

CHAPTER 1

INTRODUCTION

This thesis is about pharmacists and patients¹. More specifically, however, it is about how these two parties with largely disparate worldviews come together to negotiate an interaction and how their meeting is mediated by the all-pervasive context of HIV/Aids and by pre-existent influences such as medical authority, power, cultural and linguistic barriers and socio-economic factors. It incorporates various sociological research methods to focus on the talk-in-interaction and the discourse which is generated within twenty-six interactions between pharmacists and patients in a specific HIV/Aids clinic.

The inspiration for the study comes from several sources. Through exposure to research in the fields of health communication and HIV/Aids, the researcher became aware of the dire need for investigation and revision of current communication practices across cultural and linguistic barriers in medical consultations. South Africa is a unique linguistic and cultural environment that presents many communication challenges for health professionals and patients (Mullin, Cooper, & Eremenco, 1998; Levin, 2006b), particularly in the complex and demanding field of HIV/Aids care and antiretroviral (ARV) treatment.

Across many health-related fields, research has often shown that good communication is an essential component for improving adherence to medicines. Poor communication or misunderstanding of instructions may result in patients experiencing problems with medications or confusion about treatment options (Sleath, Roter, Chewning, & Svarstad, 1999). Effective communication within the health care context is imperative for obtaining accurate information from patients and providing information that is successfully understood by patients. It

¹ Although controversy exists over the use of the term 'patient' versus 'client' (e.g. Wing, 1997), the term 'patient' will be used consistently throughout this thesis because it is the term used by the health professionals in the research setting.

contributes to patient and health professional satisfaction and is associated with positive health care outcomes (Fallowfield & Jenkins, 1999).

Linked to the need for good communication is the popular and well-advocated concept of ‘patient-centred care’, which is described in various ways in the literature. Essentially, the approach encompasses a style of consulting which focuses on understanding the patient, trying to enter the patient’s world, involving the patient in health care decisions and attending to the patient’s needs and preferences (cf. Mead & Bower, 2000). Linked to this concept is the recently introduced notion of concordance (Marinker, 1997) as well as the suggestion that health professionals need to pay attention to intuition and atmosphere in their interactions with patients (Langewitz, 2007a, 2007b). The recent profusion of research into health communication practices attests to a focus on the patient, his/her interaction with the health care professional and experience of health care systems.

Within South Africa, the majority of health care interactions take place across cultural and linguistic boundaries. At some health care sites, as little as 5% of doctors are able to conduct interactions in the home language of the patient (Schwartz, 2004) and health professionals and patients often do not share a common language. A growing body of research in the field of health communication practices in South Africa (Penn, 2007) has shown the ineffectiveness of communication across cultural barriers, the many facets to cross-linguistic and cross-cultural communication, the pitfalls involved with the use of interpreters, the absence of so-called patient-centred care in certain contexts and the need for further research in these areas. Results from these studies demonstrate how language barriers can significantly affect a patient’s ability to ask questions and understand instructions about medications, which ultimately affects the patient’s experience of health care and the health professional’s ability to provide patient-centred care.

Research documenting doctor and patient perceptions about language and cultural barriers reveals the presence of intense frustrations. These challenges are documented to some extent in South African studies involving health professionals such as doctors, speech and hearing therapists and genetic counsellors, through the work of the Wits Health Communication Project (Penn, 2007). In one study, a doctor stated, “It feels like there’s a gap between me and the patient...it’s really difficult to convey information to the patient” (Moa, 2005, p. 24). In another study, a patient expressed that “Sometimes, English words may mean ... different things, I think they [the doctor] mean this, but then they mean something else” and “The way he explained to me, made me misunderstand him... I didn’t ask and I felt so stupid” (Levin, 2005, p. 9).

While completing a year of community service at Rustenburg Provincial Hospital (RPH) – which was selected as the research site for this study – the researcher was introduced to the unique linguistic and cultural characteristics of the community served by the hospital. The prolific mining industry in the area has attracted large numbers of immigrants from neighbouring provinces and countries. This influx of people has brought a diverse range of languages into this health care context and a resultant increase in already existing language barriers between patients and health professionals.

This year of community service coincided with the early stages of government ARV rollout at this site. The researcher also observed how the newly opened HIV/Aids outpatient clinic at RPH rapidly became burdened beyond its capacity, with thousands of patients requiring care. Pharmacists quickly had to devise plans for financing, storing, organising and distributing ARVs and other drugs, as well as for monitoring adherence for patients included in the treatment rollout programme. The logistical and managerial burdens placed on the pharmacists working under such conditions appeared immense.

In addition, in many health care contexts across South Africa, the pharmacist is often the health professional who is responsible for communicating important

information to patients about ARVs and ensuring good adherence behaviours. When the researcher initially approached the RPH Pharmacy with the idea of conducting this study, the response from the pharmacists was overwhelmingly positive. The head pharmacist was particularly interested in the proposed project because she hoped that the results would enable them to provide better services to patients across linguistic and cultural barriers. The pharmacists felt that they lacked expertise in successfully communicating with patients, especially due to a lack of counselling and communication skills training.

This situation is confirmed in the literature. Due to the enormity of the HIV/Aids epidemic and the inadequacy of the health care system in South Africa, great strain has been placed on all health professionals, but particularly on the pharmacist, who is expected to provide services that go beyond simply dispensing medicines (Gilbert, 1998c, 2004). The pharmacist's workload now includes dispensing medications, monitoring drug interactions and toxicities, optimising regimens, educating patients about antiretroviral therapy (ART) and adherence, assessing cultural and linguistic factors, following up on management issues and planning strategies to improve adherence (Hardy, 2005; Hill, 2006).

Pharmacists are also expected to provide patient counselling, which includes providing information about medicines to patients, providing patient-oriented advice, assisting patients to make decisions regarding a course of action and offering emotional support to patients. This process necessitates effective communication and counselling which is tailored towards each patient's needs (Kansanaho, 2006). However, pharmacists are rarely trained in communication skills (Salter, Holland, Harvey, & Henwood, 2007). Kansanaho, Cordina, Puumalainen and Airaksinen's (2005) study of the level of counselling skills amongst Finnish pharmacists shows that pharmacists do not possess competent levels of critical consciousness and reflexivity, which are essential counselling skills.

While there is a relatively large body of research investigating general communication skills required by pharmacists, very little has been published that examines the nature of communication dynamics, cultural issues, or language barriers within the pharmacist-patient interaction (Shah, King, & Patel, 2004). Much of the South African sociological research in the field of pharmacy has been conducted by Gilbert (e.g. 1998a, 1998b, 1998c, 2001, 2004, 2005), but this work does not specifically investigate communication practices.

This thesis attempts to address the paucity of research in this field. It began with the idea of describing the linguistic characteristics and communication processes of pharmacist-patient interactions, something that has not been done either in the South African context or in the disease context of HIV/Aids and ARV treatment. As the analysis of the data progressed, however, it became clear that the aims of the study needed to broaden to include a consideration of the context of the interactions – the institution (the hospital) and the broader socio-political context. The large volume of detailed and unique data that emerged from the data collection process could not be ignored: it demanded the careful development and fine-tuning of methods of transcription and analysis and it required a level of analysis that could incorporate and address the many complex psychosocial and contextual issues present in the data.

Chapters 2, 3 and 4 provide an investigation of the literature and certain theoretical concepts which will prove crucial to the interpretation of the data. *Chapter 2* begins by focusing on the context of HIV/Aids in South Africa, specifically the status of the epidemic at the time of the study, the necessity for adherence to treatment and various factors described in the literature which influence adherence behaviours. *Chapter 3* presents a background to the participants included in the study. A description of the Tswana people in the Rustenburg region is followed by a discussion of the work of the pharmacist and the history of the profession of pharmacy in South Africa. Cultural issues in pharmacy practice are also presented.

Chapter 4 discusses previous health communication research, particularly studies conducted in the field of pharmacy. It progresses to a discussion of certain sociological constructs pertinent to this research, including theories of power, assertion and agenda, Mishler's theory of the lifeworld, Parson's theory of the sick role and ecological models of communication in medical contexts. In the light of the literature and previous research studies, a new ecological model is proposed. This thesis aims to demonstrate how the results of this study may prove the model.

In *Chapter 5*, the study design, methodological choices and theoretical background of the study are detailed.

The results of this study are presented in several parts. The first part, *Chapter 6*, provides ethnographic background information about the research site. The researcher decided to present information about adherence practices and ARV regimens used in the research setting together with details provided in the literature and Department of Health guidelines, to create a chapter which combines elements of a literature review, background information and results.

Chapter 7, the second part of the results section, aims to offer a comprehensive description of many of the communicative and interactive themes, patterns, processes and strategies which emerged from analysis of the data. The third part of the results section, *Chapter 8*, focuses on several contextual influences and themes present in the data and demonstrates how the macro context may affect the micro elements of the interaction. This section is continued in *Chapter 9*, in which extracts from exceptional cases in the data corpus are presented to provide insight into the impact of contextual, site-specific and disease-related factors on pharmacist-patient interactions in this context.

The results are discussed in a general manner in *Chapter 10* and the thesis concludes with a description of a framework for communication skills training for pharmacists working in the context of HIV/Aids, based on the results of this study.

Given the negative consequences of non-adherence to ARVs, coupled with the enormous burden and expectations placed on pharmacists working with HIV patients, the critical need for research into pharmacist communication practices in South Africa is obvious. It is hoped that the results of this study will be used to inform the development and implementation of training programmes to optimise communication between pharmacists and patients. This in turn will promote adherence to ARVs through improved communication between patients and pharmacists. This study therefore embraces principles of action research (Meyer, 2000).

The thesis is the result of much reading, deliberation and debate, input from journal reviewers, discussions with other researchers and experts in the field, and conversations with pharmacists working in ARV clinics. The intention is that this work should provide the reader with a glimpse into the worlds of both pharmacist and patient within this context. The small window of interaction between two different worldviews – that of the patient and the pharmacist – allows us to learn much about each participant and what they bring to the interaction. It also gives insight into the nature of interactions in this particular institution and in the context of HIV/Aids, which allows conclusions to be drawn about pharmacist-patient interactions in general and permits recommendations to be made regarding pharmacy practice.

This thesis is presented within both a linguistic and a sociological framework. The interactive processes and communication strategies used by both pharmacists and patients are inherently influenced and framed by numerous contextual factors which overshadow each interaction and affect even the most basic elements of conversation. It is in the mundane processes of everyday interaction that we see the broader picture of the impact of HIV/Aids, poverty, psychosocial and socio-historical factors.

CHAPTER 2

HIV/AIDS AND ADHERENCE

2.1 HIV/Aids: current status in South Africa

Over the past decade, the disease² of HIV has spread with astounding rapidity. The number of cases around the world has reached staggering levels of around 33.2 million. Sub-Saharan Africa remains the most severely affected area, with more than two thirds of all infected persons living in this area. South Africa is officially the country with the largest number of HIV infections (UNAIDS, 2007).

Statistics indicate that approximately 5.4 million people in South Africa were living with HIV during 2006. The prevalence rate is just over 11% (Dorrington, Johnson, Bradshaw, & Daniel, 2006). One in three women between the ages of 30-34 years and one in four men between the ages of 30-39 years were living with HIV during 2005 (Shisana et al., 2005). However, recent statistics suggest that this rate has reached a plateau (Dorrington et al., 2006; UNAIDS, 2007).

The global introduction of ARV therapy has meant that people living with HIV can now enjoy longer, healthier lives. Mortality rates have decreased and ARVs have changed the clinical picture of HIV infection to that of a manageable chronic disease (Gallant, 2002; Yeni, 2006). In South Africa, the provision of ARVs was finally approved in 2003, amidst much controversy and a struggle for accessibility (Nattrass, 2006b). The Department of Health (2007b) reports that as of September

² It is acknowledged that a sociological distinction exists between the concepts of 'disease', 'illness' and 'sickness'. 'Disease' is considered to be a biological impairment of an organism; 'illness' is the subjective, individual experience of a disease; and 'sickness' is a social term which is applied to people who are considered by others to be ill or diseased, which may cause a shift in a person's social identity due to changes in their psychosocial environment (Gilbert, Selikow & Walker, 2002). In this study, the researcher acknowledges that HIV/Aids has both an objective biological and a subjective psychosocial aspect; however, for the purposes of practicality, it may be referred to simply as a 'disease' in this thesis.

2007, 370 000 patients had been initiated on ART. Approximately two thirds of this number is receiving treatment in the public sector (Dorrington et al., 2006).

Despite the numerous controversies surrounding the delayed public accessibility of ARVs in South Africa, rollout programmes have been implemented countrywide. Apart from providing patients with treatment, the government's rollout plan includes training of health professionals and counsellors, management of drug supplies, monitoring patients receiving treatment and educating patients about nutrition (Ncayiyana, 2004). With the implementation of ARV programmes, however, comes a shift in focus from the struggle for accessibility to issues of adherence to treatment (Bateman, 2004).

2.2 Health care in South Africa

The health of a population is influenced and determined by social, cultural, political and economic factors within the environment. Health care systems reflect the broader societal context and societies in turn are influenced by health and disease. In Africa, health status, burden of disease and health care needs are shaped by factors such as poverty, malnutrition, infectious diseases, conflict, drought, poor education, lack of sanitation and inequitable distribution of resources (van Rensburg & Ngwena, 2001).

However, the South African health system and its health profile are not typically 'African'. South Africa presents a juxtaposition of sorts: the country is advanced industrially and financially, yet disadvantaged and underdeveloped areas remain. The impact of colonialist and apartheid processes, specifically the discriminative allocation of resources and the denial of access to health care, has meant that the health needs of rural South Africans are often neglected. Historically there exist black/white, urban/rural and public/private disparities in terms of the availability of and access to health care services. The high rates of unemployment, poverty and migrant labour have also affected people's access to health care services (Andersson & Marks, 1989; Mullin et al., 1998).

In an attempt to address past imbalances, the government has initiated various health reforms with the goal of achieving equitable access to health care. These goals include unifying fragmented health structures, dismantling apartheid structures in the health care system, rectifying disparities in the distribution of health resources, expanding free health services to vulnerable groups and involving communities in the planning and monitoring of health care services. However, much work remains in addressing the ‘two-class’ character of the health system – “a weak public sector that caters ‘second-class’ services to that majority of the population dependent upon the state, and a strong private health sector providing ‘first-class’ services for the wealthy and insured minority” (van Rensburg & Ngwena, 2001, p. 378).

A duality of approaches to medicine and healing exists in South Africa. Traditional medicine is an established centuries-old health care system in Africa which has come to exist alongside the western system of health care introduced by colonial governments and missionaries (van Rensburg & Ngwena, 2001). Although western medicine is now widely accepted and utilised among the African population, beliefs about disease and its causes are different to western notions of disease and these traditional beliefs persist (Herselman, 2007). Some patients may utilise traditional medicine or western medicine only, while others may seek treatment from both traditional and western health care systems (Kale, 1995; Ellis, 2004).

The government has realised the benefits of acknowledging the services provided by these healers, as well as the importance of recruiting them into primary health care services in order to ‘supplement’ inadequate government health services. A process of regulation was begun during 1998, which aimed to register traditional healers, set up norms and standards, and promote training of such healers (Baleta, 1998). It is hoped that this process will prohibit unregistered healers from advertising or claiming cures for diseases such as HIV/Aids, as patients who are encouraged to take traditional medicines may be delayed in obtaining access to western treatments (Sidley, 2004). It is also hoped that traditional healers will play an important role in expanding HIV care systems and referring patients for ARV

treatment, especially in rural areas (Homsy, King, Balaba, & Kabatesi, 2004). The expertise and assistance of these healers may prove essential, especially since ARVs currently are not available to all patients who require them.

In South Africa, patients may experience numerous potential barriers to accessing the health care system, interacting with health professionals or even adhering to treatment regimens. Some of these barriers are linked to historical disparities and impoverishment (Andersson & Marks, 1989). Vulnerabilities are linked to factors such as the severity of the disease of HIV/Aids, symptoms of the disease, side effects of treatment, complexity of drug regimens, stigma and discrimination, poverty, unemployment, gender, pregnancy, language, education, literacy, culture, access to treatment and health care, financial resources, different world views and trust of the health care system or health professional (Ickovics & Meade, 2002; MRC, 2003; Nachega et al., 2004).

The nature of the health system may also constitute a barrier to accessing care and treatment. The health care infrastructure remains poor in many areas and numerous South African hospitals and clinics, including pharmacies, are experiencing a human resource crisis because of the health burden imposed by the HIV/Aids epidemic (Schneider, 2006). These deficiencies may negatively affect the quality and availability of care provided to patients. Health professionals who work with patients with HIV/Aids, especially nurses, are often over-burdened as a result of HIV/Aids. They may experience feelings of helplessness and powerlessness, emotional stress and fatigue, fear (especially of contagion), anger and frustration (Rohleder & Swartz, 2005; Smit, 2005).

2.3 Adherence and HIV

The nature of ARV treatment is such that the patient must remain on it for the duration of his/her life and the disease is unforgiving of lapses in adherence (Altice & Friedland, 1998). Strict adherence to ARVs is necessary to ensure maximum suppression of viral replication, slowed progression to Aids, decreased

mortality rates, prevention of viral resistance and encouragement of immune reconstitution (Bartlett, 2002; Ickovics & Meade, 2002).

Research has shown that adherence levels of 80-95% are required to ensure such success (Gross, Bilker, Friedman, & Strom, 2001; Paterson et al., 2000). In reality, however, studies have shown that 40 – 60% of patients have levels of adherence less than 90% (Bartlett, 2002). Cessation of ARV therapy by a patient can give rise to almost instant viral rebound, usually within days or weeks (Chun, Davey, & Engel, 1999). A drug-resistant strain of HIV can then be transmitted to new hosts (Tang & Pillay, 2004). Given the relentless intensity and spread of the epidemic in South Africa, the dissemination of such a strain has the potential to destroy the success of any ARV treatment program.

Because of the unequivocal need to ensure adherence to ARVs, a closer inspection of some of the factors involved in non-adherence as well as in successful adherence is warranted. Firstly, however, it is important to explore the concept of adherence.

2.3.1 Adherence, compliance and concordance

The concept of ‘adherence’ implies consistency. It involves the behaviours and intentions of a patient towards treatments or medications (Houts, Doak, Doak, & Loscalzo, 2006) and the degree to which his/her behaviours concur with the health professional’s recommendations (Garcia & Cote, 2003). It comprises two steps: firstly, accepting and understanding a message or instruction as something that must be acted upon and secondly, executing the recommended actions (Houts et al., 2006).

The term ‘adherence’ is preferred to ‘compliance’, because adherence implies the participation of the patient in the choice and use of a particular treatment regimen (Altice & Friedland, 1998). It has been argued that the term compliance implies submission, obedience and passivity (Garcia & Cote, 2003). Marinker (1997)

describes compliance in terms of what each party brings to the consultation: the doctor brings scientific evidence and skill (the solution) and the patient brings health beliefs (seen as an impediment to the solution). The doctor must overcome the impediment and ensure that the patient complies with treatment. Marinker argues, however, that this flawed description of compliance perpetuates non-adherence.

A third term, ‘concordance’, has been introduced recently and is hailed as the ideal model for describing adherence and medicine prescribing and taking. Marinker (1997) explains that in any encounter, the patient and the health professional have different health beliefs and perspectives which need to be conveyed and mutually respected within an interaction. This allows for the formation of a therapeutic alliance in which the patient is encouraged to make informed decisions about diagnosis and treatment and a sharing of power takes place. This new term implies agreement and harmony, negotiation between equals, respect for the patient’s agenda, the creation of openness in the therapeutic relationship and the patient as a decision maker (Bissell, May, & Noyce, 2004; Vermeire, Hearnshaw, Van Royen, & Denekens, 2001). Therefore, concordance focuses on the process of interaction rather than on patient behaviour and it incorporates a patient-centred care approach (Weiss & Britten, 2003).

The notions of compliance and adherence generally refer to the degree to which the patient follows a medication or treatment regimen. Concordance additionally refers to the therapeutic alliance or partnership between patient and health professional regarding whether, when and how medicines will be taken (Marinker & Shaw, 2003). In this thesis, the term ‘adherence’ will be used to refer to patients’ medicine-taking behaviours and the degree to which they follow the ARV regimen. This is the term which is used by the health professionals in the research setting.

2.3.2 Barriers to adherence to ARVs

Adherence to HIV therapies centres on specific issues (Altice & Friedland, 1998)

and within the multicultural-multilingual and often resource-limited context of South Africa, these issues are of even more importance. ARVs have the added element of being associated with acceptance or denial of HIV/Aids as well as with social implications such as stigma and disclosure. In addition, adherence to ARV regimens is known to decay with time (Gross et al., 2001).

Firstly, it must be noted that non-adherence can be intentional (deliberate cessation of treatment) or unintentional (involuntary disruption in treatment) (Horne, 2001, as cited in Skoglund, Isacson, & Kjellgren, 2003). Drug adherence is not a natural behaviour and it is not within human nature to do things with 100 percent regularity (Roux, 2005). It is a well-known fact that patients tend to 'experiment' with medications by modifying regimens to fit their lifestyle, using medications symptomatically and weighing up the benefits of taking a medication against the costs of not doing so (Pound et al., 2005).

Non-adherence is generally defined as one or more of the following behaviours: a delay in seeking treatment, missing follow-up appointments, skipping doses, overdosing, taking treatment inappropriately or at an incorrect time, not adhering to diet restrictions related to the treatment regimen, or stopping treatment altogether (Bartlett, 2002). Vermeire et al. (2001) note in their review of adherence research studies that more than 200 variables which may be associated with non-adherence have been studied since 1975. However, because non-adherence is a complex phenomenon, none of these variables has been found to be a consistent predictor of adherence.

A review of studies investigating adherence barriers in both developed and developing countries found similar significant barriers across different economic settings. These included fear of disclosure, substance abuse, complex regimens, decreased quality of life because of HIV/Aids, work and family responsibilities and lack of access to medicines (Mills et al., 2006a). Several interrelated determinants of non-adherence have been identified, including patient variables, treatment regimen variables, perceptions of HIV and ARVs, disease

characteristics, the patient-health professional relationship and the clinical setting. Patient variables linked to non-adherence do not generally include sociodemographic factors such as gender, age and ethnicity. However, psychosocial factors such as depression, mood or substance abuse may precipitate poor adherence (Ickovics & Meade, 2002; Murphy, Roberts, Hoffman, Molina, & Lu, 2003). In addition, patients may forget to take a dose or may find the change in daily routine associated with taking the treatment too disruptive (Bartlett, 2002).

Issues related to treatment regimens have received much attention in the literature, especially with the relatively recent emergence and constant advancement of HIV treatments (Hardy, 2005). ARV regimens may comprise greater than 20 pills a day in some cases and patients may be taking additional medications for the treatment of HIV-associated diseases. The ARV regimen may be complex, often containing numerous pills to be taken at several times during the day. In addition, each regimen may have different storage and diet requirements (Bartlett, 2002). However, studies have shown conflicting results over whether a complex regimen does in fact influence adherence behaviours (Ickovics & Meade, 2002).

In addition to complexity of the regimen, the emergence of side effects, or even ‘anticipatory’ side effects (the patient’s expectation of side effects), may constitute a significant barrier to adherence (Murphy et al., 2003). This is linked to the phenomenon of immune reconstitution inflammatory syndrome (discussed further in *Chapter 6, Section 6.3.9*) (Department of Health, 2004). The patient may believe that the treatment is making the disease worse or that there is no change in his/her health status (Chesney, 2000) and s/he may stop taking the ARVs as a result.

Disease characteristics of HIV/Aids are also important. The level of severity of symptoms and/or opportunistic infections as well as immunologic status may be motivating factors towards adherence (Ickovics & Meade, 2002). If a patient is too ill, too tired or in too much pain, s/he may stop taking treatment (Bartlett, 2002; Chesney, 2000). Catz, McClure, Jones and Brantley (1999) found that

sicker patients were more likely to attend appointments; however, Gordillo, Del Amo, Soriano and Gonzalez-Lahoz (1999) found that patients in more advanced Aids stages were less likely to adhere to treatment. In a South African study, Orrell, Bangsberg, Motasim and Wood (2003) found that the clinical stage of the disease at commencement of ARV treatment did not predict adherence.

Attitudes towards and beliefs regarding ARVs, as well as peer experiences with treatment, are also important factors in adherence. A patient may feel overly negative or over-confident about the treatment and its efficacy (Garcia & Cote, 2003). If the patient feels sceptical about the effectiveness of the treatment, or has inaccurate perceptions about ARVs, this may result in poor adherence (Bartlett, 2002). In addition, dissatisfaction with the health care system or previous negative experiences with medicines may affect adherence levels and lead to avoidance of treatment (Chesney, 2000).

Other variables are linked to adherence, such as availability of finances, transport and childcare, as well as convenience of and accessibility to reliable primary care (Ickovics & Meade, 2002). Laurent et al. (2002) found that Senegalese patients listed financial difficulties as a major obstacle to adherence. These issues are pertinent to the South African situation, where many patients may not be able to attend clinic appointments because of transport costs. A missed clinic appointment may cause the patient to default on treatment because s/he cannot collect medicines for the month.

The relationship between the patient and the health professional is of paramount importance to adherence. It involves issues of communication, trust, power, attitudes, confidentiality and participation. If the patient perceives the provider as being competent and trustworthy, this influences his/her acceptance of ARVs, making him/her more likely to adhere to the medicine (Ickovics & Meade, 2002). A study conducted in the Free State Province of South Africa found that nurses considered the quality of the health professional–patient relationship and the provision of emotional support to patients to be fundamental elements in ensuring

adherence to ARVs (Stein, Lewin, & Fairall, 2007). Murphy et al. (2003), in a focus group study of barriers to ARV adherence, found that patients reported lying about their adherence to ARVs if they felt uncomfortable with the health professional or if they received negative responses from the health professional when complaining of side effects.

2.3.3 Adherence studies in South Africa

The study of ARV adherence in developing countries is noticeably limited in the literature. There appears to be an expectation that patients in resource-limited areas will have poor adherence, which is attributed to factors such as poorer levels of literacy and education, as well as a lack of infrastructure and health care resources (Harries, Nyangulu, Hargreaves, Kaluwa, & Salaniponi, 2001; Orrell et al., 2003). However, several studies have disputed this assumption. Notably, in a review of studies by Mills et al. (2006b), adequate adherence was found to be greater in studies conducted in Africa than those in North America and favourable adherence can be achieved in sub-Saharan African regions.

Orrell et al. (2003) studied adherence in Xhosa-speaking HIV patients in Cape Town using a pill counting method. They found high levels of adherence that were similar to or better than levels found in studies conducted in developed countries. Nachega et al. (2004) report similar findings from a questionnaire-based study of patients in Soweto (Gauteng Province), as do Coetzee et al. (2004), who analysed CD4 counts³ and viral load counts⁴ in patients from Khayelitsha (Western Cape Province). The independent use of different methods of adherence measurement in these three studies could be said to confirm the fact that high levels of adherence can be achieved in South African situations. Further afield, studies conducted in Senegal by Laurent et al. (2002) and in Uganda by Weidle

³ This is the most commonly used test to assess the status of the immune system. It measures the number of CD4 cells per cubic millimetre of blood. A normal CD4 cell count is greater than 800 and a CD4 cell count below 200 is diagnostic of AIDS (Treatment Action Campaign, 2006).

⁴ This test measures the amount of HIV RNA (Ribonucleic acid) per unit of blood plasma and is a measure of the success of ARV therapy. It provides an indication of virus concentration and the rate of virus reproduction (Treatment Action Campaign, 2006).

et al. (2002) confirm that high levels of adherence to ARVs can be obtained in developing countries. Both studies used methods of patient self-report.

Some interesting results have emerged from these South African studies. Concurrent with the general body of literature, no significant correlation was found between age, gender, knowledge of HIV and ARVs, and adherence levels. Orrell et al. (2003) and Nachega et al. (2004) found that low socioeconomic status was not found to impact on adherence. However, Nachega et al. (2004) found that unemployment tended to be associated with poorer adherence – patients often face a fear of unemployment or punishment for taking days off work to attend a clinic (Cilliers, 2005). The most common reasons for non-adherence included being away from home, forgetfulness and running out of medicines.

Chesney (2006) cautions that health professionals need to consider the particular clinical and social setting when implementing adherence programmes. Many adherence-promoting strategies as well as theoretical models of adherence behaviour have been developed for resource-rich, developed world settings and these are not necessarily applicable to a health care context in a non-western developing country. It is therefore important to consider studies of adherence that have been conducted in developing, resource-limited settings.

2.3.4 Stigma, disclosure and adherence

The disease of HIV/Aids carries culturally and socially constructed meanings and is heavily linked to the two great taboos of society, namely sex and death. Edwin Cameron (2005, p. 75) describes the epidemic as “enmeshed with sex and death”. Consequently, there is greater stigma attached to the illness. It has become a disease which is frequently talked about in euphemistic, metaphoric terms; it is silenced and ‘unsayable’ (Almeleh, 2006; Ellis, 2004). Delbene (2004) reports that in her study of 34 interactions between doctors and HIV positive patients, the word ‘Aids’ was not mentioned even once.

The decision to disclose one's HIV status is often a difficult process which may be influenced by numerous psychosocial and contextual factors. Patients must consider the benefits and risks associated with disclosure and make a decision regarding whether it is in their best interests to disclose their status. Brandt (2005) describes a study of women living with HIV/Aids in the Western Cape. These women made strategic decisions about disclosure and their decisions were often motivated by a need to protect existing support structures, social networks and the sustainability of their households. Perceived negative reactions often discourage patients from disclosing their status (Almeleh, 2006).

Stigma, or the fear of stigma, is a major obstacle to HIV prevention and care, as well as to testing, disclosure and treatment seeking. It is a pervasive, often subtle phenomenon present in many South African communities: "...in much of the country, every family, street, church, workplace, and community has become, often painfully, aware that among them are people with HIV/Aids" (Jewkes, 2006, p. 430). Goffman (1963, p. 9) defines stigma as "the situation of the individual who is disqualified from full social acceptance" because they differ from others in a particular societal category or stereotype. Van Niekerk (2005, p. 703) expands on this definition: stigma is "a dynamic process of devaluation that significantly discredits an individual in the eyes of others". Stigma may be fuelled by factors such as a fear of physical or symbolic contagion, social inequality or differences, fear of societal collapse, or a need to protect one's identity (Campbell, Foulis, Maimane, & Sibiya, 2005).

At a societal level, stigma may present a barrier to access of social programs by communities. At an individual level stigma may prevent people from accessing HIV prevention, testing and treatment. Cameron (2005) uses an example from Botswana to illustrate the impact of stigma in this regard: although the government of Botswana initiated a revolutionary pledge in 2001 to provide free ARVs to all patients who required them, few people initially came forward to accept the treatment. This lack of uptake is attributed to the profound influence of stigma.

Different types of HIV/Aids-related stigma exist, including self-stigma (involving self-blame or condemnation), perceived stigma (the fear of stigma associated with disclosing HIV status) and enacted stigma (actual discrimination). Enacted stigma may include acts such as gossip, verbal abuse, degradation, rejection, discrimination and/or abandonment (Bond, Chase, & Aggleton, 2002, as cited in F. Thomas, 2006). In essence, stigma is focused more on disgrace or shame rather than on any physical, bodily evidence of the disease (Goffman, 1963).

The results of stigma may be devastating to the individual living with HIV/Aids. Campbell et al. (2005) conducted a qualitative study of stigma in a South African community. They discovered the existence of a complex web of context-linked symbolic representations and beliefs that sustain stigma. Stigma in this community served as a form of ‘social policing’ to punish people who had acted ‘immorally’. As a result, people who had disclosed their status were often disowned by their family and did not receive the crucial support they needed in order to cope with their illness. People reported that they were scared to seek health care because by entering a clinic or AIDS counselling centre, their community would know their status.

For many patients, HIV/Aids-related stigma or fear of stigma is a daily reality which may directly influence medicine taking and adherence behaviours. A recent US study showed that a high degree of fear of stigma was the only statistically significant independent predictor of non-adherence to ARV regimens (Rintamaki, Davis, Skripkauskas, Bennett, & Wolf, 2006). Disclosure of HIV/Aids status is heavily linked to stigma and patients often choose not to disclose their status or their treatment, even to close family members (Almeleh, 2006). A fear of stigma, especially from sexual partners, was found to be an important barrier to adherence in a South African study (Nachega et al., 2004).

A vicious cycle is then established: in order for patients to receive the support and care they require to manage their illness and treatment regimen, they need to disclose their status. If they are too afraid to disclose, or if they experience stigma

after disclosing, they may be forced to face their illness alone. A patient may not want other people to know about their status or treatment, or see their medication, or the treatment may remind the patient that s/he is HIV positive and so s/he may default on treatment (Lewis, Colbert, Erlen, & Meyers, 2006). Because ARVs must often be taken at inopportune times, patients may develop anxiety about trying to hide their medications in order not to reveal their HIV status to others. This can lead to non-adherence if a patient decides that the potential for stigma is too high. This concurs with research in South Africa which highlights the problems of lack of disclosure and the presence of stigma-related issues (Olley, Seedat, & Stein, 2004).

2.3.5 Measurement of adherence

The measurement of adherence poses a challenge for health professionals (Ickovics & Meade, 2002). The most frequently used measurement appears to be that of patient self report (Bartlett, 2002), but other methods include pill counts, patient interviews, pharmacy prescription refill records, adherence questionnaires and measurement of health outcomes (Balkrishnan & Jayawant, 2007).

The manner in which the health professional asks the patient about adherence may influence self report: if the patient feels judged or threatened, s/he may not report adherence behaviours accurately (Paterson, Potoski, & Capitano, 2002). The popular use of patient self reports is also of concern because of the influence of social desirability/response bias, the patient's cognitive ability and honesty, as well as the health professional's interpretation of the patient's responses (Balkrishnan & Jayawant, 2007). Similar problems are encountered with pill counts, also a popular measurement technique.

Due to time constraints, health professionals are often forced to predict a patient's adherence instead of fully assessing it. This can lead to over- or under-estimation of adherence levels, because a quick judgment of adherence is not always reliable. Murri et al. (2004) report that in their study conducted with Italian patients,

physicians did not correctly estimate adherence for more than one third of patients. It is therefore of utmost importance to ensure that the information conveyed to patients regarding treatment regimens is simple, comprehensive and clearly presented in a culturally and linguistically appropriate manner, and that the patient has fully understood the information.

2.3.6 Communication and language issues in adherence

The manner in which a message is communicated by a health professional and understood by a patient is significant (Garcia & Cote, 2003). Medicines do not work in patients who do not take them, or who do not take them correctly (Bonaccorso & Sturchio, 2003). There is only one correct, but infinite incorrect ways to take a medication (Pilnick, 1999).

Patients do not always adhere to medicines or use them as recommended for a number of reasons, one of which may include a breakdown in communication between health professional and patient (Skoglund et al., 2003; Sleath et al., 1999). Understanding instructions given by a health professional is an essential (but not sufficient) condition for adherence (Dimatteo & Chow, 1995). Many patients feel uncomfortable to ask questions of the health professional and may not voluntarily raise concerns or ask for clarification of information (Bridson, Hammond, Leach, & Chester, 2003). Information presented to a patient may be too complicated for them to follow, or may be presented at an inappropriate level that they cannot understand (Blenkinsopp, Bashford, & Dickinson, 1998). Likewise, the health professional may not ask questions to determine the educational needs of the patient, the patient's experience of side effects and barriers to adherence, as well as the patient's understanding of the information presented (Sleath et al., 1999).

There is evidence for significant discrepancies in patient understanding of research procedures and treatment programmes. Barriers to successful communication with patients in the field of HIV/Aids may include professional

detachment and distancing from the patient, intuitive censoring of information given to patients, use of euphemisms which reinforces misunderstandings, failing to talk openly and honestly, lack of time, lack of expertise in the field of HIV, inability to see the patient's perspective, embarrassment when discussing sensitive issues with patients, judgmental attitudes and strong emotions towards the disease that interfere with the health professional's ability to communicate successfully with the patient (Fallowfield & Jenkins, 1999). The manner in which the topic of discussion is introduced by the health professional, the way in which awkward moments and problematic language are handled and the extent to which the health professional attempts to see the patient's perspective all impact upon the outcome and success of HIV-related discussions with patients (Epstein et al., 1998).

In a quantitative study investigating adherence to tuberculosis (TB) treatment, Mishra, Hansen, Sabroe and Kafle (2005) found that poor quality of communication between patients and health professionals was significantly associated with treatment non-adherence. However, the authors' choice of research methods did not allow for comprehensive exploration of specific issues involved in the communication. Interviews (a potentially rich source of information) were statistically analysed based on closed-ended questions.

Perhaps more pertinent to the South African multilingual context, Murphy et al.'s (2003) study provides valuable insights into adherence barriers in monolingual HIV positive Spanish-speaking patients who receive treatment in an English-speaking environment. The authors point out that a language barrier can be a significant obstacle to treatment, causing difficulties for patients in terms of communication with the health professional, comprehension and retention of instructions regarding the regimen and adherence. Orrell et al.'s study (2003) found that patients who could speak English appeared to have an advantage in terms of their ability to adhere to ARV regimens.

Murphy et al. (2003) also discuss the use of interpreters in interactions. Their research showed that patients considered not having a health professional who

spoke their language as detrimental to their ability to adhere to an ARV regimen. Patients struggled to understand instructions and sometimes made dosage errors due to this lack of understanding. The use of interpreters, however, posed its own set of problems: some patients found their assistance useful, while others complained that interpretation was inaccurate, a problem that has been addressed previously in the literature (e.g. Elderkin-Thompson, Silver, & Waitzkin, 2001). Trained interpreters who translated accurately tended to improve patients' confidence in the health care system and their ability to adhere to the treatment regimen.

The provision of written materials for patients also poses a significant problem and is closely linked to issues of health literacy and general education (Kalichman, Ramachandran, & Catz, 1999). Patients with lower levels of health literacy are known to experience poor health and negative outcomes of treatment. A study conducted in the United States with patients of 65 years and older found that those with inadequate health literacy had a considerably higher mortality rate than those patients who had good health literacy. Inadequate health literacy is defined as difficulty in reading and understanding basic written medical instructions and health materials (Baker et al., 2007). In a groundbreaking study of health literacy in ARV treatment in the United States, Kalichman et al. (1999) found that the number of years of education and the level of health literacy were important independent predictors of adherence to treatment. They note that many of the strategies and aides used to assist patients in adherence (such as alarms, charts, pill bottle labels, etc) require literacy skills in order to understand them. Houts et al. (2006) point out that patients with limited literacy skills need assistance in understanding written information and remembering what they have been told.

In a context such as South Africa, in which many patients who attend public health care services have limited education and/or functional literacy skills (Aitchison & Harley, 2006), a focus on investigating and improving verbal communication practices becomes imperative. In the field of HIV/Aids, adherence

to medications is imperative and treatment is a lifetime commitment. Successful and appropriate communication is essential to promote adherence and ensure the best possible treatment outcome (Hill, 2006). Despite the abundance of research into adherence behaviours, however, there is a dearth of research into multilingual interactions between patients and health providers in the context of ARVs and adherence and there is a need to investigate and address issues of communication, particularly in multilingual settings.

2.4 Summary of Chapter

This chapter provided a description of the status of the HIV/Aids epidemic in South Africa as well as a discussion of how the introduction of ARVs has altered the way in which the disease is managed. The chapter also highlighted the dynamics of our health care system, particularly its inherent dualities and barriers to both patients and health professionals.

The chapter also focused on the complexities inherent in the concept of 'adherence', with particular reference to adherence to ARV treatment regimens. The researcher provided a review of barriers to adherence and factors which may influence adherence behaviours. Studies of adherence practices in developing contexts were highlighted, the results of which demonstrate that good adherence is achievable in these contexts.

These sections provide a preface to an introduction of the work of the pharmacist in the multilingual, multicultural South African health care environment and to a description of the patient population.

CHAPTER 3

PHARMACISTS AND PATIENTS: BACKGROUND INFORMATION

In order to provide a balanced description of the pharmacist-patient interaction within this context, the researcher found it necessary to consider the worldviews and backgrounds of the participants. Therefore, a description of the history of the Tswana people in the Rustenburg region is provided, followed by an analysis of the literature and documentation related to the work of the pharmacist and the history of the profession in South Africa.

3.1 The Tswana

3.1.1 Tribe structure

The Tswana people form one of three major divisions of the Sotho group of central southern Africa. They live in areas in Botswana and South Africa, specifically in the North West Province and Northern Cape. The Tswana are split into subgroups comprised of several clusters of different tribes (Schapera & Comaroff, 1991). The people who live around the town of Rustenburg (the research setting) are mostly from the Bafokeng tribe who are affiliated to the BaKwena totemic social grouping (Bozzoli, 1991). *Figure 1* illustrates the location of the town of Rustenburg in South Africa and *Figure 2* depicts the town of Rustenburg and its surrounding areas.

The Tswana people speak the language of Setswana, which is similar to Sesotho. Several so-called ‘loan words’ have been incorporated into the Setswana language, especially from Afrikaans (e.g. *stout*, meaning ‘naughty’). The Tswana have a strong oral culture rich in metaphors and proverbs (Roberts, 1985).

Figure 1: Map of Rustenburg, South Africa



Map from <http://content.answers.com>

Figure 2: Map of the Rustenburg area



Map from <http://www.mapquest.com>

Traditionally, each tribe is an independent unit with its own hereditary chief and territory. Membership of a tribe is by descent, although many tribes have people of mixed origins who originally came from other tribes. The Tswana people are divided into various groups and each group has adopted an animal as their totem or object of honour (the BaKwena people have adopted the crocodile as their totem).

Prior to European colonisation, the tribe lived in one village concentrated around their chief. A village consisted of a cluster of small hamlets and each hamlet was inhabited by a single ward or group of people with a headman in charge of each ward. The people farmed the land and practiced animal husbandry. Within each tribe there was a class system consisting of nobles (descendants of former chiefs), commoners (descendants of outsiders incorporated into the tribe) and immigrants (outsiders admitted into the tribe). The Tswana are known for their complex legal and political systems as well as their infliction of brutal punishments on wrongdoers (Roberts, 1985). Tribal affairs were directed not only by the chief but also by his brothers, uncles and sons; therefore, the tasks of the chief were conducted as a family and not merely on an individual basis (Schapera, 1963).

3.1.2 Family structure and kinship

Kasanga and Lwanga-Lumu (2007) describe the Tswana society as tightly integrated, where individuals belong to specific in-groups and their interests are protected. Tswana society is hierarchically organised according to age, status and gender. Customs and traditions are based on norms of behaviour and politeness, specifically respect for elders and responsibility to protect their honour.

Prior to colonisation, polygamous marriages and large family groups were common; however, modern households tend to be smaller. A family group may live together in a compound, headed by a common elder. Traditionally, there are well-defined divisions of labour and social distinctions between men and women. Women worked in the fields, built and repaired huts, prepared food, fetched wood and water and did housework. Men herded cattle, hunted, assisted with building

huts and cleared new fields. Children were also expected to assist with tasks according to their age and young boys engaged in cattle herding. Some authors have highlighted the domination of Tswana women by their men folk (Kinsman, 1983). More recently, however, the influences of colonisation have led to the relaxation of this dominance and the inclusion of women in economic activities.

In Tswana culture, recognition of kinship is important. People differentiate between relatives according to sex, age and line of descent. A special term of kinship is applied to each category and even distantly related tribesmen are included in a person's circle of kin. There is a close sense of kinship among the Tswana, who are expected to be protective, supportive, hospitable and friendly, and help others in times of need. Neighbours and distant relatives are included in occasions of domestic importance.

Schapera and Comaroff (1991) describe how in Tswana culture, every child is linked to siblings through the custom of *go rulaganya ga bana*, i.e. brother to brother, sister to sister and sister to brother. As a result, children have special aunts and uncles. A man's maternal relatives are particularly important and his children are often sent to visit their mother's people. The maternal uncle is the one who is consulted for advice and assistance, as well as marriage decisions. Within the tribe, adults are grouped according to ages. Each age-set must work and fight together and they maintain a strong sense of solidarity, companionship and intimacy.

Interestingly, van Onselen (1996, p. 9) describes how the family unit has been forced to adapt its ideological shape and size because of economic, political and social influences and transformations. Some families may be "near-nuclear...at the 'western industrial' end of the spectrum", while others may be larger "at the end marked 'traditional farming' and more often than not, simply [straddle] the nondescript socioeconomic terrain in the middle". Therefore, Tswana family groups and structures of kinship have undergone change through cyclical and historical periods.

3.1.3 Spirituality

Tswana people traditionally worship the spirits of their ancestors and their healing systems are “ordered in terms of a cosmological scheme which defined the relationship between...man, spirit and nature” (Comaroff, 1981, p. 369). More recently, due to the transformation brought about by European colonisation, Christian beliefs have been incorporated into this cosmological order. The official religion of most tribes is Christianity, influenced by numerous denominations; however, Schapera and Comaroff (1991) note that this Christianity is often merely conventional rather than a true acceptance and practice of Christian beliefs.

Before the spread of Christianity, the Tswana believed in *Modimo*, a god who created all things and moulded destiny. It was believed that he is the instigator of punishments for deviant behaviour. Death was considered an act of God. The Tswana believed that the dead would survive into the afterlife and that the souls of dead people would become spirits who would lead a life similar to that on earth. Therefore, the dead were usually buried with their weapons or with farm implements as well as clothes. These spirits would show continued interest in the lives of their living descendants and they had the power to reward or punish behaviour. In order to maintain their favour, families worshipped the spirits of their own as well as the chief’s ancestors through rituals and sacrifices.

Today, beliefs regarding death vary widely. The dead are typically buried in special graveyards on the outskirts of the village and a religious ceremony is held at the graveside. Those Tswana who profess to be Christian believe in the concepts of immortality, heaven and hell. Some people believe in the existence of *dipoko* (ghosts) who haunt the places that they frequented while alive.

3.1.4 Disease and healing

Although ancient religious beliefs and practices are largely obsolete, the influence of the ancestors continues to be recognised specifically in relation to disease or

illness. A person's illness may be attributed to the anger of the ancestors and certain rituals may need to be performed in order to promote recovery (Schapera & Comaroff, 1991).

In Tswana culture, diseases, disorders or misfortunes are classified according to their causes and no fixed relationship exists between causes and symptoms. Although a vocabulary of terms to describe both physical and psychological disturbances exists, these do not form the basis for their classification of disease (Comaroff, 1981). Traditional Tswana people differentiate between 'Tswana' diseases (those that can only be treated by a traditional healer) and 'European' or 'non-Tswana' diseases (e.g. TB). The healing process depends on the perception of the meaning of the disruption. However, they consider biomedicine to be one of many types of medicine and they acknowledge the need for different treatments for specific diseases. Tswana healers have incorporated new knowledge into existing belief systems about disease and illness (Haram, 1991).

The Tswana practice magic and this includes the use of medicines to treat disease, protect people, promote fertility, ensure success, predict the future, find employment, or injure enemies. Traditional healers (*dingaka*) use herbal remedies of vegetable origin or parts of animals or humans to cure minor ailments. They may also practice divination, perform rituals for the treatment of disease or pray directly to the spirits of the ancestors (Comaroff, 1981).

3.1.5 History of the tribe

Perhaps the most important influencing factor in Tswana history is the impact of Western civilisation and European control which originated with the arrival of British missionaries, traders, hunters and explorers in the early 1800s. The many evangelists and missionaries who moved into the area were involved in the colonial process both overtly and subtly. They introduced a new worldview and principles of 'civilised life', such as agricultural practices, education, architecture and building, clothing and the Western concept of time (Comaroff & Comaroff,

1986). They also brought Christianity, new forms of marriage and death rituals and a new system of morality (Schapera & Comaroff, 1991). In an “atmosphere of benign paternalism” (Bozzoli, 1991, p. 61), several missionaries felt it their duty to “clothe the heathens and rehouse them in proper habitations...and reform the social division of labour” (Comaroff, 1989, p. 674). The missionaries and the Tswana developed a symbiotic relationship through the exchange of goods, aid and skills. Several tribes attempted to attract missionaries to their tribes in a bid to gain power over other tribes (Comaroff & Comaroff, 1986).

Boer Voortrekkers arrived in 1837 and settled in the Transvaal area. They established several historically ‘white’ towns, such as Rustenburg, with associated ‘black’ townships like Tlhabane, which lies just outside Rustenburg. The Boers (Afrikaans farmers) claimed Tswana people as their subjects and pressed them into forced labour. Local chiefs often clashed with the Boers over this issue (Bozzoli, 1991).

The Boers resented the relationship between the Tswana people and the British missionaries and this led to armed conflicts as the Boers attempted to extend their boundaries. As a result of these conflicts, the British established the Bechuanaland protectorate in 1885, which later became the Republic of Botswana. However, this decision had several negative consequences for the Tswana: chiefs lost much of their power, the people were forced to pay taxes and men began migrating to work on the newly established mines in the area (Schapera & Comaroff, 1991).

Mbenga (1997) describes how during the 1860s the Boers forced the Tswana into unpaid labour in the Pilanesberg area. He also discusses an incident in which Paul Kruger publicly flogged a Tswana chief who later died because of his injuries. This type of violence and terror was part of the colonisation of the area by both the Boers and the British and was perpetuated through land expropriations, forced removals of Tswana people into designated areas, the use of people for labour and the theft of Tswana cattle as ‘tax’. This is indicative of the highly unequal power relations which existed between blacks and whites in the area at that time.

Many Tswana people grew up working on Boer farms. Likewise, many Boers learnt Setswana as they worked together on the farms. Some authors have suggested that the interactions between Boers and Tswana on these farms are a mirror of national politics and apartheid ideals (Sylvain, 2001). However, van Onselen (1990) cautions that it cannot be said that race relations on farms are a reflection of race relations in general. Instead, Bozzoli (1991) points out that the relationship between the Boers and the Tswana was complex in terms of hierarchies of gender, class and age in each social group.

Van Onselen (1990) discusses how each culture was influenced by elements of the other through a process of cultural osmosis and interaction. For example, Boers learnt to trust in the skills and remedies of Tswana traditional healers, while traditional healers began prescribing patented western medications for their patients. He also suggests that “a complex, unwritten code of racial etiquette governed the daily patterns of social interaction between the politically dominant whites and the large mass of oppressed blacks” (p. 116). In addition, the North West Province is an “area notable for the dominance of racist republican ideas”, but there is “evidence of a surprising degree of tolerance and flexibility in social relations” (p. 122).

In his biography of the sharecropper Kas Maine, van Onselen (1996) describes the oft-troubled historical relationship between Tswana and Afrikaans people in the North West Province. Through necessity, inter-racial social practices were formed and facilitated, ideas were shared and aspects from both cultures were embraced and swapped. Life in colonial times meant that many Tswana people learnt to negotiate the economic and social intricacies of living together with white people and they become “chameleon[s] amongst the Boers” (van Onselen, 1996, p. 9). A recent incident, in which an Afrikaans teenager entered a settlement near the town of Swartruggens and shot dead three Tswana residents, is considered by many to be indicative of the continued existence of racial tensions in the area (Dibetle, 2008), despite protestations by white residents (Swart, 2008).

Bozzoli's study (1991, p. 240) documents the stories of Tswana women living near Rustenburg. They reportedly view white people as "a series of ethnic groups – Boers, Germans, Jews, and so on, each defined by virtue of its characteristic relationship to the Bafokeng...Boers are also farmers, who know about crops and seed; Jews are traders; German [people are] missionaries...the women think of whites in terms of their individual characteristics as employers...".

The advent of apartheid led to the establishment of the homeland of Bophuthatswana in the western Transvaal area of South Africa during 1977. Townships were planned around major cities such as Rustenburg (Baldwin, 1975) and chiefs were appointed by the Bophuthatswana government. The Bantu Homeland Citizenship Act meant that every black person had to become a citizen of a homeland and people were forcibly moved from urban areas and settlements in white farming areas into these homeland areas (Francis, 2002; Schapera & Comaroff, 1991).

Lucas Mangope was appointed head of state and he embarked on a reign of manipulation and control in an effort to promote Batswana ethno-nationalism and resist pressure for reincorporation into South Africa in 1994. Bozzoli (1991) interviewed several women from the Phokeng area who remembered the Bophuthatswana Defence Force hunting and detaining hundreds of Tswana people. After the demise of Mangope, the area now known as North West Province was left with extensive poverty, a shortage of housing, unemployment and frustration over lack of service delivery (Jones, 1999). A great shift towards casual employment and migrant labour occurred, leading to the dispersal of the Tswana, the abandonment of the traditional social organisation and kinship ties and the decentralisation of communities.

The vast majority of Tswana people are currently caught in a cycle of poverty and peasantry. Many cluster around someone in the family who receives a regular income or pension, leading to the emergence of complex household structures (Francis, 2002). Others have turned from agriculture to petty trade, informal

activities or casual labour. Christian churches have become the arena for communal activities and collective identity, replacing the authority of the chieftainship and cohesion of family groups (Schapera & Comaroff, 1991). A new class structure has emerged as a result of differences in access to wage incomes, welfare support, access to land, capital and skills (Francis, 2002).

Most authors believe that a combination of the influence of Christianity and the visiting missionaries, acquisition of Tswana land by the Boers and migrant labour caused great transformations in Tswana society. This led to the demise of many of the traditional ways of life, domestic relationships and kinship, chieftainship and culture (Schapera & Comaroff, 1991; Bozzoli, 1991). Despite this, the Tswana have retained their language and some of their spiritual and cultural beliefs, as well as a strong sense of community (Comaroff, 1981).

3.2 The work of the pharmacist

3.2.1 History of the profession of pharmacy in South Africa

The history of the pharmaceutical industry in South Africa dates back to the arrival of Jan van Riebeeck and the employment of apothecaries. It was only in the 19th century, however, that the industry became more formalised with the introduction of licenses for dispensing of medicines (Gilbert, 1998b). With global leaps in technology and industrialisation came a threat to the functions of the pharmacist and a loss of much of the art and science of pharmacy. Instead, pharmacists rapidly found themselves practising as overqualified drug salespersons whose primary work involved dispensing medicines to patients (Gilbert, 2001).

Apartheid policies in the 20th century lead to an imbalance in the distribution of resources between public and private sectors, urban and rural areas, and population groups. This has meant that health services still do not meet the needs of many communities and rural areas have few pharmacies (Gilbert, 1998a).

Currently, only 11 percent of registered pharmacists work at government hospitals (Summers et al., 2001).

In recent years, much debate and controversy has been sparked by the Department of Health's introduction of drug reform and dispensing fee policies which have attempted to address these imbalances (Department of Health, 2006; Independent Online, 2007). Pharmacists have been obliged to commit themselves to regaining their professional standing within the South African health care community.

Historically, the professions of pharmacy and medicine are closely connected. However, the status of the pharmacist is not equal to that of the doctor, who continues to hold greater status than most other health professionals do (Pilnick, 1998). A long history of dispute exists between doctors and pharmacists regarding the right to dispense medicines to patients. Regardless of this dispute, the pharmacist continues to act as the dispenser and caretaker of medicines and the doctor remains the healer and prescriber of medicines (Gilbert, 1998c, 2001).

There has also been a move towards role expansion with an increasing need for pharmacists to play a part in health promotion and education, counselling of patients and provision of advice and information (Gilbert, 1998c, 2004; Iversen, Mollison, & MacLeod, 2001). With such an expansion in role comes a necessity for improved and efficient communication skills, especially within a multicultural-multilingual context. While there is a relatively large body of research investigating general communication skills required by pharmacists, little has been published examining the nature of interactions between patients and pharmacists, cultural issues pertinent to pharmacy practice, or language and cultural barriers within the pharmaceutical interaction (Shah et al., 2004).

3.2.2 Training of pharmacists

In South Africa, eight universities currently provide pharmacy training. The pharmacy degree consists of four years of full-time study, followed by one year of

practical internship and a second year of community service in the public sector (South African Pharmacy Council, 2003). The degree offers problem-based and outcomes-based learning. Because of the lack of registered pharmacists, especially in the public sector, pharmaceutical education focuses on training pharmacists for general practice (i.e. dispensing) rather than on clinical pharmacy or manufacturing.

The South African Pharmacy Council sets the curriculum for the degree of Bachelor of Pharmacy offered at South African universities in accordance with the Pharmacy Act of 1974 (Department of Health, 2000a). Although the general curriculum is prescribed, each university that offers the degree has a different emphasis on the unit standards laid out by the Council (Rhodes University, 2006). Some of these unit standards include organisation of the manufacture, procurement and distribution of pharmaceutical products; dispensing medicines to patients; providing education, information and care to patients to ensure optimum use of medicines; and providing information and advice to the community (Department of Health, 2000a).

Despite the inclusion of basic communication, counselling and education tasks in the unit standards, a review conducted by the researcher of the online curriculum summaries provided by the various universities revealed that the degrees remain predominantly science-based and generally do not include communication or counselling modules. None of the reviewed curricula appears to include content which addresses traditional medicine and health beliefs in South Africa. This is rather unsatisfactory in light of the fact that South Africa presents a particularly challenging health care context due to its multiplicity of languages, cultures and health care systems. Other countries have identified the importance of training pharmacists in communication skills and many international pharmacy degrees focus on teaching these skills (cf. Dickson, Hargie, & Morrow, 1996). A wide literature base exists which describes the development and implementation of various training and evaluation programmes specifically aimed at pharmacy students and pharmacists.

3.2.3 The ‘professional obligation’ of the pharmacist

Pilnick (2003, p. 848) introduces the notion of the “professional obligation” of the pharmacist. In order to understand this notion, a discussion of the relevant South African documentation is necessary.

According to the amended Pharmacy Act of 1974 (Department of Health, 2000a, p. 3), the following acts are specific to the profession of a pharmacist:

“The provision of pharmaceutical care by taking responsibility for the patient’s medicine related needs and being accountable for meeting these needs, which shall include but not be limited to the following functions:

- (a) evaluation of a patient’s medicine related needs by determining the indication, safety and effectiveness of the therapy;
- (b) dispensing of any medicine or scheduled substance on the prescription of a person authorised to prescribe medicine;
- (c) furnishing of information and advice to any person with regard to the use of medicine;
- (d) determining patient compliance with the therapy and follow up to ensure that the patient’s medicine related needs are being met; and
- (e) the provision of pharmacist initiated therapy.”

It is interesting to note that according to the Act, the pharmacist is specifically tasked with the responsibility of monitoring the patient’s medication needs and ensuring adherence to medications, in addition to providing information and advice about medications. This is reiterated in The South African Pharmacy Council’s (2003, p. 1) description of the profession of pharmacy, which states that the pharmacist should be a “provider of pharmaceutical care by taking responsibility for the outcome of therapy”. In addition, “a pharmacist must be competent to provide pharmacist initiated care to the patient and ensure the optimal use of medicine”.

Pharmacists “are often the most accessible health care providers in the community” (Zappa, 1999, p. 25). “Pharmacists are the primary legal custodians of medicines and consumer health educators. ‘Walk-in’ access to pharmacies and clinics enables any member of the community to consult directly with a trained health professional” (Commonwealth Pharmaceutical Association, 2003, p. 1). A pharmacist may be the first health professional who a patient chooses to consult for advice, information or treatment. They are also often the last professional a patient consults, especially in a hospital setting where the pharmacy may be the final stop after the patient has consulted the doctor and/or other health professionals.

3.2.4 The pharmacist’s role in HIV/Aids

The medical treatment of HIV/Aids and related opportunistic infections is almost entirely based on the provision of medications (Hill, 2006). Due to the enormity of the HIV/Aids epidemic and the inadequacy of the health care system in South Africa, all health professionals need to become involved in the prevention and treatment of the disease. Traditional disjointed models of health care provision, in which the doctor prescribes treatment without consulting with other health professionals, do not work in the case of HIV/Aids because patients experience many concomitant physical and psychosocial problems. A team approach is therefore necessary and pharmacists hold the potential to contribute greatly towards multidisciplinary management of the disease (Gilbert, 2004).

Because the patient will be taking ARVs for life, the pharmacist plays a vital role in the patient’s care, particularly in promoting adherence to the treatment regimen (Zappa, 1999). Some authors have suggested that the pharmacist should lead the multidisciplinary HIV/Aids management team as the medication and adherence expert. One model suggests that the pharmacist should play the role of dispensing relevant medications, monitoring drug interactions and toxicities, optimising regimens, educating patients about HIV therapy and adherence, assessing cultural and linguistic factors, following up on management issues and planning strategies to improve adherence (Hardy, 2005; Hill, 2006). Another model puts the

pharmacist in a team together with doctors and nutritionists, with the pharmacy as the focal point of care delivery. In this model, team members should coordinate treatment and care for patients and the pharmacist should be tasked with data management and the provision of education and information to the community (Zappa, 1999).

Aside from adherence and ARV management, the pharmacist is an important team member in the prevention of HIV infection through the provision of education, promotion of behaviour changes, reduction of mother to child transmission, management of sexually transmitted infections (STIs), treatment of TB, provision of post-exposure services and access to voluntary counselling and testing (VCT) services. Pharmacists can also supply information and support to patients who are on ARV regimens and offer advice on lifestyle and nutrition (South African Pharmacy Council, 2003).

Interestingly, a recent South African survey revealed that although pharmacists are eager to become involved in the education, testing and treatment of HIV/Aids, doctors are not in favour of such a move. Doctors generally feel that pharmacists should provide advice, information and counselling to patients regarding the correct use of medications, but that they should not have access to patients' laboratory test results and should not be involved in pre-test counselling, rapid testing, the provision of post-exposure prophylaxis, or the treatment of STIs without a doctor's prescription. The researchers who conducted this survey suggest that these opposing views are related to entrenched relations between the two professions. This conflict of opinion may have negative consequences for the provision of HIV/Aids health care in a resource-limited setting in which doctors and pharmacists ideally need to work together to provide adequate patient care (van der Walt & Summers, 2006).

Given the many negative variables that are often out of the health professional's control, perhaps the most important intervention to promote successful adherence is to improve communication between patients and health providers. Drug

dispensers are rarely trained in communication skills, but such training should become a priority (Mishra et al., 2005). The World Health Organisation urges that “a comprehensive response to HIV and Aids requires the simultaneous acceleration of treatment and prevention efforts with the ultimate goal of universal access to prevention, treatment and care” (World Health Organisation, 2005).

In order to achieve such an ideal, further research and intervention is necessary. As some of the research detailed above has shown, studies conducted in developed countries and models of behaviour are not necessarily applicable within the context of developing countries. It is therefore essential to analyse health communication practices between pharmacists and patients within a developing country context such as the multilingual-multicultural South African environment. This study aims to begin the process of addressing this gap in the available research.

3.3 Cultural issues in pharmacy practice

3.3.1 Cultural barriers

“While many [patients] find it challenging even to access today’s health care system, this can be even more stressful when there is a language or cultural barrier” (Cuellar & Fitzsimmons, 2003, p. 285). In an age of globalisation, this statement is particularly pertinent to many pharmacists around the world who provide services to an increasingly multicultural patient population.

It is a well recognised fact that cultural and linguistic factors pose potentially large barriers to a patient’s ability to access health care systems, health information and treatment instructions, or even to adhere to a treatment regimen. These barriers can also create barriers for pharmacists, especially when attempting to provide information about medications to patients (Zweber, 2002). Awareness of intercultural variations and different norms of behaviour is essential in cross-cultural interactions, because conflict, misunderstanding and miscommunication may arise due to a lack of attention to these differences (Kasanga & Lwanga-

Lumu, 2007). In the field of pharmacy and especially HIV care, such barriers are of particular concern because of the necessity for patients to adhere to ARVs.

Culture and health beliefs are inextricably intertwined. A patient's beliefs about the cause of disease, effective treatments, healing and medicines, as well as their expectations of treatment, will impact upon their trust in the health care system and health professional, as well as their acceptance of treatment recommendations and adherence to treatment regimens (Schaafsma, Raynor, & de Jong-van den Berg, 2003; Shah et al., 2004). Differing beliefs and expectations held by both pharmacist and patient may result in hostility, confusion or misunderstanding of information. A patient's view and experience of western medicines, and particularly chronic treatments, may affect adherence and commitment to treatment (Burroughs, 2003).

Health professionals who are culturally competent are better equipped to provide effective care which may significantly affect patients' clinical and health outcomes. According to Mullin et al. (1998, p. 72), "health professionals enhance impact of their efforts when they uncover what patients think caused the disease or illness because treatment is most effective if patients feel that their provider is addressing their concerns". Some of these outcomes may include improved patient education about a disease, improved health-seeking behaviour by patients, more appropriate testing and screening, fewer diagnostic errors, avoidance of treatment complications and greater patient adherence to medical advice (Vanderpool, 2005).

Within the boundaries of a therapeutic relationship, it is important for the health professional to allow the patient to discuss his/her cultural beliefs regarding disease and medicine and then to incorporate these beliefs and practices into the patient's treatment and care. It also encourages the pharmacist to build knowledge about the cultures served in the pharmacy (Zweber, 2002). However, Mullin et al. (1998) caution that members of the same cultural group may not necessarily hold the same beliefs about health and disease. One should not assume uniformity within a cultural group, but seek to discover a patient's personal beliefs as

informed by their culture.

Health care practitioners are not always aware of cultural and linguistic barriers and this is reflected in the large body of literature which documents some of the obstacles faced by ethnic minorities when accessing health care systems. The field of pharmacy has recognised the importance of being culturally aware when providing services to patients from different cultural backgrounds. Because of this, several studies have been conducted to address these cultural barriers and determine the efficacy of cultural competence training packages for students and practicing pharmacists (e.g. Assemi, Cullander, & Hudmon, 2004; Evans, 2006; Shah et al., 2004). It has been noted that “becoming culturally competent and practicing multicultural patient care is a choice that pharmacists can be made aware of, preferably at an early stage...[if] given adequate tools” (Shah et al., 2004, p. 2).

Despite this, many studies simply acknowledge that cultural differences exist and that pharmacists need to be attuned to these differences, but they do not specifically document pharmacist-patient interactions in which cultural barriers are present, nor do they provide practical suggestions for addressing cultural or linguistic barriers. A lack of South African studies which investigate cross-cultural interactions in pharmacy settings is also evident. Although some international literature may prove applicable to the local context, caution is necessary: the results of studies involving so-called ‘ethnic minorities’ may not necessarily apply to the South African context, where majority populations do not speak English or are second-language English speakers.

3.3.2 Culture and traditional medicine

In Africa, traditional healers far outnumber biomedical health care providers. Up to 80% of patients access traditional medicine or may visit a traditional healer before seeking treatment at a hospital (Gumede, 1990, as cited in Shai-Mahoko, 1996). A study conducted in the North West Province (Shai-Mahoko, 1996) lends insight

into the activities of traditional healers in this area. Out of a sample of 35 healers, STIs rank high on the list of conditions treated. It is interesting to note that teachers, nurses and ministers of religion rank high on the list of people in the local communities who consult traditional healers, indicating that patients from a range of socio-economic and educational backgrounds utilise the services of traditional healers.

Patients who consult traditional healers are often unfamiliar with the western concept of taking medications for a long period, especially for a chronic illness – traditional healers usually give once-off herbal remedies. In addition, patients may be unfamiliar with the idea of tolerating unpleasant side effects as part of successful medical treatment (Burroughs, 2003).

According to van Dyk (2001a, p. 62), “most African patients consult traditional healers for STD [Sexually Transmitted Disease] treatment, and [the healers] are particularly competent in handling STD’s”. Patients living with HIV/Aids usually consult traditional healers and medical practitioners simultaneously (Meyer-Weitz et al., 1998, as cited in Liddell, Barrett, & Bydawell, 2005) but many choose traditional medicine as primary care. Traditional healers have much to offer in terms of providing knowledge and assisting with the control and prevention of HIV/Aids, as well as easing the burden on western medical practitioners (Liddell et al., 2005; Shai-Mahoko, 1996; van Dyk, 2001a).

“Alternative explanations for disease” in the African setting “are often regarded as a cause for...non-adherence to medical treatment and the use of potentially dangerous traditional remedies” (Levin, 2006c, p. 1058). Pharmacists therefore need to be aware of traditional remedies or healing practices which patients may use (Zweber, 2002). This is particularly important in a country such as South Africa, where many patients consult traditional healers and these healers have been encouraged to provide support to patients living with HIV/Aids (Homsy et al., 2004; Liverpool et al., 2004).

An informal discussion which the researcher held with a pharmacist at Rustenburg Hospital in December 2005 revealed that many patients who attend the Wellness Clinic appear to be accessing traditional healers or even taking traditional medicines in conjunction with ARVs; however, they usually do not disclose this fact to the pharmacists or doctors. This is confirmed by Moa's (2005) study conducted at the Hospital. This practice, known as dual consultation, is a strategy used by patients to improve their chances of recovery (Herselman, 2007).

The pharmacists also recounted several incidents in which it was discovered that a patient had taken an herbal remedy which had affected their response to ARVs. Traditional medicines are used widely in the treatment of HIV/Aids, but they are generally not well researched despite their recommendation by Dr Manto Tshabalala-Msimang, the Minister of Health. An investigation of the pharmacology and toxicology of two popular herbals – the African Potato and Sutherlandia – showed that these herbal remedies might produce an inhibitory effect on ARV drugs and lead to viral resistance, treatment failure or drug toxicity. Therefore, it is important that pharmacists are aware of the potentially negative impact of herbal medicines on ARVs and that they inform patients about the possibility of adverse events or risks associated with taking such remedies (Mills, Foster, et al., 2005; Mills, Cooper, et al., 2005).

Despite the inclusion of western definitions of disease and models of causation in HIV/Aids education programs and the media, as well as the acceptance of western beliefs by many Africans, it is important to consider traditional beliefs about HIV/Aids and disease in general.

A significant difference between African traditional medicine and western biomedicine is the conceptualisation of health, disease and illness. Traditional Africans believe that all diseases have a specific cause and that it is important to discover who or what caused the disease. This cause may be natural (e.g. germs), through pollution (ritual impurities associated with death, the reproductive system, or violation of sexual prohibitions), from disharmony with the ancestors,

the failure of human relations, or witches (van Dyk, 2001a; van Dyk, 2001b).

Many Africans believe that witchcraft is the cause of HIV/Aids (van Dyk, 2001a), despite well-developed ideas of infection and contagion in African representations of disease (Liddell et al., 2005). Although most believe that STIs are caused by germs through sexual transmission, they do not always view HIV/Aids as an STI. They believe that the point of entry of a disease into the body is the body part that becomes sick. However, HIV does not affect the genitalia and people who are ostensibly healthy can inflict the disease on others. Therefore, the cause of HIV/Aids is attributed to witchcraft rather than infection or contagion (van Dyk, 2001b; Liddell et al., 2005).

Another important factor in the African view on healing is the role of the community and the family. Healing “always takes place in a social setting where the patient is accompanied by members of his or her family who understand, support and accept the patient” (van Dyk, 2001b, p. 9). However, the incorporation of family and community into the healing or treatment process may prove difficult in light of issues of confidentiality, stigma and disclosure associated with HIV/Aids. Although the family is important in the experience of healing, there are regulations as to the kind of information that can be shared and with whom. It is essential for the health professional, together with the patient, to identify those persons who should be included in treatment and care (van Dyk, 2001b).

3.3.3 Cross-linguistic pharmaceutical care

Culture, language and communication are intertwined. Several authors discuss how communication across cultural and linguistic barriers may present interactional difficulties because of differences in verbal and non-verbal communication practices (Shah et al., 2004; Zweber, 2002). It has become apparent that pharmacists need to be competent interlocutors as well as efficient cross-cultural communicators. Research has shown that “speaking to patients in their own language and understanding personal and cultural influences on health

care and medicine-taking [is] important in delivering [a] message to ensure and improve patient compliance” (Huckerby, Hesslewood, & Jagpal, 2006, p. 682).

It is acknowledged that the use of an interpreter or a bilingual pharmacist is optimal in situations in which a language barrier is present, but this is not always possible and it is impractical to expect pharmacists to become fluent in the language(s) of their patients. Even when an interpreter is available, intercultural translation may prove difficult: some words do not exist in other languages or they may have different meanings across cultures (Schaafsma et al., 2003) (cf. Levin’s (2005, 2006a) study of Xhosa terminology for respiratory diseases).

Particularly in the field of pharmacy, health care systems in South Africa are predominantly English- or Afrikaans-based. Drug prescription labels, package inserts and pamphlets offering information about medications are usually available in English only and not necessarily in the home language of the patient, making it difficult for patients to access care and knowledge (Odegard et al., 2004).

Westberg and Sorensen (2005) interviewed pharmacists and non-English-speaking patients from minority populations in the United States to determine communication barriers. Poor adherence levels seemed to be more prevalent among non-English-speaking patients and more than half of these patients did not understand instructions given by the pharmacist. Access to pharmaceutical services in the patients’ native language was limited and interpreters were not always available.

Fejzic and Tett (2004) investigated communication difficulties among non-English speaking Yugoslavian immigrants in Australian pharmacies. Patients who did not speak English were found to have twice the error rate with medication use compared to those patients who could speak English. Interviews with patients revealed that the primary problem with medication use was a lack of understanding of how to take the medicines, the purpose of the medicines and their common side effects. Patients also reported that they experienced difficulty

in asking for and obtaining information and advice from the pharmacist. Interestingly, semantic factors also appeared to play a role in creating communication barriers and confusion of meaning: for example, in the languages included in the study, the word for ‘medication’ is translated as ‘cure’ in English and the word for ‘doctor’ means ‘the one who cures’.

Although quantitative in nature, a study by Odegard et al. (2004) on the provision of education for Asian patients with asthma showed that health education provided in the patient’s language of choice improved health and treatment outcomes for those patients whose native language was not English. The study concluded that information and education should be tailored to the linguistic and cultural needs of the target population.

3.3.4 Health communication and the pharmacist

Britten, Stevenson, Barry, Barber and Bradley (2000) have devised a list of categories of misunderstandings related to prescription of medicines, which lends insight into how communication breakdowns within the pharmacy context may occur. Firstly, the patient may not offer information to the health professional, or information may not be sought from the patient – for example the patient’s perceptions and expectations of the medicines or the patient’s medical history. Secondly, the health professional may not disclose information to the patient or the patient’s understanding of information is not assessed – for example, how a drug works or its correct dosage. Thirdly, conflicting information may be given to the patient, or the patient does not understand or remember information about his/her diagnosis and treatment. Lastly, relationship factors may influence communication and, importantly, erroneous assumptions may be made by both parties due to a lack of communication.

Within HIV/Aids health care, patients come to the health professional with cultural beliefs, misconceptions, prior knowledge and experiences of HIV which are informed and influenced by publicity and media coverage of the disease. Some

authors propose that breakdowns in health communication may occur because of a failure to investigate the patient's expectations, culture, beliefs and understandings about medicines and disease (e.g. Elwyn, Edwards, & Britten, 2003). This failure may lead to confusion, misunderstanding or even hostility between both parties (Shah et al., 2004).

Therefore, the quality of communication in any interaction between a patient and pharmacist plays a crucial role in enabling the patient to assimilate knowledge and information, manage his/her condition and correctly take a particular medication. However, as *Chapter 4* will demonstrate, there is limited research available that investigates interactions between pharmacists and patients and much of the current research has focused on doctors or nurses and their interactions with patients (Skoglund et al., 2003).

3.4 Summary of Chapter

This chapter provided insight into the world of the participants included in this study – the Tswana people and the pharmacist. The Tswana were described in terms of tribe and family structure, spirituality, beliefs regarding disease and healing and kinship relations. A description of their history revealed the influence of colonisation and Christianity on tribe structure as well as the often-troubled relations between Tswana and Boers in the area. Lastly, an account of recent historical events demonstrated the great changes in the tribe over time which have occurred due to processes such as migrant labour and the influence of poverty.

The chapter also focused on the pharmacist working in the multilingual, multicultural South African health care environment. The history of the profession was described, highlighting the lack of pharmacy services in many areas and the imbalance in the distribution of resources. Pharmacists have experienced a role expansion in recent years as they take on the tasks of educators and counsellors. The vital responsibilities and obligations of the pharmacist in the field of HIV/Aids were discussed.

Finally, the chapter reviewed literature concerning cultural and linguistic issues in pharmacy practice, specifically barriers to communication and adherence. There is a need for cultural attunement and a consideration of patients' health beliefs, expectations and use of traditional healing systems. A lack of studies investigating cross-cultural and cross-linguistic pharmacy practices was noted.

CHAPTER 4

AN OVERVIEW OF HEALTH COMMUNICATION RESEARCH AND MEDICAL SOCIOLOGICAL CONCEPTS

The first part of this chapter will provide an overview of health communication research in general, followed by a consideration of studies specifically conducted in the field of pharmacy which make use of sociolinguistic methods to examine processes of interaction and communication. The second part of the chapter will introduce various concepts and theoretical frameworks from the field of medical sociology which are pertinent to the interpretation of the data. Finally, a consideration of various ecological models of communication will be discussed, followed by the presentation of a proposed model based on the literature reviewed in *Chapters 2, 3 and 4*.

4.1 Health communication research: a brief overview

The development of the field of health communication began during the twentieth century with the emergence of ‘health’ as an important concern and the establishment of a formal healthcare system. However, with these advances came a focus on the science of medicine and the medical model, both of which detracted from the view of ‘patient as a whole person’ and the importance of communication. Asymmetry in health professional-patient relationships became the norm as doctors exercised their scientific knowledge and authority and patients began to acknowledge the doctor as ‘expert’ (R. Thomas, 2006).

During the 1970s, however, a shift occurred with the rise of consumerism: the healthcare system was seen as prohibitive and the cause of patients’ ignorance of illness and health status. Together with an increased emphasis on prevention of illness and influences from the fields of psychology and sociology, patients began

to seek information about illness and health concerns. Because of this shift in focus, health professionals and researchers began to take an interest in the mechanisms of health communication and the need for meaningful communication with their patients (Ratzan, Payne, & Bishop, 1996). F. Thomas (2006, p. 40) notes that “today we recognize the importance of a healing environment and the impact that communication can have on the course of an illness”.

The field of health communication is extensive and the focus of research divergent, with several avenues of study (Aarva, de Haes, & Visser, 1997). One of these avenues focuses on examining communication processes in various social and healthcare contexts, across different levels (including intrapersonal, interpersonal, group, organizational and societal communication) and channels (e.g. face to face communication between health professional and patient, or mass media communication of health messages) (Kreps, Bonaguro, & Query, 1998).

The last few decades have seen an exponential increase in the study of institutional talk and specifically health care interactions, influenced by scholars from the social sciences. Thompson (2003) notes that the study of healthcare interactions was the predominant focus of research in the field of health communication for many years and although the focus of research has recently broadened and changed, it remains an important area of study. Researchers have realised the limitations of using experimental research to analyse communication processes and specific interactive behaviours, investigate the purposes of medical communication, determine the influence of communication on patient outcomes and gain insight into how background variables, disease and site characteristics may influence communication (Ong, de Haes, Hoos, & Lammes, 1995).

Pilnick and Dingwall (2001) provide a comprehensive review of studies conducted in the field of genetic counselling, the findings of which are applicable to all research in health care settings. They emphasise the importance of understanding how patients receive and understand information and how health

professionals deliver this information. These processes have been successfully studied in various health care domains using sociological methodologies such as Conversation Analysis (CA) and ethnography. They caution that in order to encourage successful communication practices in health care, it is necessary to identify the parts of the interactive process, as well as the various influences on these parts. This can only be achieved using carefully selected appropriate research methods.

Recently, there has occurred a shift in emphasis from research which focuses on the health professional's behaviour and communication to research which focuses more strongly on the patient's experiences, individuality and insights. This shift has occurred as a result of the recognition that the patient is a whole person who possesses expertise, knowledge and control of his or her own health. Therefore, researchers and practitioners have begun to focus on the transforming roles of both patients and health professionals and the mutual influence which both parties may have on each other (Hall & Visser, 2000).

The analysis of institutional talk began with the work of scholars in the social sciences who have recognised the interrelationship of interaction, contextual factors and social structure and the unique aspects of institutional talk when compared to ordinary conversation. Conversation Analysts have conducted much of the work on institutional interactions in many health care domains and the use of CA in health care research has gained recognition. This method is employed in numerous studies (e.g. Drew & Heritage, 1992; Heritage & Maynard, 2006) which have yielded invaluable insights into communication practices in medical consultations, including how participants construct and orientate themselves to institutional norms, how aspects of the work of an institution are managed through talk, how institutional discourse is distinctly asymmetric and how social contexts are related to social actions.

CA has been utilised in several South African studies. This method of analysis appears to be particularly suited to multilingual health care contexts in which

language and cultural barriers and the use of interpreters are frequent occurrences, because of its attention to microlevel details of communication success and failure. In addition, Friedland and Penn (2003, p. 109) note that because CA focuses intensively on the positive and negative dynamics in a specific interaction and allows for “understanding of the dynamics, social and power aspects, shifting roles and pace of an interview, it “has the potential to remove the cultural bias with which researchers sometimes may approach such an analysis”. In conjunction with other methods of data collection such as ethnographic observations and narrative interviews, CA allows for a multidimensional perspective which combines direct evidence of communication success or breakdown in the interactions with participant perceptions of language issues. The data may provide evidence of misunderstandings, mistranslations, or communication barriers and facilitators (Friedland & Penn, 2003; Penn, 2007).

Given the unique and challenging nature of healthcare contexts, it is necessary to obtain a comprehensive understanding of interactional processes and communication success and failure as embedded and reflected in macro-level social and institutional structures and contexts. Therefore, methods of Discourse Analysis (DA), e.g. Critical Discourse Analysis (CDA), Foucauldian analysis, or methods such as those proposed by Potter and Wetherell (1987) or Roberts and Sarangi (2005), have also become popular approaches for studying institutional talk and organisational structures because they focus on contextual influences on interactions.

In South Africa, some research has used methods of DA or CDA to investigate health care practices. These studies have focused on issues such as the training of health professionals in the context of the social construction of illness (Williams, 2005), the dynamics of sexuality and HIV/Aids within communities (Shefer et al., 2002), the negotiation of sex and women’s sexual desire in the cultural context of gender relations (Shefer & Foster, 2001), how the media reports on HIV/Aids (Meintjes & Bray, 2005; Searle & Ndhlovu, 2002) and the use of language in a particular context and how this influences sexual practices (Selikow, 2004). It appears to be of particular importance to consider the influence of social, political,

economic, linguistic and cultural factors on health care interactions in this multicultural context, especially in the field of HIV/Aids which is a socially constructed illness.

4.2 Communication research in pharmacy settings

4.2.1 Overview

De Young (1996) has conducted a review of much of the research which examines pharmacist-patient communication views and practices. More than thirty studies over several decades have used data collection methods such as mail surveys, secret shoppers (i.e. prepared 'patients'), or closed-ended questionnaires to investigate the communication practices of pharmacists. De Young notes that these quantitative research methods, which have dominated the study of pharmacist-patient communication, have not provided the necessary insights into the quality of communication practices. Shah and Chewning (2006) conducted a similar literature review of studies of pharmacist-patient interactions. They report that analysis of taped interactions is rare and they highlight the need for further detailed examination of pharmacist-patient dyads.

Dyck, Deschamps and Taylor (2005) examined pharmacy sessions in Canada and found that most information presented by the pharmacist was given in a matter-of-fact, direct manner. A one-way transfer of information was noted, with rare verification of patients' understanding of information. Pharmacists tended to have their own agenda and wanted specific responses from patients, instead of listening to everything the patient might want to say. However, interactions with patients who were knowledgeable about their condition and treatment were found to be more symmetrical. Kansanaho (2006) confirms the observations by Dyck et al. (2005) and describes the interactive style of pharmacists in Finnish pharmacies as 'drug-centred', paternalistic, often monologue-based rather than discussion-based, asymmetrical and controlled by the pharmacist.

Sleath (1996) investigated the nature of pharmacist-patient interactions in community pharmacies in the United States. She found that in 43% of consultations, pharmacists did not interact with patients who were collecting prescriptions, even though they were required to by law. The average length of interactions was found to be less than two minutes.

The researcher attempted to locate studies which used sociolinguistic methods (such as CA and/or DA) to analyse pharmacist-patient interactions. Although some studies indicated that they had utilised CA, closer inspection showed that this was not the case (Skogland et al., 2003), that the researchers had combined minimal CA with quantitative analysis (Dyck et al., 2005), or that the study merely presented random extracts from transcripts with minimal or no apparent analysis of the data (John & Housley, 2001). Only two studies were located which could be said to have truly utilised methods of CA and DA, viz. the research completed by Pilnick and Salter. These studies proved especially influential for this thesis and they will now be described in some detail.

4.2.2 Pilnick's study

Alison Pilnick's groundbreaking PhD thesis (1997) focused on the micro analysis of monolingual pharmacist-patient (or caregiver) interactions within a UK paediatric oncology clinic, using CA techniques. She has published this study in four papers (1998, 1999, 2001, 2003), each of which examines a different aspect of these interactions and provides insight into the nature of pharmacist-patient communication and the work of the pharmacist. According to Salter (2005, p. 66), "Pilnick is the first to address the 'communicative competencies' required by pharmacists in their extended role".

In her first publication (1998), Pilnick discusses issues of competence, knowledge and asymmetry in the pharmacist-patient encounter. The extracts presented in the paper provide evidence of some patient-initiated questions, requests for information or comments, but these were generally rare. The pharmacist dominated talk, initiated topics of discussion and set the agenda for the session.

Instructions or information was often given to patients regardless of whether the patient had requested it or not. The patients' utterances typically included limited responses or reactions.

Patients initially demonstrated knowledge of their children's medications and some of the interactions depicted a more symmetrical interactional alignment, compared to many studies which describe the typical asymmetry in institutional interactions. However, both parties moved quickly from greetings to the 'business' of dispensing. Pilnick found instances of interactional submission, during which knowledgeable patients deferred to the pharmacist's advice. Overall, however, she suggests that asymmetry in pharmacist-patient interactions is less than that found in other institutional talk, possibly because of the difference in professional status between pharmacists and other health professionals such as doctors.

Another observation made by Pilnick (1998) is that pharmacists' encounters with chronic patients are different to once-off visits by patients with acute conditions. These differences tend to focus on issues of knowledge: patients with a chronic disease will acquire information and understanding of their condition and treatment over time through repeated encounters with health professionals and the pharmacist in particular. Pilnick's findings may be applicable in the case of HIV/Aids, which is also a chronic disease requiring multiple encounters with the pharmacist and lifelong treatment. The differences between chronic and acute patients in terms of their interactions with health professionals and their knowledge of treatment and illness indicate the need to investigate pharmacist-patient interactions on a disease-specific and site-specific basis.

The second publication (Pilnick, 1999) examines whether the counselling provided by pharmacists in the oncology clinic can be classified as giving advice, information or instructions. Pilnick describes the consultations as 'directive' and she suggests that the pharmacists are engaging in the activity of instruction rather than providing counselling and/or advice about specific drugs which is tailored to the needs of each patient.

Generally, patients in her study used basic response tokens, such as ‘mmm’, in response to details provided by the pharmacist. The pharmacist elicited responses from the patients before proceeding with a discussion. However, Pilnick questions whether these responses actually indicate a patient’s commitment to future action. In addition, an assertion of knowledge by a patient is not a demonstration of knowledge; Pilnick concludes that it is difficult to determine how a patient’s assertion of understanding relates to actual understanding.

Her third publication (Pilnick, 2001) compares and contrasts the structure and organisation of the pharmacist-patient interaction with that of other documented institutional interactions. Pilnick proposes a template for the pharmacist-patient interaction based on her data. What is apparent is that the interactional organisation of encounters between patients and pharmacists differs from traditional templates of institutional talk between patients and other health professionals such as doctors. Therefore, the results of studies that detail interactional processes in other health professions are not necessarily applicable in the case of pharmacy interactions. This makes it important to study pharmacist-patient interactions specifically.

Drawing from Jefferson’s (1981) sequence for troubles talk and Zimmerman’s (1992) sequence for emergency calls (institutional talk), Pilnick (2001) suggests a putative template for advice-giving sequences in pharmacy interactions. She notes that there are differences between the advice-giving sequences in pharmacy interactions and the sequences proposed by Zimmerman and Jefferson. In particular, Zimmerman’s template for institutional talk cannot account for the interactional contingencies of advice giving. Therefore, these templates cannot necessarily be applied to the case of the pharmacist, nor can they be applied to pharmacy interactions in all contexts. Pilnick’s template is as follows:

Opening/Identification/Recognition/Acknowledgement
Greeting
Approach to advice giving
Arrival at advice giving
Acceptance/Rejection of Intention
(Rearrival)
Delivery of advice/information
Response to advice/information
Close implicature
(Questions/Reclose implicature)
Exit

Pilnick's fourth publication (2003) describes four different approaches used by pharmacists to initiate and deliver counselling sequences, with the responses from patients to each approach. She defines the term 'counselling' as inclusive of "all verbal activities that take place around medications management" (2003, p. 836).

The most common approach was the routine delivery of advice, information or instruction with limited patient participation and without first establishing whether the patient was knowledgeable about the issue. The least common approach was the initiation of counselling as a result of a patient's request for information. Occasionally, pharmacists asked patients whether they would like to receive information about a topic. Pilnick reports that pharmacists were reluctant to question patients' understanding of instructions, apparently in an attempt to avoid attacking or undermining patients' competence. Instead, pharmacists assume that patients understand information or they rely on implicit understanding or incidental demonstration of comprehension by patients. Pharmacists occasionally used a series of questions to establish the patients' competencies or knowledge on a particular subject.

The focus of this study is different to Pilnick's work. This study also investigates pharmacist-patient interactions in the context of a specific disease (HIV/Aids), but it includes interactions across linguistic and cultural barriers. Her study involved

caregivers of patients, rather than patients themselves; this study does involve some caregivers of both adult and paediatric patients, but the focus is on the patients themselves. However, Pilnick's work provides an important guideline for this study because of the limited existence of research of this nature.

4.2.3 Salter's study

Charlotte Salter (2005, 2006; Salter et al., 2007) conducted a study of monolingual medication review encounters between UK pharmacists and elderly patients which took place in the patients' homes. Salter analysed the social construction of the interactions and how these interactions supported elderly patients as users of chronic medication. Her analysis included both CA and DA techniques.

Salter identifies two discourse types, including 'screening and assessment' and 'advice giving and counselling'. In addition, she identifies the occasional use of a 'patient discourse' which involved a response by the pharmacists to the patients' lifeworld, i.e. their personal experiences (Mishler, 1984). The interactions tended to follow an interview or cross-examination format and were dominated by pharmacists. Pharmacists generally gave instructions and advice during interactions and patients rarely asked questions or presented concerns.

Those parts of the interactions which involved questioning the patient about adherence behaviours tended to become delicate moments and patients often responded defensively. Pharmacists often continued to question patients or give advice or instructions despite the patient demonstrating their knowledge or competence. It appeared that they wished to maintain control over patients. Therefore, a level of discord and suspicion between pharmacist and patient arose, and Salter suggests that the communication environment undermined the patient. Patients appeared to feel intruded upon and felt that the pharmacist was attacking their cognitive competence. Because of this, they tended to resist advice given by

the pharmacists. The issue, according to Salter, becomes a moral one: do patients have the right to be forgetful or disorganised?

Overall, Salter concludes that “review pharmacists have limited interactional skills”, that patients were reluctant to ask questions and that the pharmacists “frequently missed potential troubles-telling sequences and struggled...to respond to patients’ shows of emotion” (p. 331). This study is important because it contains not only a micro analysis of interactional processes, but also a discussion of the impact of the social construction of the encounter on communication between the pharmacist and patient. It also highlights how delicate situations may arise during discussion of patients’ adherence behaviours.

4.3 Previous research conducted at Rustenburg Hospital

One study has been conducted at the HIV/Aids Clinic at Rustenburg Hospital (Moa, 2005). This study interviewed 20 HIV positive female patients attending the Clinic as well as four doctors and a pharmacist who work in the Clinic, to investigate their perceptions regarding communication processes and language barriers.

The results revealed that patients generally understood doctors with the assistance of an ad hoc interpreter (usually a nurse) and patients felt comforted by the presence of the interpreter who acted as a cultural broker for the patient. Some patients did not seem to understand specific HIV-related terminologies, such as ‘CD4’, and several patients lacked adequate understanding of the virus and the disease. A few patients were aware of their lack of understanding and wished to learn more about the disease. Interestingly, when questioned about concerns related to their health and accessing health care services, patients were more anxious about their lack of knowledge of HIV/Aids than about issues such as transport or finances.

The study also revealed health professionals' frustration at not being able to communicate easily with patients and a fear of being misunderstood by patients which could have disastrous consequences in terms of treatment outcomes. Some health professionals had learnt a few Setswana greetings or basic instructions, but most relied on the assistance of ad hoc interpreters. However, health professionals felt that the presence of an interpreter sometimes created a barrier between them and the patients. Because of language barriers, they felt unable to offer the interpersonal, informational or decisional support which patients required. They regretted the fact that they could not speak Setswana fluently, because this would enable them to connect emotionally with their patients and demonstrate empathy towards patients.

4.4 Concepts and Theories from Medical Sociology

This section will present certain sociological constructs and theories which are pertinent to this study, including theories of power, assertion and agenda, Mishler's theory of the lifeworld, Parson's theory of the sick role and ecological models of communication in medical contexts.

4.4.1 Mishler's Voices of Medicine and the Lifeworld

In his seminal work *The Discourse of Medicine: Dialectics of Medical Interviews*, Mishler (1984) introduced the concepts of the *voice of the lifeworld* and the *voice of medicine*. His work is based on Habermas' Theory of Communicative Action (Habermas, 1987). According to Habermas, all speech acts have an intrinsic goal of mutual understanding and humans hold communicative competence to produce such understanding. *Communicative action* is interaction that is linguistically mediated, in which the speakers perform actions; this is oriented to achieving understanding. *Strategic action* occurs when a speaker produces an effect on a hearer; this is oriented to success and manipulating an outcome. Habermas describes how 'communication pathologies' may arise from confusion between

the two action types (Greenhalgh, Robb, & Scambler, 2006; Scambler & Britten, 2001).

Habermas distinguishes between communicative and strategic action and between *system* (the economy and state, which hold power over citizens) and *lifeworld*. The lifeworld functions as a framework within which communicative action takes place and it is produced through successful communicative action (van Heerden, 1994). According to Mishler, the concept of the lifeworld refers to the patient's contextually grounded social world – his/her everyday life, experiences, events and problems. In his analysis of doctor-patient interactions, Mishler noticed that patients sometimes discussed problems in their lives that were related to their illness or to contextually grounded experiences of events or problems. In medical interactions, the voice of the lifeworld must compete with the scientific, controlling, technical voice of medicine.

Mishler acknowledges that the two voices may coexist and both patient and health professional may use one voice or switch between voices within an interaction. The health professional's exclusive use of the voice of medicine may result in the domination of an interaction and suppression of the patient's feelings, concerns or perspectives. He argues that this may lead to poor or ineffective medical care and he calls for a more patient-centred practice which considers the patient's lifeworld. A more 'humane' practice would be one in which the voice of medicine is seen as an interruption of the voice of the lifeworld, rather than the other way around (Mishler, 1984; Barry, Stevenson, Britten, Barber, & Bradley, 2001).

Based on his analysis of doctor-patient interactions, Mishler (1984) describes a typical pattern of communication – the Unremarkable Interview – which is conducted entirely in the voice of medicine. Generally, the doctor issues a request, the patient responds and a pattern of request and response ensues, occasionally interrupted by a request from the health professional for clarification or elaboration of the response. Although such an interaction may appear coherent, it is in fact fragmented due to interruptions, lack of acknowledgement of patient

responses and topic shifts for no reason. The doctor maintains control over the interaction and the patient is not given an opportunity to play a role in maintaining the flow of conversation.

Barry et al. (2001) continued the work of Mishler and examined general practitioners' interactions with patients. They describe four different communication patterns found across their data corpus, viz.: Mutual Lifeworld (doctor and patient use the voice of the lifeworld), Lifeworld Ignored (patient uses the voice of the lifeworld but this is ignored by doctor), Strictly Medicine (the voice of medicine is used exclusively), and Lifeworld Blocked (patient uses the voice of the lifeworld, but this is blocked by doctor). Barry et al. conclude that an increased use of the voice of the lifeworld by the health professional leads to more humane interactions with patients and better outcomes of health care interventions.

Using Halliday's (1973) three-part classification of language functions, Mishler analysed general practitioners' interactions with patients in terms of their textual function (continuity and cohesion), interpersonal function (communication roles and relationships) and ideational function (references and meanings). He identified specific behaviours on the part of the doctor which he feels show a greater attention to the patient's lifeworld. These include:

- The use of open-ended questions which do not constrain responses;
- Allowing the patient to speak without interrupting;
- Responding to the patient in the voice of the lifeworld (e.g. engaging in expressive or slightly teasing exchanges with a patient);
- Explicitly connecting responses to the patient's responses;
- Dropping the voice of medicine in favour of the voice of the lifeworld;
- Using statements which affirm a common humanity;
- Acknowledging the patient's circumstances;
- Responding to the patient's feelings;
- Expressing his/her own feelings;

- Jointly constructing meaning through active listening; and
- Providing direct, concrete explanations without using euphemisms.

Mishler's theory of the voice of the lifeworld which competes with the voice of medicine is a useful method for analysing communication in medical encounters (e.g. Salter, 2005), especially in light of the call for more patient-centred care.

4.4.2 Power and asymmetry in medical encounters

Power and asymmetry within medical encounters are oft-discussed topics in the sociological literature, especially due to the recent move within the medical field towards encouraging greater equality in health care encounters. Scholars have debated whether asymmetry is a positive or negative force and various perspectives exist which explain the power imbalances in interactions between doctors and patients (Nettleton, 2006).

Lupton (2003) discusses three different perspectives of power in view of medical interactions. In the first perspective, power imbalances exist based on legitimate authority given to those who have earned it and they are needed to serve the interests of society. Therefore, medical dominance is necessary in order to maintain a social distance between the doctor and the patient as well as to establish the authority of the doctor and compliance from the patient. According to the second perspective, power involves a struggle of control and oppression. The doctor is in control and the patient is seen as an oppressed party. The third perspective aligns with Foucault's theories. It posits that medical relationships often consist of subtle, pervasive power struggles, seen in the use of language and other practices which enable participants to take control of an interaction. In this perspective, power relations are constantly negotiated.

Parsons' concept of the 'sick role' (as described in Cockerham, 2004) – or rather, the 'patient role' (Taylor & Field, 2003) – suggests that doctors and patients perform certain role obligations in accordance with institutional and social expectations. Health professionals inherently possess power, status, expertise and

prestige, but patients do not. Patients are in an inferior position to the health professional and their role is to accept, reject or negotiate treatment recommendations. Therefore, the relationship is inherently unequal.

However, Parsons believed that this asymmetry is not problematic but is necessary in order for the doctor (or health professional) to effect positive change in a patient's health status. The ultimate goal of medical encounters is to promote such change. Through choosing to seek help and care, patients hand over their health concerns to health professionals, relinquish responsibility for their health to the health professional and acknowledge the health professional's expertise. This implies a difference in power in the relationship before an interaction has even begun. It also needs to be acknowledged that power in medical interactions is not necessarily abusive, but may be productive. In addition, power relations are constantly negotiated and may be challenged within institutional health care relationships (Lupton, 2003).

Ten Have (1991) echoes this notion of asymmetry. He believes that patients and health professionals have different tasks within medical encounters. Distribution of these tasks involves natural interactional dominance by the health professional and interactional submission by the patient. Asymmetry is interactionally achieved within a consultation. However, ten Have points out that the interactional style of health professionals often involves monopolising the interaction or withholding information from a patient, both of which promote asymmetry in interactions. Although patients may take the initiative for the interaction by choosing to consult the health professional, this initiative may be lost when they enter the consulting room and the health professional begins to control the interaction. Patients usually defer to the health professional regarding assessment, diagnosis and treatment and they may not utilise interactional initiatives such as formulating requests or voicing concerns.

Lupton (2003) discusses the concept of the 'good patient', i.e. patients who choose to relinquish decision making to the doctor and trust in his/her care. She

believes that these patients should not be seen as passive recipients of treatment, but rather as patients who choose this role because they consider it crucial to their physical and emotional well-being. Although it may appear that patients are passive recipients of health care, they are in fact actively involved in the process of care, although their influence may be subtle (Nettleton, 2006). Indeed, Cockerham (2004) notes that there may be times when a patient may not want to accept responsibility for his/her health, or s/he may be unable to do so – for example, the case of a patient who is seriously ill and as a result does not have the strength to either challenge or collaborate with a health professional, as is often the case with HIV/Aids.

In addition, Lupton believes that the extent to which the patient feels empowered to take control and become an active participant in an interaction with a health professional is dependent upon the patient's health problem. This is because each disease or illness holds different associated emotional dimensions and bodily experiences. In the case of HIV/Aids, for example, patients may experience a variety of symptoms or side effects from treatment, as well as psychosocial issues such as stigma, discrimination, or fear of death.

Ultimately, however, although an unequal relationship may exist between a patient and a health professional, the outcome of the interaction depends on the negotiation of shared assumptions and power and how each participant is able to influence the outcome of a consultation. A micro analysis of interactions can reveal how this negotiation of power relations and identities takes place (Nettleton, 2006).

4.4.3 Agendas and control

In health care interactions, both health professionals and patients may hold agendas. Generally, health professionals are responsible for setting the agenda by determining the reason for a consultation, interpreting the patient's symptoms and deciding on treatment options. In the pharmacist interactions in this study, there is

a predetermined reason for the patient's visit, viz. to dispense ARV medications and provide dosage instructions to the patient.

However, many patients come to a consultation with their own agenda. This may include the patient's expectations, ideas and concerns related to their health and/or social and emotional issues (Barry, Bradley, Britten, Stevenson, & Barber, 2000). The agenda is usually negotiated within an interaction and this negotiation is reflected in the sequential structure and outcome of the interaction. The patient's agenda may be unvoiced or voiced, their expectations may or may not be met, or the agendas of the patient and health professional may conflict (Meeuwesen, Tromp, Schouten, & Harmsen, 2007). Marvel, Epstein, Flowers and Beckman (1999) report that doctors often redirect the focus of an interaction before patients have finished stating their concerns and patients may not have an opportunity to voice all of their concerns.

Conflict may arise within a cross-cultural medical encounter because of the existence of a duality of perspectives and worldviews – for example, professional/patient and western/traditional views. The doctor and patient have different worlds of experience and reference and these differences may lead to clashes within an interaction (Nettleton, 2006). In addition, cultural practices of respect may lead patients to behave less assertively and defer to the health professional's authority (Raubenheimer, 1987). Patients may not express their agenda explicitly, which may produce poor mutual understanding within an interaction.

Meeuwesen et al. (2007) studied agenda-setting and mutual understanding in same-culture and cross-culture interactions in the Netherlands. In same-culture interactions, patients often gave a 'clue' that mutual understanding was not occurring or that they did not agree with the doctor. This clue took the form of an explicit expression of doubt, concern or opinion. Ethnic minority patients did not provide clues and interactions tended to continue smoothly with minimal responses from patients and no expression of concern or requests for more

information. Cross-cultural interactions tended to follow a traditional pattern in which the doctor took charge and the patient followed obediently.

Meeuwesen et al. (2007) caution that when a doctor is not given a clue by the patient or the interaction does not follow a conflict pattern, they may assume incorrectly that mutual understanding is occurring and fail to check whether the patient has any questions or concerns. Poor mutual understanding often results in non-adherence, making it important for health professionals to be aware of the fact that patients may not voice their agendas or indicate when mutual understanding is not optimal.

4.4.4 Ecological models of health communication

Various ecological models of communication in medical encounters have been proposed in the literature. These models acknowledge the critical influence of a variety of patient and health professional characteristics and the broader social context on health professional-patient interactions. The use of an ecological approach is rare, as most researchers choose to examine the influence of one variable on interactions, e.g. gender or age, rather than focusing on the impact of multiple variables. The models proposed by Street (2002, 2003), Street, Gordon and Haidet (2007) and Chick (1995) are particularly pertinent to this study.

Street (2002, 2003) believes that interactions are embedded primarily in the interpersonal context. This context includes the goals, skills, perceptions and emotions of the participants, as well as the opportunities or constraints created by their actions. People have different styles of communicating in various situations, depending on factors such as identity, personality, linguistic skill and socialisation. Likewise, health professionals develop unique styles of communicating with patients and they adapt their responses according to the situation. Within the ecological model, a person has a predisposition to communicate in a specific way, depending on their individual communication style and on their interactional partner's communicative actions. A health

professional's communication style will influence a patient's responses and participation in an interaction.

However, as Street (2002, 2003) notes, medical encounters occur within a context. The way in which health professionals communicate with patients is dependent on and influenced by contextual and environmental factors such as cultural, economic, media, political, and/or organisational factors, as well as interpersonal variations and predisposing characteristics of both the pharmacist and patient. *Figure 3* provides details of these factors. Contextual factors will influence the patient's and the health professional's affective, cognitive and behavioural processes, which in turn affect communication.

Street et al. (2007) expand upon Street's (2003) model (see *Figure 4*). They elaborate on processes which influence the way in which a health professional (specifically a physician) communicates with a patient. These processes include the health professional's communication style, patient characteristics, health professional-patient concordance and the patient's communication. A health professional's communication style may evolve from repeated experience of interacting with patients, his/her philosophy of care, medical training, or from socialisation related to gender. A patient's demographic characteristics may affect the health professional's communication and perceptions, because the health professional may hold a bias towards a patient, based on his/her demographic status. Street et al. (2007) highlight the importance of considering the collective influence of the factors included in this model.

Figure 3: Street's (2003) ecological model of communication in medical encounters

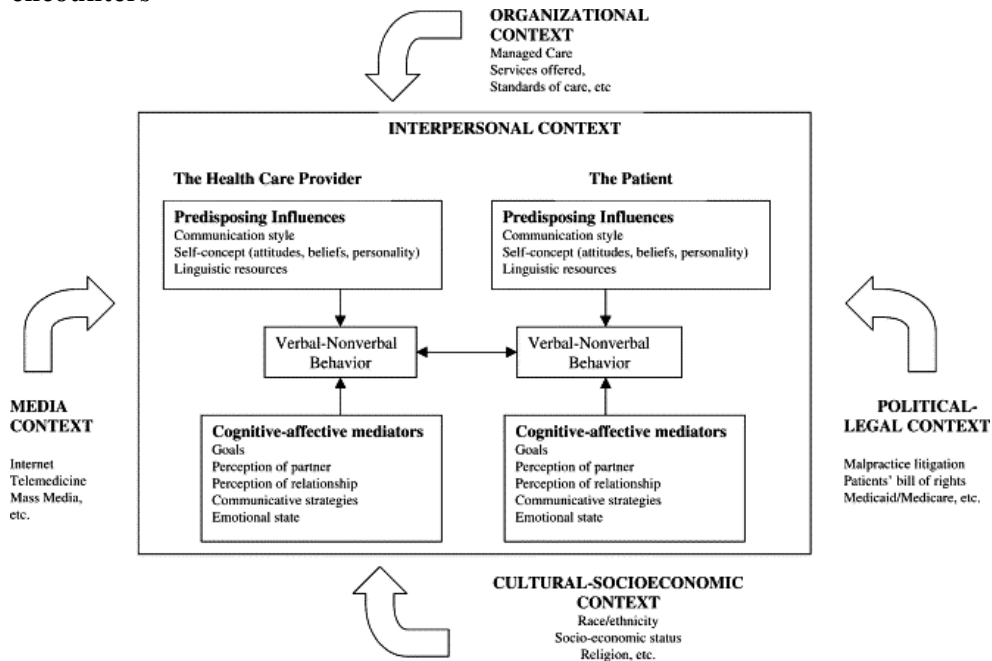
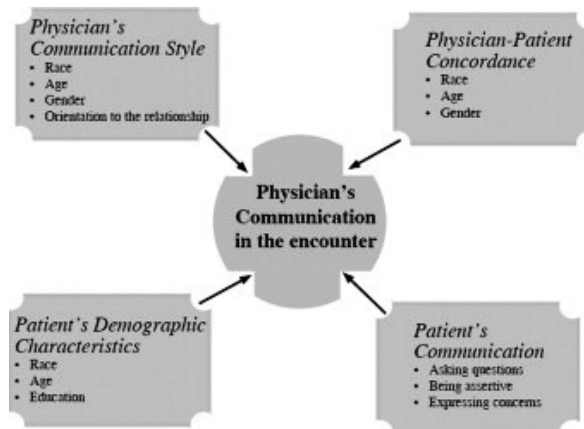
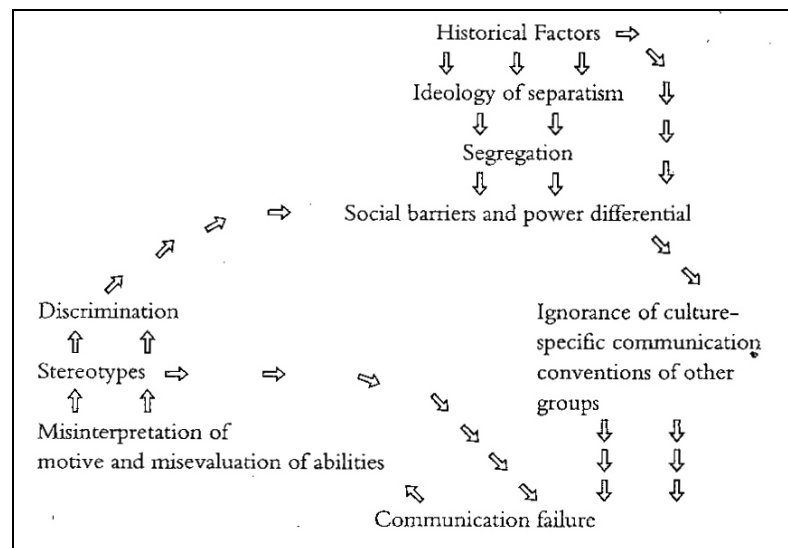


Figure 4: Street et al.'s (2007) model of potential influences on physician's communication



Chick (1995) believes that communication breakdowns can be traced back to predominant social relations within communities. The micro elements of an interaction are influenced and constrained by ideologies, values and structures within the wider context of the institution and society as a whole. Chick proposes a model (see *Figure 5*) in which he explains how “historical structural forces in South Africa led to the adoption of an ideology of separatism, to legally enforced segregation, and to social and economic distancing between the various cultural groups” (p. 238). As a result, people are ignorant of cultural and communication conventions of other groups which makes them susceptible to miscommunication across cultures. Miscommunication between people from different cultural groups may result in negative cultural stereotypes and discrimination.

Figure 5: Chick’s (1990, as cited in Chick, 1995) negative cycle of socially created discrimination



This model highlights the significant role of language in establishing and maintaining relations of power within interactions and the wider societal context. However, Chick adds an addendum: when interactional parties are sufficiently culturally sensitive to each other, their differences in culture do not always lead to miscommunication. Even if cultural differences do become apparent, participants may be prepared to engage in repair sequences. Therefore, in order to ensure

successful cross-cultural communication, cultural attunement or sensitivity is required.

Hoskins (1999) discusses the concept of ‘cultural attunement’, which involves learning the unique customs, beliefs and rituals of a specific group of people and becoming aware of cultural and linguistic barriers. Importantly, however, it also involves taking into account the personal meanings which each individual holds: “building bridges to connect diverse worlds ... is an all encompassing way of being that comes from an ethic of care...” (p. 82).

In light of the literature, it seems imperative that health professionals learn to take cognisance of how contextual factors related to disease and the psychosocial and socioeconomic circumstances of the patient may influence communication processes. Although Street’s (2003) model acknowledges the significant impact of context, site and institution on communication between health professionals and patients, he omits any reference to the impact of a particular disease on communication. As will be demonstrated in this thesis, much of the pharmacists’ behaviours during interactions as well as their use of specific communication processes appears to be shaped by the urgency of the disease and the importance of providing the patient with the best chance of adhering correctly to the regimen through ensuring that s/he understands the ARV dosage instructions.

Chick’s model highlights the importance of considering the impact of historical and socio-political factors on interactions. In the South African context, our history of segregation, racism, discrimination, power differentials and social barriers may well impact on relationships and interactions between African patients and (often) white health professionals in a western health care system. Street’s (2003) model does not address cross-cultural interactions and it omits factors which may influence communication across cultural and linguistic barriers.

Therefore, it becomes necessary to propose a new ecological model which incorporates a consideration of historical and disease-related contextual aspects as

well as additional elements related to culture and language within the interpersonal context. The window of interaction which is scrutinised in a study such as this one gives but a small indication of the coming together of two vastly different worldviews and contexts. Within multilingual and multicultural situations especially, the action of communication not only involves successfully sending and receiving information, but it necessitates negotiation and collaboration between the worlds of the two participants within a specific context.

This proposed model of communication in multicultural and multilingual health contexts (see *Figure 6*) is based on the work of Street (2003), Street et al. (2007) and Chick (1990, as cited in Chick, 1995). The model was devised after data collection and analysis. It is informed by a comprehensive review of the literature as well as previous research conducted in the South African context (e.g. Penn, 2007). Although applicable to all health professionals, the model was developed for pharmacists, in line with the focus and results of this study.

The model depicts both a macro context and an interpersonal context. Each context influences the interaction between pharmacist and patient. In the research setting of this study – Rustenburg Provincial Hospital Wellness Clinic – the macro context includes the *disease context* of HIV/Aids (and its associated influences such as stigma and discrimination), the *media context* (the influence of often-conflicting media messages in South African society and western versus traditional views of healing), the *cultural- socioeconomic context* (which includes factors such as race, poverty and culture), the *organisational or institutional context* of Rustenburg Hospital, the *historical context* of the surrounding areas (the history of the Tswana people and their often tumultuous relations with the Boers) and the *political-legal context* (which includes access to health services and often poorly developed health systems in the area).

These macro contextual factors influence the interpersonal context of the interaction and this thesis will aim to demonstrate this impact. The interaction itself consists of the pharmacist, patient and often a third party (e.g. an interpreter,

caregiver or family member). This dyad or triad is affected by predisposing influences in both the pharmacist and patient (for example, age, gender, language, culture, communication style, worldview, knowledge about illness), as well as cognitive-affective mediators (such as goals, agenda and emotional states). These predisposing influences, coupled with the influence of the macro context, determine communication processes and the outcome of interactions in terms of the level of concordance and attunement between pharmacist and patient.

In the following chapters, this thesis will aim to use the results of the study to prove the existence of this model within the research context. Specifically, it will demonstrate how verbal and non-verbal communication processes of interaction are influenced by the macro context.

4.5 Summary of chapter

This chapter outlined the history of health communication research with specific reference to the use of interactive sociolinguistic methods to examine interactions between health professionals and patients. A discussion of qualitative studies of pharmacist-patient interactions highlighted the dearth of research of this nature, particularly in the field of HIV/Aids. A description of a study conducted at the research site demonstrated some of the difficulties experienced by health professionals and patients who must communicate across linguistic and cultural barriers. An investigation of pharmacist-patient interactions in the context of HIV/Aids was shown to be necessary and such a study may provide valuable insights into communication and adherence practices.

The chapter also focused on various concepts and theories from the field of medical sociology which are pertinent to the study. In particular, Mishler's work on the concept of the lifeworld, Parson's sick role, theories of power and asymmetry, assertiveness and control were discussed and will be referred to in forthcoming chapters. Finally, several ecological models of health communication were presented and the researcher proposed a revised ecological model.

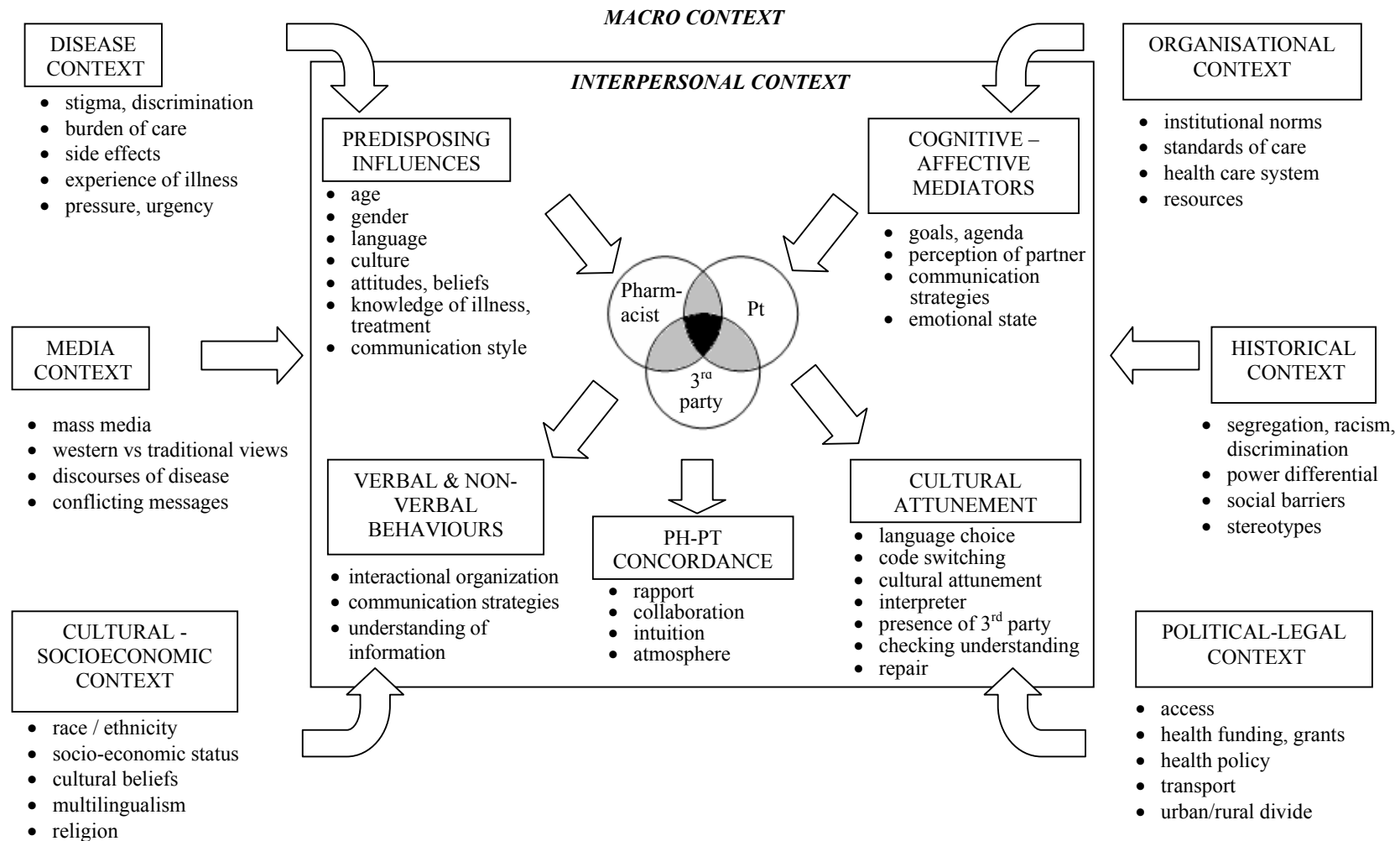


Figure 6: Ecological model of potential influences on pharmacist-patient communication
(after Street, 2003; Street et al., 2007; and Chick, 1995)

CHAPTER 5

METHODOLOGY

5.1 Overview

This chapter aims to provide a description of the research process from inception to completion. It will focus on aspects such as the design of the study, the chosen setting, participant selection, data collection and ethical considerations, and, finally, will provide a breakdown and description of the development of the framework which informed the analysis process.

The idea behind this research project was to develop a description and an understanding of the pharmacist-patient interaction, the pharmacy environment and the work of the pharmacist in the South African context of ARVs and HIV/Aids – a previously unexplored field. Because of the extent of the HIV/Aids epidemic in South Africa and the imperative need for patients to adhere to ARV treatment, the researcher became interested in studying exactly how pharmacists dispense ARVs and provide dosage instructions to patients and how their communication may facilitate or inhibit understanding of information. The researcher hoped to gain insights beyond the pharmacists' task of dispensing ARVs to patients and reach into the realities experienced by the participants.

The chief pharmacist and her team expressed an enthusiastic interest in the study, in the hope that they may improve their service delivery and interactions with patients. During an initial period of observation prior to commencement of the study, the pharmacists were eager to share their experiences and challenges of working with patients living with HIV/Aids, as well as the work of dispensing ARVs and their development of adherence support tools. They continued to support the study throughout the research process and remained open to constructive suggestions and recommendations.

5.2 Aims

As revealed by a review of the literature in *Chapters 3 and 4*, limited qualitative research exists that investigates health communication practices and interaction processes in pharmacist-patient interactions. No such research appears to have been completed in South Africa or in the field of HIV/Aids.

Therefore, this study began with the following research questions:

- What are the communication characteristics of pharmacist-patient interactions in the chosen setting?
- What processes and strategies are facilitative or inhibitive factors in each interaction?

Specific aims of the study were:

- To identify and analyse conversational components and dynamics of recorded interactions between pharmacists and patients in the context of HIV/Aids, in both same- and cross-language encounters, across a variety of patients and a range of pharmacy visits.;
- To establish the nature of information and dosage instructions provided to patients about ARVs and the methods used by pharmacists to give this information to patients; and
- To explore the insights and perceptions of patients and pharmacists regarding informational content as well as interactional and communication dynamics within the interactions.

During the analysis process, the study broadened to include questions such as:

- What features of the context (disease, site and participants) influence this institutional talk?

- How and why do ‘macro’ contextual factors affect the microstructure of interactions?
- Why is there an apparent difference between these pharmacist-patient interactions and other non-South African studies?

5.3 Research Design

5.3.1 Why choose qualitative research?

Qualitative research methodologies have struggled to find recognition as strong, scientific approaches to research in health care contexts (Jones, 1995). Nevertheless, as outlined in *Chapter 4*, qualitative research methods have been utilised successfully in several South African and international studies in health care contexts. These studies have yielded insights into communication behaviours in interactions and qualitative methodologies seem particularly suited to the South African multicultural, multilinguistic health care environment.

Some authors have decried the fact that theories and methods of research emanating from developed countries are often applied inappropriately to situations in developing countries. Qualitative research methods are needed in order to gain a deeper understanding of local worldviews, attitudes, beliefs and knowledge about disease, as well as social, psychological and cultural factors which may influence health behaviours in a specific context (Yach, 1992). In the area of HIV/Aids research, this is of the utmost importance.

As discussed in *Chapter 4*, the review conducted by De Young (1996) shows that the quantitative research methods which have dominated the study of pharmacist-patient communication have not provided insight into the quality of communication practices. Little has been published that specifically examines the nature of interactions between patients and pharmacists or cultural and language barriers within pharmacist-patient interactions (Shah et al., 2004). As De Young (1996, p. 76) suggests, “after more than 25 years of research, perhaps the time has

arrived for investigators to begin to examine other strategies to study pharmacist-patient communication”.

It has been suggested that in areas or subjects which have received little attention or investigation, such as the subject of this thesis, qualitative descriptions may prove to be a prerequisite of quantitative research. In cases where little is known about a particular subject, methods such as semi-structured interviews or ethnography can provide valuable exploratory data which may lead to further studies. Themes may emerge which can be compared across several cases or contexts (Power, 2002) and our understanding of an under-researched subject can be expanded.

Qualitative research seems to hold preference over quantitative research when conducting studies in the field of HIV/Aids. Power (2002, p. 87) highlights the fact that “many of the social phenomena being studied are personal, intensely private, and sometimes illicit”. Qualitative research may provide invaluable insights and rich contextual data about complex socio-cultural behaviours and beliefs. It may enable researchers to “appreciate the subtlety and complexity of HIV-related behaviours and the importance of lifestyle and culture in determining crucial factors, such as risk and negotiation” (Power, 1998, p. 687). It is also important to understand the attitudes and knowledge of health professionals and caregivers of people living with HIV/Aids, because this may allow for the improvement of service delivery (Power, 1998).

Qualitative research may allow access to topics that are not amenable to quantitative research, for example, lay and professional health beliefs, the organisation of health services, interactions between health professionals and patients, the changing roles of health professions, patient behaviours such as adherence to treatment, and patients’ life experiences (Pope & Mays, 1995).

Therefore, the researcher decided to employ a descriptive, qualitative paradigm for this study. Such a framework is suited to the nature of this research and it

allowed the researcher to examine rich detail and extract meaning from the interactions within their natural context, to explore the participant's perspectives and attempt to discover the meanings and understandings which the participants bring to the context (Creswell, 1998; Jones, 1995; Leahy, 2004).

5.3.2 Research design

Based on the success of several studies of health care interactions previously conducted by the Health Communication Project at the University of the Witwatersrand (Penn, 2007), the researcher decided to collect data using several methods which would enable triangulation of data sources. This combination of methods strengthened the study design, as each method revealed different perspectives of the phenomenon under study and allowed for comparison and cross-checking of the consistency of the data obtained (Patton, 1990). It also encouraged the development of a comprehensive interpretation of the data.

After receipt of ethics approval and permission from the research site, data collection was carried out over a period of one week. This included:

- video recording of interactions between consenting pharmacists, patients living with HIV/Aids and their caregivers, and sometimes an interpreter;
- semi-structured interviews conducted with all participants using a predetermined set of guiding questions to facilitate exploration of participant perceptions of conversation dynamics and understanding of information and instructions about ARVs; and
- ethnographic, descriptive observations of the research environment both prior to and throughout the data collection period.

Although it might have proven beneficial to collect data from the same patients over multiple visits, this was not possible for a number of reasons. At the time of data collection, patients were being referred to local clinics to collect their medications and some would not be returning to the research site. In addition,

follow-up appointment dates for patients were scheduled at varying intervals of two weeks or one month and patients do not always return to the Clinic on the exact date of their appointment. Therefore, the researcher decided not to track patients over several visits but to collect recordings of a range of interactions with patients who were attending the pharmacy for initial or follow-up visits.

The analytic framework and process were developed through intense consultation with the literature throughout the duration of the study. Data analysis included transcription and, where necessary, translation of the recorded interactions, followed by analysis using a hybrid sociolinguistic method. Triangulation involved searching for patterns and similar themes across the various data sources (Mays & Pope, 2000). Based on findings and common themes which emerged during the analysis and triangulation process, the researcher modified her original aims to include a focus on some of the socio-cultural and socio-economic factors which appeared to have great influence in the pharmacist-patient interactions.

5.4 The Research Setting

The chosen setting for this study is the Wellness Clinic Pharmacy at Rustenburg Provincial Hospital (RPH) in the North West Province (see *Chapter 6* for a description of this setting). The Wellness Clinic provides medical, pharmaceutical, nursing and counselling services to outpatients with HIV/Aids. The Pharmacy is situated within the Wellness Clinic and comprises a consulting room with an outside waiting area. Interactions take place across a desk and patients sit directly opposite the pharmacist. Patients see the pharmacist for first and subsequent monthly visits during commencement of ARV therapy. During each visit, the pharmacist dispenses ARVs and other HIV-related medications, reviews the patient's health status, monitors adherence behaviours and presents or repeats dosage instructions.

5.5 Participants

5.5.1 Sample size

Generally, small sample sizes are used in qualitative research to allow for intensive study of a particular phenomenon. The size of the sample is usually not pre-specified, but selection is instead sequential and influenced by both the research question and analysis of the data (Curtis, Geslen, Smith, & Washburn, 2000). Although there is controversy in the literature regarding the size of a random sample required for rigorous qualitative research, it is felt that the rich, detailed information yielded when using methods such as Conversation Analysis (CA) does not warrant a large sample size in order to provide an accurate description of the phenomenon under study. However, as Perakyla (2004) cautions, the data corpus must contain sufficient information to enable the researcher to observe variations in the phenomena.

Therefore, the researcher aimed to obtain a data corpus of interactions between approximately 20 to 30 patients and at least 2 pharmacists, across a range of language abilities, ages and genders. Twenty-six interactions were recorded. These involved two pharmacists and one pharmacy assistant, twenty four patients, five caregivers and two mothers of children with HIV/Aids (for a full description of participants, see *Chapter 6*).

5.5.2 Sampling of Participants

Because this project involved research in a relatively unexplored field, the researcher wished to collect data from a variety of patients. Broad selection criteria were therefore employed to provide a typical sample of patients seen by the pharmacists.

By virtue of it being an HIV/Aids outpatient clinic, patients attending the pharmacy are HIV positive persons who have been referred by a doctor to the

pharmacy to collect ARVs or associated medications. It was therefore assumed that patients attending this pharmacy who were invited to participate in this study had already been diagnosed as HIV positive. The researcher did not question patients or caregivers about their HIV status.

Participants were selected using a sampling method of convenience according to their availability and willingness to participate in the study. Patients were attending the pharmacy either for the first time or for a follow-up visit and had been referred to the Wellness Clinic pharmacist by a doctor who had prescribed ART. Only adult patients and caregivers were included in the study; paediatric patients were not included because of ethical considerations. However, two cases included mothers of children receiving paediatric ARV treatment, but in both cases, the children were not present in the pharmacy during recording. Prisoners could not be included in the study due to regulations laid out by the Department of Correctional Services. Hospital workers who had incurred needle pricks or who required post-exposure prophylaxis (PEP cases) were not included. Patients who attended the pharmacy to collect non-ARV treatments only (e.g. TB treatment or vitamins) were also excluded.

The patient population included mostly first-language Setswana speakers and the majority of patients understood and could speak some English and/or Afrikaans. Patients who did not speak any of these three languages were not included in the study, for example, patients who spoke Portuguese or isiXhosa only.

Pharmacists working in the Wellness Clinic Pharmacy were invited to participate in the study. Although only two interactions between patients and the pharmacy assistant were recorded, the researcher decided to include these in the data corpus because they provide insight into interactions in which participants were matched culturally and linguistically. One of these interactions is the only one in the data corpus which involves a patient who had defaulted on treatment, which makes it of particular interest and importance to include in the study.

5.6 Ethical considerations

Permission to conduct this study was obtained from the CEO of the hospital as well as from the manager and head pharmacist at the Wellness Clinic. Ethical clearance was obtained from the University's Human Research Ethics Committee (see *Appendix 1*).

5.6.1 Identification of risks involved in participation in the study

People living with HIV/Aids and their caregivers are a vulnerable population who are open to exploitation, coercion, harm, manipulation or deceit from researchers because of their terminal or chronic disease status. They are often victims of stigma or discrimination because of their HIV positive status. Some studies have found that patients with HIV/Aids are averse to participating in research studies because they perceive that researchers and health professionals show negative attitudes towards them (Morse, Simon, Besch, & Walker, 1995). Patients may distrust researchers and their motives, or they may be concerned about a potential for lack of confidentiality (Sutton, Erlen, Faan, Glad, & Siminoff, 2003). This mistrust arises from a history of exploitation of patients with HIV/Aids, especially those in developing or disadvantaged environments (Ballantyne, 2005).

In South Africa, the population most at risk for HIV infection are especially vulnerable to exploitation for various socio-historical and socio-economic reasons. In this context, HIV/Aids is a highly feared disease and carries a number of negative, stigmatising connotations. Therefore, there is an increased risk of social or psychological harm to people living with HIV/Aids who decide to participate in research studies (MRC, 2003).

In this study, no physical risks to participants existed. However, the following potential psychosocial risks to participants were identified by the researcher:

- Patients may experience a fear of stigma or may feel that they are being labelled as HIV positive by the researcher. In response, the researcher endeavoured to keep all identifying information confidential. Although no patient explicitly voiced concern in this regard, some patients were anxious about the use of the video camera (discussed in *Section 5.6.2*).
- Patients and/or caregivers may experience emotional reactions during the interviews with the researcher and/or research assistant. In these cases, the researcher or research assistant endeavoured to refer the patient and/or caregiver to a counsellor at the Clinic for appropriate assistance. This did not occur in any of the interviews. However, some patients indicated that they felt concerned about their lack of understanding and these patients were encouraged to return to the pharmacist to request clarification of information.
- Pharmacists may experience emotional reactions during interviews with the researcher. Although this did not occur, the researcher planned to refer the pharmacist to the clinical psychologist at the hospital should this situation have arisen.
- Patients may be fearful that the researcher may report non-adherence (which may be detected in the interviews with participants) to the pharmacist or other staff members in the Clinic, leading to negative consequences. This did not occur; however, in the event that a patient expressed such a fear, the researcher planned to reassure patients that this would not occur.

5.6.2 Obtaining consent from patients

It was apparent from the start of this study that certain implicit protocols existed in the Wellness Clinic regarding the presence of researchers and the collection of data. This is perhaps due to the sensitive nature of the health care interactions and the vulnerability of patients who attend this Clinic. Certain cultural and institutional norms also appeared to influence how the researcher and the research assistant were introduced into this environment and to the patients themselves.

It was suggested by the pharmacists that if they introduced the researcher to patients, the patients would feel less threatened by the presence of the researcher. The researcher therefore remained in the pharmacy, the patient was invited by the pharmacist to enter the pharmacy and the researcher was introduced by the pharmacist to the patient. Because several of the patients had met the pharmacist(s) during previous visits, they appeared to show a greater level of trust when the researcher was ‘endorsed’, so to speak, by the pharmacist.

Informed consent was obtained from all participants. Verbal and written information about the study was made available to participants in English as well as Setswana when required (refer to the information sheets in *Appendix 2*). For those patients who indicated that they were proficient in English, the researcher explained the study to them and obtained consent. For those who were not proficient in English, the research assistant explained the study in Setswana and obtained consent. On some occasions, the information provided by the researcher was reinforced in Setswana by the assistant. Some patients were unable to provide written consent due to ill health or illiteracy. In these cases, verbal consent was obtained after careful explanation of the study.

Patients were given an opportunity to decide whether they would like to participate in the study. It became apparent that some patients felt compelled to participate or appeared unsure of their decision to participate. The researcher and research assistant made it explicitly clear to patients and caregivers that they were not being coerced or pressured into participating, that they had the power to decide whether or not they wished to participate, that if they declined to participate there would not be negative repercussions and that all information and recordings would be kept strictly confidential.

Participants were encouraged to ask questions or raise concerns about participation in the study, which they did do on occasion. Participants were given the information sheet to take home with them. Contact information for the

researcher was made available and participants were encouraged to contact the researcher should they have any questions or concerns.

Several patients expressed great concern about participating and most specifically about the use of the video camera. Some had no objection to answering questions, but did not wish to be filmed. Their main opposition to participating appeared to be related to the issue of confidentiality and the belief that the researcher would publicly disclose their HIV status by showing the videos on television. The researcher reassured patients about confidentiality and reinforced the promise that the video would not be put on television. The research assistant also utilised the consent document as a contract, i.e. she signed the page prior to the patient signing the form. This practice appeared to generate a greater degree of trust between the patients and the researcher.

One patient in particular refused to participate in the study and the researcher and pharmacist acknowledged this decision. The video camera remained set up in the room but was turned off. During her consultation with the pharmacist, the patient turned her back to the camera and held a brown paper bag against the side of her face. The pharmacist and researcher both reassured the patient that the camera was off, but the patient persisted in using the bag to hide her face. She relaxed only when the researcher placed the lens cap onto the camera to confirm that it was not being used. This incident is indicative of the fear of stigma experienced by many patients with HIV/Aids in this context.

Despite these concerns, however, many patients did choose to participate in the study and did not feel threatened by the use of the video camera. One patient and his caregiver were so eager to participate that they faced the camera directly and smiled broadly, as if waiting for their chance to ‘perform’.

5.6.3 Ethical dilemmas

During the planning phase of the study, the researcher realised that the semi-

structured interviews had the potential to reveal a lack of understanding or a misunderstanding of treatment regimens by patients. The researcher felt that in such a situation she would be bound ethically to bring this to the notice of the pharmacist(s), because this may negatively affect a patient's adherence to ARV treatment. However, the University Ethics Committee advised against such practice, because this research is exploratory and descriptive rather than critical of current practice (i.e. the researcher should not try to correct practices).

During the interviews, this situation did indeed arise and it presented the researcher with a delicate ethical dilemma. Should misunderstandings be ignored or questions go unanswered, this could have potentially harmful consequences to patients in terms of their ability to adhere to treatment. Prior to data collection, the researcher discussed this dilemma with the research assistant and together they decided that in such a situation it would be in the patients' best interests to encourage them to seek out a Wellness Clinic counsellor or return to the pharmacist.

On several occasions during the interviews, patients were unable to demonstrate knowledge of information when asked (e.g. dietary restrictions), they had questions about the meaning of terms such as 'CD4' or 'virus', or they were concerned that they had not correctly understood the ARV dosage instructions. When she felt competent to do so, the research assistant provided answers to the patients' questions and concerns based on her own observations in the pharmacy and knowledge of ARV regimens. She also encouraged patients to return to the pharmacist or ask their questions during follow-up visits, or to go to a nurse or counsellor in the Wellness Clinic for assistance. On one occasion, she returned to the pharmacist with a patient so that the patient could ask questions and receive clarification regarding her concerns. The pharmacist did not feel threatened by this action and appeared grateful that the research assistant had encouraged the patient to pursue her concerns.

This dilemma is an example of the influence of research ethics committees (RECs) over researchers. Some authors have discussed the fact that RECs often

make bureaucratic, standard ‘rules’ for researchers and participants in a specific research situation (Kerrison & Pollock, 2005; Hall, 1991). The researchers are nonetheless expected to follow these rules, regardless of whether they are in the participants’ or the researcher’s best interests. In the case of this study, the researcher felt that the REC’s recommendations were not in the best interests of the participants and that it would be detrimental to withhold information or refrain from encouraging patients to seek answers to their questions.

5.6.4 Confidentiality

All data tapes and transcripts were treated confidentially and were kept in a secure place. All identifying information, including patients’ names, has been removed from this thesis and pseudonyms have been used where necessary.

It is acknowledged that by choosing to name the hospital, the participants in the research population (specifically the pharmacists) could be identified. Although this does pose a potential breach of confidentiality, the researcher has endeavoured to omit and remove all information which would obviously reveal the identity of the participants. In addition, it is known to the researcher that since the time of data collection, Pharmacist B no longer works at the hospital and Pharmacist A has been transferred to another pharmacy in the hospital complex.

5.7 Data collection

Data collection took place over a period of one week. The researcher was provided with the opportunity to experience, understand and absorb the context, routines and daily activities that take place in this pharmacy. Data collection consisted of the following:

- **Ethnographic, participant observations** and note taking within the research setting during the week.
- **Video recording of pharmacist-patient interactions.**

- Audio recording of **semi-structured interviews** conducted with participants, using a predetermined set of guiding questions (see *Appendix 3*). Interviews were conducted in a separate consulting room outside the Wellness Clinic.

5.7.1 The research assistant

The research assistant selected for this study is a first language speaker of Setswana. Her sister works as a professional nurse at the Wellness Clinic. She is an honours-level speech therapy student at the University and had previously conducted a research project at the Wellness Clinic (Moa, 2005). Therefore, the research assistant was familiar with the context, population, disease and ARVs, as well as with some of the methods of data collection used in this study.

The research assistant was briefed by the researcher so that she was familiar with her required role. As mentioned previously, ethical dilemmas and the recommendations of the ethics committee were discussed. Practicalities and logistics of data collection were also considered by the researcher and research assistant, based on the research assistant's previous research experience in this setting.

The researcher and participants did not always speak a common language. Therefore, language barriers inevitably arose, rendering it difficult for the researcher to obtain informed consent and conduct the interviews with participants. In such circumstances, the research assistant assisted with obtaining informed consent, conducting the semi-structured interviews and acting as a cultural broker between the researcher and participants.

5.7.2 Ethnographic, participant observation

The aim of ethnography is to understand the social world and behaviour of the people being studied (Galanti, 1999) through immersion in their community, with the ultimate goal of producing a detailed description of the people, their beliefs

and culture (Snape & Spencer, 2003). As discussed previously, the primary aim of this study was to gain an understanding of the pharmacist-patient interaction within the context of HIV/Aids, in this specific setting.

The concept of participant observation was particularly important during data collection. Observations carried out before the week of data collection provided the researcher with insights into issues such as the style and structure of pharmacy interactions in this context, how pharmacists check patients' understanding of information, various systems in place for monitoring adherence, what kind of information needs to be understood by patients and differences between adult and paediatric ARV regimens. Informal discussions with Pharmacist A at this time highlighted various misconceptions and confusions experienced by patients, as well as difficulties experienced by the pharmacists (e.g. lack of resources, institutional constraints, problems with adherence monitoring).

With the support of the pharmacists, the researcher then became part of the pharmacy for a week and experienced phenomena for herself (Ritchie, 2003), for example, listening to and learning the ARV dosage instructions as they were given to patients. The week of data collection provided an opportunity for intensive observations by the researcher, who was able to observe all activities and conversations in the pharmacy during a typical week. Both the researcher and the research assistant were treated as part of the hospital team – on occasion they were asked to take or fetch files from the OPD (outpatients) pharmacy or deliver messages to other staff members.

During this week, the researcher made field notes which contained information, insights, anecdotal experiences, feelings, opinions, details of the physical space of the Pharmacy and Clinic, and actions and activities of the people in the Clinic and Pharmacy (Byrne, 2001). This information was gained through informal discussions with the pharmacists and other health professionals in the Clinic, observations of the institutional system and the pharmacy, the work of the

pharmacists, interactions between pharmacists and patients, as well as anecdotal evidence reported by pharmacists.

Because of the relationship between the researcher and the pharmacists, the researcher was able to gain candid insights and perceptions from them. They often revealed their emotions and feelings both directly to the researcher and as asides during their interactions with patients, apparently because they were familiar with both the researcher and research assistant and did not feel that they were being scrutinised by an unknown ‘outsider’.

In the case of those patients who had refused to participate in the study, the researcher was allowed to remain in the room to observe the consultation, with the patient’s consent. Again, this provided an opportunity for observation of communication processes. The researcher was careful to make notes after or between patient-pharmacist consultations. This was done so as not to cause a distraction during the patients’ consultation and in order to remain sensitive to the patient and pharmacist.

Ethnographic studies usually involve prolonged periods of observation and data collection within a specific research context (Galanti, 1999). It is acknowledged that one week of data collection may not have afforded the researcher sufficient time to gain comprehensive insights into the workings of the Pharmacy and Clinic. However, this is balanced by the fact that the researcher was familiar with the hospital (and the Wellness Clinic to an extent) because she had spent a year working in this context.

In order to counteract the restrictions imposed by the short time period of data collection, the researcher engaged in later conversations with the pharmacists via email and during a feedback session six months after data collection. This allowed for clarification of specific procedures in the pharmacy, reflection on ethnographic notes made during data collection, and collection of additional information pertinent to the study such as pharmacy statistics. Approximately eighteen months

after data collection, the researcher also had the opportunity to converse with a new pharmacist working at the Clinic. This discussion enabled the researcher to determine whether some of the practices and processes observed during the week of data collection were still in place at the Pharmacy.

5.7.3 Video recording of interactions

Traditionally, sociolinguistic research methods have not used video to record interactions but have relied on audio recordings to provide data. Therefore, relatively few studies have examined non-verbal aspects of interactions, compared to the number of studies which focus on analysis of verbal aspects. This absence is reiterated in clinical communication research studies (Finset, 2007). Heath (1986) points out, however, that by excluding these aspects, analyses may be rendered inappropriate or crude. Examining these aspects provided the researcher with a greater level of detail in interactions and allowed for a more complete exploration of the social organisation of human interaction. Any movement, gesture, facial expression, or gaze behaviour can be used within an interaction to carry out an action and accomplish particular tasks. Each speaker's movements are precisely coordinated with those of the conversational partner.

Preliminary observations of the pharmacy setting by the researcher revealed that merely recording audio material would not provide adequate data. The heavy reliance of pharmacists and patients on the use of props (pill containers, boxes, bottles, adherence cards, paper bags, syringes, etc.) and demonstrations of dosage instructions, as well as gesture and joint attention, meant that an examination of non-verbal aspects of the data was a necessity in order to understand the participants' shared meanings. Indeed, during the transcription and analysis processes, it was clear that in some instances, omitting the non-verbal behaviours and relying solely on the verbal transcript would lead to distortion of the true communicative meaning of the interactions.

Prior to collecting data, the researcher had decided not to be present in the room during recording of the pharmacist-patient interactions, in order to avoid any negative impact that her presence may have had on the behaviours or responses of participants (Speer & Hutchby, 2003). Despite the researcher raising concerns to the contrary, the pharmacists were insistent that the researcher be present in the room during filming. They felt that patients would feel more comfortable if the pharmacist was seen to be 'in control' and watching what the researcher was doing while collecting the data. In addition, they felt it would be less disruptive to their work if the researcher remained inside the pharmacy. The researcher endeavoured to be as unobtrusive as possible during interactions, but her presence may well have had an impact on participants' behaviour.

During some of the interactions, both pharmacists are present in the room. They share office space and Pharmacist A works on a part-time basis, usually during the mornings. During those periods when Pharmacist A is working in the Pharmacy, one of the pharmacists consults with patients while the other completes administrative tasks. Although it is a common occurrence that two pharmacists are present in the Pharmacy, the presence of the other pharmacist may have impacted upon the patients' behaviour during their consultations.

Recording began after patients consented to participate in the study and often after they had greeted the pharmacist. Therefore, several transcripts do not contain the opening sequence of the pharmacist-patient interaction (Pilnick's (2001) recorded data also omits the opening/greeting sequences of interactions for this reason).

5.7.4 Semi-structured interviews

Interviewing is the most common data collection technique in research (Grbich, 1999). The researcher decided to utilise qualitative interviews in order to explore the subjective experiences, perceptions, opinions and interpretations of the pharmacists, patients and caregivers (Broom, 2005). Integrating research participants' accounts gained from interviews with CA can improve

communication research and enhance analysts' interpretations. Interview data may provide additional evidence of phenomena identified through CA, information about individual professionals' communication styles and choices and/or exploration of the way in which communication practices achieve certain consultation outcomes (Collins, 2005).

The role of the interviewer is vital in obtaining data of a high standard from participants. The use of the interview format brings with it an intimacy that develops between participants, who may reveal information that they would not necessarily reveal if they were answering a questionnaire. The data obtained may differ according to the level of rapport and trust that is initially established (McIlfatrick, Sullivan, & McKenna, 2006; Sorrell & Redmond, 1995). Therefore, the researcher felt that it would be most appropriate to allow the research assistant to conduct the interviews in Setswana. It was also felt that the research assistant would be able to establish a rapport with patients and caregivers because she was matched culturally and linguistically to them. Indeed, Tabane and Bouwer (2006) analysed mono-cultural versus cross-cultural interviews and found that when the interviewer and interviewee are culturally matched, there is often a greater level of comfort and ease on the part of the interviewee. People who share a culture may talk about sensitive issues more freely.

For the purposes of this study, the researcher felt that a semi-structured type of interview would best serve the research requirements (Broom, 2005). Sorrell and Redmond (1995) suggest that although interviews should be guided by a set of questions, the interviewer does need to be flexible and change the format and sequence of questions as the interview process continues. The research assistant was briefed by the researcher in this regard.

Previous research (e.g. Penn, 2007) and the research assistant's experience of conducting interviews in this Clinic (Moa, 2005) showed that patients in this context are a particularly vulnerable and sensitive population. During the informed consent process as well as during the research assistant's study, patients

demonstrated fear of both stigma and loss of confidentiality. Therefore, it would be inappropriate to probe certain areas such as participants' experiences of living with HIV/Aids, their experiences of stigma or disclosure and issues of adherence to ARV regimens. In addition, the focus of this study was on communication with the pharmacist and comprehension of ARV instructions, rather than on HIV-related issues. Therefore, the researcher decided to select questions related to language barriers, patients' perceptions about their consultation with the pharmacist, communication practices and comprehension of ARV instructions and HIV-related terminology. The questions selected for the interviews with pharmacists had a similar focus in accordance with the aims of the study. Questions used for the interviews are included in *Appendix 3*.

Generally, patients were not keen to participate in the interviews, as this took extra time in an often already long day. Data collection during the afternoons proved especially problematic, as patients were hungry, fatigued or wanted to go home. Because of these difficulties, the research assistant was forced to keep the interview time to a minimum; therefore, some interview data is not particularly comprehensive.

The length of interviews with patients and caregivers ranges from 1 minute 17 seconds to 10 minutes 37 seconds and averages 4 minutes 18 seconds. Interviews with the pharmacists range from 5 minutes 30 seconds to 12 minutes 47 seconds.

Although not specifically probed, issues such as fear of dying or of contracting disease, fear of being tested, fear of passing the disease to their children, stigma, disclosure, alcohol abuse and the burden of care were volunteered by patients and caregivers. Some patients showed a need for counselling and support and responded to the research assistant's empathetic interviewing style. Several patients asked questions or requested clarification, particularly about HIV/Aids-related terminology. Where necessary, the research assistant referred these patients back to the pharmacist or arranged for them to receive information or counselling at the Wellness Clinic (see *Section 5.6.3* regarding ethical dilemmas).

Despite the apparent sensitivity of the research assistant, it is acknowledged that the answers provided by patients may not be completely honest or genuine. The apparent distrust displayed by some of the participants towards the researcher and the research process, a possible fear of repercussions or a desire to please may have prompted some participants to provide overtly positive responses. Nevertheless, many of the participants did provide candid answers and invaluable insights into their emotions and experiences of living with HIV/Aids.

5.8 Data Treatment

After data collection, several months were spent transcribing and translating the data prior to analysis. Mishler (1984) notes that in order to study a medical interaction systematically, it is necessary to explain how recorded speech is transformed into transcribed text. Therefore, the process of transcription will now be described.

5.8.1 Transcription of audio recorded interviews with participants

All recorded interviews with pharmacists were transcribed by the researcher. All interviews with patients which were conducted in Setswana were translated into English and transcribed by the research assistant. The verbal content of the interviews was transcribed verbatim.

5.8.2 Transcription of verbal elements in the interactions

Heath (1986) advises that the researcher begin by transcribing vocal elements. All video recorded interactions were transcribed verbatim from the videos by the researcher and a second research assistant. The researcher then viewed each video again, corrected any errors in transcription and transcribed aspects such as sequencing (overlaps and latching), pauses and intervals and characteristics of speech production (stress, prolongation, cut-offs, intonation, speed), using traditional CA transcription symbols (Jefferson, 2004; ten Have, 2000).

All Setswana sections in the interactions were translated into English by the research assistant. All Afrikaans sections in the interactions were translated into English by the researcher and verified by a research assistant, both of whom are second language Afrikaans speakers.

5.8.3 Transcription of non-verbal elements in the interactions

In CA research, the question of how to transcribe non-verbal behaviours is one that lacks a simple answer. A universal system for transcribing verbal and vocal elements of recorded speech has been available for several decades, based on Jefferson's work (2004), but a standard system does not exist for the transcription of non-verbal behaviours such as eye gaze, gesture or visual behaviours. Numerous authors have attempted to design a non-verbal transcription system and some of these have proved more successful than others.

Specifically, the researcher felt it important to focus on the use of props, gestures and demonstrations, body language and sometimes gaze, all of which are central to the pharmacist-patient interactions. However, the challenge of transcribing these non-verbal behaviours proved to be a somewhat difficult task. The researcher began by consulting the literature, but some of the transcription conventions available were not found to be useful for this type of data. Of all the systems reviewed, Heath's (1986) notation appeared to be the most user-friendly. It utilises a series of lines, dashes, commas and dots to depict gaze, gaze direction and movements. His gaze transcription system is a modified version of the work of Charles Goodwin (1981), who used arrows to indicate where in the talk the non-verbal behaviours occur. A description of Heath's system is given in *Appendix 4*.

Heath (1986) describes the process of transcription as 'mapping' of data, which enables the researcher to become acutely aware of verbal and/or non-verbal behaviours and their specific position within an interaction. However, he cautions that the completed 'map' (the transcription of the interaction) is not a full

representation of the original data, and the researcher should utilise the transcript(s) together with the original recorded interactions.

When transcribing data, it is important to bear in mind that a transcript which contains too much information will not necessarily make the research material accessible. Therefore, the researcher must carefully consider those aspects that are necessary and worthy of transcription (Ochs, 1979, as cited in Bot, 2005), or those aspects that are of interest or are related to a specific phenomena (Heath, 1986). Heath specifies that details of gaze should only be presented if they are necessary to describing a specific extract or crucial to interpretation of the data.

After transcription of verbal elements, Heath (1986) recommends mapping relevant visual elements onto the transcript. Verbal transcripts are transcribed vertically down the page, but visual elements must be transcribed across the page, to indicate where these elements occur in relation to the speakers' talk. To differentiate between speakers, one speaker's non-verbal behaviours must be transcribed above the talk (usually the 'main' speaker – in this study, pharmacists' behaviours are transcribed above) and the other's below the talk (in this study, patients' and caregivers' behaviours are transcribed below). If gaze behaviours are transcribed, these are placed on the first line above (or below) the talk.

Where pauses occur in the talk, Heath (1986) digresses from CA transcription norms. Jefferson (2004) represents a pause as the length of time in brackets, e.g. (0.6), but Heath prefers to represent these silences with dashes, where each dash is equivalent to one tenth of a second, e.g. ----- (i.e. six dashes). In the pharmacy data, however, pauses were often several seconds in length, which would make it extremely cumbersome to represent them in a series of dashes. Therefore, the researcher decided to transcribe pauses using Jefferson's CA transcription.

Initially, the researcher made notes on all non-verbal behaviours, including gaze, gesture, demonstration, facial expression and body movements. During the analysis process, the researcher differentiated between non-verbal behaviours used

for communication or interactive purposes, versus body movements that were not necessary or essential to interpretation of the interactions. Therefore, in the extracts included in this thesis, the researcher transcribed only those non-verbal behaviours which were of obvious importance in terms of communication or interaction.

Each selected extract was then transcribed using the appropriate non-verbal transcription conventions (Heath, 1986), through careful scrutiny of the original videos together with the transcripts of each interaction. The completed transcripts provide a simple representation of both verbal and non-verbal behaviours. The researcher was able to add in translations of Setswana and Afrikaans words and phrases without disturbing this simplicity.

5.8.4 Reliability of transcription and translation

“The quality of recordings and transcripts has important implications for the reliability of conversation analytic research” (Perakyla, 2004, p. 285). There are many difficulties inherent in achieving accurate transcriptions and numerous errors may arise during transcription.

One study has demonstrated that multiple transcribers can produce acceptably similar transcripts from the same recording, even when they are not experienced transcribers. This suggests that the verbal and vocal information transcribed by the researcher (and assistants) is a good reflection of the original recordings of the pharmacist-patient interactions (Patterson, Neupauer, Burant, Koehn, & Reed, 1996). Nevertheless, the researcher endeavoured to ensure reliability and validity of the interactions and transcriptions.

Obviously, in this context as well as in others, the researcher was not able to capture all movements and events using a stationary video camera. Therefore, ethnographic field notes were used to supplement the recordings; these described

events not captured by video, events that occurred before or after recording and events that occurred outside of the pharmacy.

In order to ensure reliability of transcription, all recorded pharmacist-patient interactions conducted in English and/or Afrikaans were transcribed verbatim by the researcher, verified by an independent research assistant and checked by the researcher. Certain sections of the recordings were unintelligible; the researcher then worked together with an independent research assistant to reach a joint consensus on the likely content of these sections and to correct any errors in the transcripts (Perakyla, 2004). When necessary, the researcher returned to the videos to determine the precise sequence of verbal and non-verbal events. Finally, when extracts were selected for inclusion in the results section, the researcher again returned to the videos and re-transcribed the relevant non-verbal behaviours using Heath's (1986) transcription system.

The researcher decided to employ a second translator to verify the accuracy of the Setswana translations in the transcripts. However, it was discovered that the original translations that had been completed by the research assistant were in fact imprecise. Therefore, the second translator revised and improved the original translations.

5.9 Theoretical Background

An essential component of any analysis is a strong theoretical framework, especially when applying sociolinguistic methods of analysis and interpretation (Jorgensen & Phillips, 2002). Without a social theoretical framework, the interactional phenomena under study cannot be placed into the broader contexts of health, medicine, the health care institution and society (Mishler, 1984). In any research, the researcher will develop his or her own approach to analysis to some extent, but this approach ultimately needs to be grounded in theory. The method of analysis utilised in this study was developed from various theoretical

influences, concepts and notions, and data-driven observations. The theoretical basis for this analytical method will now be described.

5.9.1 Defining macro and micro

It is important to begin with a definition of what is meant by the terms ‘micro’ and ‘macro’. Analysis of the literature and the work of various scholars within the fields of CA and DA reveals the multiplicity of definitions of what constitutes ‘micro’ versus ‘macro’, as well as the ongoing micro-macro debate (Hilbert, 1990).

Some authors define the domains in terms of the interaction, where processes and structures within the interaction are ‘micro’ and anything outside of the interaction itself is considered ‘macro’, e.g. the societal or the institutional order. Mishler (1984), as well as other scholars in the field of symbolic interactionism, describes another category called ‘meso’, which is the institutional setting; ‘macro’ is the system of health care, ‘micro’ is the interaction.

In broad terms, van Dijk (2001) refers to ‘micro’ as language use, discourse, verbal interaction and communication, and ‘macro’ as power, dominance and inequality between social groups. He sees the institution as a pivot between social structuring and the social event or action, in this case the interaction. In later publications, however, he distinguishes between macrostructure as the semantic information which provides the overall cohesion to a discourse and microstructure as the relations between sentences or elements in a sentence (van Dijk, 2004).

These distinctions immediately create a rift between the interaction and the institution and/or society, even though the micro interaction may employ norms that are part of the social structure of the institution (Mouzelis, 1992). Fine (1990, as cited in Fine, 1993, p. 10) suggests that it is misleading to create fixed distinctions between so-called micro and macro levels. Instead, he “argue[s] for a seamless sociology which recognises that ‘separate’ levels are actually intertwined and indivisible, with micro analyses implicated in macro ones, and vice versa”.

The researcher agrees with Fine's position, and it is hoped that this thesis will demonstrate how micro and macro structures are very much intertwined and should not be separated. However, for the purposes of practicality and definition, in this study the term 'micro' will be used to refer to the communication and linguistic processes and strategies within the interaction and the term 'macro' will refer to contextual factors such as the impact of the institution and socio-political and disease-related factors.

5.9.2 Why include context?

The debate over whether to consider the context of talk and conversation has existed for many years. Although CA acknowledges that talk is situated in the circumstances of its participants (Sacks, Schegloff, & Jefferson, 1974) and utterances are shaped by the activity in which they occur, it has traditionally shunned inclusion of external contextual factors such as ethnographic characteristics of the setting.

Indeed, purists in the field believe that researchers should know nothing of the background or context of an interaction, but that evidence of the context will be found in the data itself (ten Have, 2000). Ethnographic data is excluded because the focus is on examining how the interaction reveals the participants' orientation to the context and what they consider relevant contextual features within the interaction (Drew & Heritage, 1992; Silverman, 1999). The immediate context of the interaction, i.e. the product of the actions of the participants, is continually developed, transformed and renewed through successive actions and preceding activities. In the case of institutional talk, "the institutionality of an interaction is not determined by its setting. Rather...institutional or professional identities are somehow made relevant to the work activities in which [participants] are engaged" (Drew & Heritage, 1992, p. 3-4).

Drawing from the work of Garfinkel, Maynard (2003, p. 64) emphasises the importance of studying context. The context refers to the sequence of turns in

which an utterance is embedded, but also to resources external to the conversation. “For their meaning, utterances depend on their context; the character of a message is related to the particularity of circumstances in which it is embedded”. That is, we must interpret and analyse what a person says based on displayed understandings and orientations that are evident in the conversation (e.g. using CA). Pilnick (1999) notes that we need to understand the organisation of talk before we can analyse the way talk is influenced by context.

Atkinson and Heritage (1984) believe that analysis of processes and strategies are only interesting when they can be shown to be usable by people in the real world. Indeed, several fields such as sociology, ethnography and discourse analysis, focus strongly on macro issues and social contexts of interactions in an attempt to answer real problems. Silverman (1999) believes that the issue of including and considering contextual factors in CA research is not whether to include them, but rather *when* to include them and *how much* contextual information is relevant.

In answer to the debate, Silverman (1999) suggests that if the researcher begins from an analytical perspective that is clearly defined, s/he can address social problems with persuasiveness and force. One should begin by considering *how* contexts are locally produced by participants in an interaction through examining in detail the small phenomena and actions inherent in an ongoing interactive sequence through methods such as CA. Thereafter, one should examine *why* certain phenomena and actions are produced, in terms of institutional and cultural limits.

Therefore, as Schegloff (1991, p. 64) notes, talk should be analysed “with the hope that its results will provide more effective tools for the analysis of distributional, institutional and social structural problems”. The approach to analysing talk should not be to answer problems or questions, nor should one consider what findings it might give. Sacks (1984) believed that through examining small phenomena in detail, we might gain understanding of how people do things as well as the kinds of objects used to construct actions and order

affairs. Thus, Silverman (1999) believes that CA and ethnography should be viewed as two methodologies which perform different jobs and ultimately enable us to answer 'how' questions and then 'why' questions.

Lazarus (1988, p. 49) strongly advocates for the inclusion of context and a study of the institutional system, because "the clinical setting is not merely a backdrop for interactions but is an integral part of the doctor-patient relationship". Concepts of illness and sickness are created and mediated by social structure and medical classifications of disease, as well as the medical setting. Lazarus advises that a study of health professional-patient relationships needs to include observations in which the researcher learns about who works in the institution, what they do, the clinical processes and procedures in the institution, etc., in order to learn the difference between what is said and what is done, the goals of both patient and health professional, as well as events that are normal or ordinary versus exceptional events which may occur in the clinical setting and in the therapeutic relationship. This enables the researcher to obtain perspectives of the patient's and the health professional's views and experiences of the health care system and relationship. It may also highlight broader influences such as control, power, conflicts or contradictions which may shape the health professional-patient relationship.

Previous research which investigates pharmacist-patient interactions largely ignores contextual factors and their potential influence on the interactions. For example, Pilnick's (1997) study of pharmacist-patient interactions in paediatric oncology ignores the potential impact of the specific disease – cancer – and the chosen research site on interactions and communication processes. Although a detailed CA-based analysis of the interactions is presented (in line with Pilnick's aims), the impact of the so-called 'macro' context is not addressed. Further analysis that incorporated a broader outlook and an inclusion of contextual factors may have highlighted certain unique communication processes in the context of oncology and paediatrics.

Salter's (2005) study, on the other hand, does include a consideration of the broader context of the social position of the pharmacist as well as the social construction of elderly people as chronic medicine users. Although the focus of her research is on the micro level, she utilised data collection strategies such as ethnographic observations which enabled her to obtain contextual information about the participants and their immediate environments. Her analysis focuses on interactional processes within the specific context of home visit medication reviews with elderly patients and her results reveal unique aspects of these particular interactions. Salter discusses the implications of her findings in terms of how elderly people are viewed by society and how younger persons interact with them. By considering the context of the interactions, she is able to offer specific suggestions for improving communication during these home visits.

The researcher agrees strongly with the arguments for the inclusion of contextual aspects, specifically with Silverman's views on the use of multiple methodologies to incorporate the context into the analysis process. This study will demonstrate that when conducting research in the field of HIV/Aids in a multilingual and multicultural environment such as South Africa, it is impossible *not* to consider the context of the interactions.

5.9.3 Theoretical background to the study

The researcher embraced ideas of several scholars and philosophical movements that fall under the general 'umbrella' label of discourse analysis. Firstly, the researcher has drawn from the philosophical thinking that forms the basis for CA. The research into institutional talk and patient-health professional encounters, led by conversation analysts such as Heritage and Silverman, has informed this study. The CA work of Pilnick (as discussed in *Chapter 4*) was particularly influential. Secondly, the researcher has drawn from the ideas of various scholars in the field of Discourse Analysis (DA), such as Scollon (2001) (Mediated Discourse Analysis) and van Dijk (2001) (Critical Discourse Analysis).

Much debate exists regarding the relative merits of CA and DA, the ways in which they approach context, as well as the hazards involved in combining them. Although both approaches stem from separate areas in social science research and at times may appear to be at opposite ends of the analytical spectrum, the two overlap and complement each other in several respects. These areas of compatibility form the theoretical and philosophical basis for this study. The inclusion of these approaches in this study is justified on the grounds of the different kinds of knowledge that each approach lends towards an understanding of the social phenomenon of the pharmacist-patient interaction. The various theoretical and methodological perspectives of CA and DA will now be discussed.

5.9.4 Theoretical background to Conversation Analysis (CA)

CA is a data-driven approach that emerged from Garfinkel and Goffman's work in the field of ethnomethodology (Heritage & Atkinson, 1984). It emphasises descriptions of observable behaviour and seeks evidence of communication success or failure from the context of the conversation and the responses of each conversation partner. The data yields evidence of problems in the conversation, strategies employed by participants to deal with these problems and the outcome of the strategies used. Conversation is seen as a collaborative achievement (Perkins, 1995).

A fundamental assumption of CA research is based on Garfinkel's proposal (1967, as cited in Heritage & Atkinson, 1984) that the activities involved in ordinary conversation (talk) – producing one's own behaviour and understanding the behaviour of others – are products of a common set of procedures. There is an order to conversation which is methodically produced. According to Atkinson and Heritage (1984, p. 412), "the sustained focus on the details of interaction is sensitive to the fact that participants themselves observe and analyse each other's actions in extraordinarily detailed and systematic ways...".

Three fundamental principles of CA are that:

1. Talk is structurally organised in stable patterns which are oriented to by participants.
 2. Talk is sequentially organised and cannot be understood outside its context, which shapes a speaker's actions.
 3. Analysis needs to be empirically grounded and evidenced in the data.
- (Heritage, 1984)

Further, talk can only be considered communication when a speaker's action elicits an active response from a hearer. Conversations are jointly negotiated by the speaker and hearer and the conversation itself contains evidence of the outcome, i.e. "whether or not participants share interpretive conventions or succeed in achieving their communicative ends" (Gumperz, 1982, p. 5).

These assumptions about everyday conversation have been applied to the study of institutional talk, which includes interactions between health professionals and patients. Institutional talk is often differentiated from everyday conversation, although they do hold similarities and it has been suggested that talk in an institutional setting may be more restricted than ordinary conversation. Ten Have (1991, p. 162) remarks that "consultations [between doctors and patients] are sometimes almost like conversations. At other times, they resemble interrogation. But mostly they are somewhere in between...". The processes and practices of ordinary social conversations can be used to analyse institutional talk in order to examine how ordinary conversation is "specialised, simplified, reduced or...structurally adapted" in institutional interactions (Maynard & Clayman, 1991, p. 407, as cited in Silverman, 1993).

Drew and Heritage (1992) propose that institutional talk:

1. Involves the participants orienting to a common goal, task or identity associated with the institution, i.e. institutional talk is goal oriented.

2. May involve particular or special constraints which participants consider allowable contributions to the activity.
3. May be associated with inferential frameworks or procedures specific to an institutional context.

Each kind of institutional interaction should be considered unique (Drew & Heritage, 1992): a doctor-patient interaction may be similar to but can never be the same as a pharmacist-patient interaction. Indeed, Pilnick's (2001) work has already demonstrated how pharmacist-patient interactions differ from doctor-patient interactions (refer to *Chapter 4*).

As discussed in *Section 5.9.2* above, CA has been criticised repeatedly for its 'radically micro' approach, its apparent avoidance of social analysis and critique and its lack of consideration of context and so-called 'real' issues in society in general (Hilbert, 1990; Kuipers, 1989; van Dijk, 1999). The issue of context becomes particularly important when studying institutional interactions as opposed to ordinary conversation. This is because of the influence of orientations and constraints specific to an institution which affects the conduct of the participants, the organisation of their activities and their local identities. CA may be used to reveal how these institutional frames are embodied in interactions between participants in such settings (Drew & Heritage, 1992). CA holds the view that "'context' is both a project and a product of the participants' actions" (Heritage, 1993, p. 163).

CA has a well-established method for detailed, careful analysis of micro processes within transcribed interactions (ten Have, 2000). One of the goals of CA is to prove the presence of contextualisation through attending to the details of what participants say and do, rather than merely presupposing the impact of context. Therefore, CA does not generally consider contextual categories such as power in order to explain interaction and talk, unless these emerge in the interaction or are made relevant by the participants themselves (van Dijk, 1999).

5.9.5 Theoretical background to Discourse Analysis (DA)

DA is a term that encompasses a range of social science research methods which are based on analysis of talk and interaction. Providing a brief definition of DA is not an easy task, “because it covers so many levels and types of language and knowledge” (Roberts & Sarangi, 2005, p. 633). DA has two main aims, namely to provide a systematic, descriptive account of structures of discourse (including talk) at various levels, and to describe the relationships of the properties of talk to the structures of their context (including cognitive, social, cultural and historical contexts). Therefore, while CA seeks to describe interactive processes (what people say), DA attempts to explain them (what people might be thinking) (van Dijk, 1993 & 2001).

CA looks at the structures of conversation in the context of detailed transcripts, while DA provides insights into a broader range of activities present in talk, including underlying ideological and sociological concerns, social inequalities, or power relationships (Jaworski & Coupland, 1999; Silverman, 1993; Wooffitt, 2005). DA considers how language can construct a social object, what language does and what language means in its specific context (Antaki, no date). The focus of DA can be local (e.g. the study of texts such as conversations or interviews) or global (e.g. Foucault’s theories of power relations). Discourse Analysis in the social sciences tradition adopts the following views of language:

- it is a type of action (it is active and producing, not neutral or passive);
- it is a social practice which reflects, represents and constructs the social world; and
- it affects and is affected by who we are and what we do as humans (van Zyl & Bowman, 2007).

The constantly changing transdisciplinary movement of Critical Discourse Analysis (CDA) emerged from the work of discourse analysts such as van Dijk and Fairclough. CDA draws from the theories and philosophies of scholars such

as Foucault, Habermas and Bourdieu and it engages in dialogue with other disciplines and theories to address processes of social change (Fairclough, 2005). Van Dijk (2004) explains his desire that DA should participate critically in social debates and conduct research that will have an impact on society. Hence, CDA focuses on “how discourse [text and talk] enacts, expresses, condones or contributes to the reproduction of inequality” (van Dijk, 2004, p. 26).

Unlike CA which begins at the micro level of the interaction, CDA begins with the social issues and problems faced by various groups in their everyday lives, e.g. racism or sexism. However, Fairclough’s aim is to attempt to unite detailed linguistic analyses of texts (or talk) with a macro-sociological analysis of social practice (e.g. Foucault’s theories) and micro-sociological interpretive traditions (e.g. ethnomethodology and CA) (Jorgensen & Phillips, 2002). He also aims to identify specific linguistic and symbolic features of texts which are a process of social change, as well as incorporate elements of context into analysis (Fairclough, 2005).

CDA focuses heavily on issues of power, control, dominance and inequality and it borrows from Foucault’s theories of power. A controlling context can determine how a communicative situation is defined in terms of time, place, topics and topic changes, details of meaning, form and style, as well as the roles, knowledge, opinions and social actions of participants (van Dijk, 2001). CDA aims to contribute to social change through the creation of more equal power relations both in society in general as well as in communication processes.

Jorgensen and Phillips (2002) outline several basic assumptions of CDA, viz.:

1. The character of social and cultural structures and processes is partly linguistic.
2. Discourse is constitutive and constituted, i.e. it constitutes the social world and it is constituted by social practices.

3. Language use should be analysed within its social context, through concrete, linguistic analyses of the use of language in interactions.
4. Discourse functions at an ideological level, i.e. discourse practices create and reproduce unequal power relations in society.
5. CDA sides with oppressed social groups.

Although the aim of this study is not to analyse pharmacist-patient interactions at an ideological level, the researcher nonetheless identifies with many of the basic assumptions and tenets which CDA promotes, such as the fact that language use should be considered within its social context and power relations may influence communication processes. As will be revealed, there are some aspects of this data and its analysis which tend towards the ideological.

CDA and CA are disparate approaches, both in terms of theoretical background and analytical methodology, and the reader may well question the inclusion of both approaches in this study. However, the approach of Mediated Discourse Analysis (MDA) provides a link between the two, by attempting to show how the broader discourses and ideologies in society and culture are present and engaged in the mundane, everyday, real-time social actions of social actors (Scollon, 2001).

Although MDA shares many of the goals of CDA, it emerged as an alternative approach which views discourse as one of many tools which researchers can use to take social action. It acknowledges that there is a relationship between discourse and action and it attempts to understand how objects, language and actions intersect (Norris & Jones, 2005). Therefore, the focus of MDA is not merely on discourse and language but rather on the intersection of social practices, of which discourse forms part, and the actions taken by the use of discourse. However, text and its analysis may be used as a means to illustrate this social action, because many social actions involve discourse.

MDA has six central concepts, viz.:

1. mediated action (a social action taken with a mediational means or cultural tool);
2. site of engagement (a real time moment when several social practices intersect to form a unique social action);
3. mediational means (the means through which a social action is communicated or carried out; mediational means are the carriers of social, cultural and historical formations);
4. practice and mediational means (mediated actions occur at the intersection of social practices – histories, identities and social groups);
5. nexus of practice (the intersection or linkage of multiple social shared practices); and
6. community of practice (a group of people who interact with each other towards a common goal or purpose).

MDA's approach to the methodology of analysis is that the researcher needs to narrow the scope of what must be analysed, through determining what actions are significant and what texts or discourses are relevant to the social actors being analysed. The goal of MDA is "to arrive at a richer understanding of the history of the practice within the habitus of the participants in that particular social action" (Scollon, 2001, p. 171). To accomplish this, MDA uses triangulation of data sources (e.g. audio/video recordings, field notes, participant observations, interviews), focuses on the participants' definitions of what is significant, and uses issue-based analysis to identify the issues of concern to the participants. MDA also advocates for the use of CA to analyse conversational interactions.

5.9.6 Combining different approaches

There is a need to integrate a linguistic or CA approach to analysis with sociological theories and a consideration of power, inequality and social influences (van Dijk, 2001). Fairclough (1985) strongly believes that the micro

should not be separated from the macro. Indeed, an eclectic perspective may well strengthen the research because the problem is approached from different theoretical and methodological positions (Lupton, 2003). Therefore, it becomes necessary to create an interface between the local (micro) context in an interaction and the global (macro) context.

In combining approaches, it is important to integrate and demonstrate the relation between the different approaches – the resulting multi perspectival research should not be “based on a mish-mash of disparate approaches” (Jorgensen & Phillips, 2002, p. 155). Each approach utilises different methods and produces different forms of knowledge, which together create a broader understanding of the phenomena under study and an appreciation of the way in which the social realm can be understood and constructed in different ways. However, it is imperative to maintain awareness of the various approaches and their rationales (Lupton, 2003).

In the reality of an interaction, the micro and macro structures and context form one cohesive whole, i.e. they are not separate entities (van Dijk, 2001). However, for the purposes of analysis, some kind of boundary between the relevant discourses needs to be determined. Hilbert (1990) suggests that the researcher begin in one domain (i.e. micro or macro) and then explain the other, affirm the interrelationship between the two domains, and provide a holistic picture of society in terms of levelling from one domain to the other. Therefore, for the purposes of this study, analysis began at the level of the micro, using CA methods. An amalgamation of DA theoretical approaches was then utilised to analyse the data on a macro, contextual level. Ultimately, both approaches to analysis and the resulting interpretations overlap and inform each other; micro and macro elements of the pharmacist-patient interactions are intertwined.

5.9.7 Application of a combined approach to institutional interactions

Talk is considered a manifestation of the institution: it shows what health professionals and patients are doing in an interaction, as well as what it means to

be a health professional interacting with a patient and vice versa. Therefore, CA analysis can reveal what people do as well as the institutions they embody (Antaki, no date). These beliefs are exemplified in Sarangi and Roberts' (1999, p. 13) assertion that "workplace contexts can only be understood through the fine-grained analysis of talk".

However, institutional practices are more than just talk; there is a need to embed CA within a wider contextual knowledge. In order to obtain a so-called 'thick description' of the interactive characteristics of the pharmacist-patient interaction, different frameworks and methods of collection and analysis of the data are necessary (Sarangi & Roberts, 1999). The researcher considers herself a 'micro/macro Mediated Discourse Analyst'. The focus of this study is on the intersection and interplay between the different micro and macro discourses present in the pharmacist-patient interaction and the analysis is informed by the theoretical frameworks posited by CA, DA and MDA.

5.10 Data Analysis

After completion of data collection and transcription, it was necessary to devise a careful plan for analysis. This stage in the research process proved difficult for the researcher. A review of the methodological and analytical literature revealed numerous differing opinions and approaches to analysis. However, some advice from Sacks (1984, p. 27) seemed most useful:

"When we start out with a piece of data, the question of what we are going to end up with, what kind of findings it will give, should not be a consideration. We sit down with a piece of data, make a bunch of observations, and see where they will go."

Therefore, the process of analysis began without a specific hypothesis in mind and without a set methodological approach. Rather, the method of analysis evolved as the researcher worked with the data.

A rudimentary review of studies examining health care interactions reveals that there is no clear-cut approach to qualitative analysis of recorded interactions within the social science tradition. The researcher's selection of the methods, or a combination of several methods, was a critical decision that held the potential to impact seriously on the outcomes of this study. The researcher felt that it was important to begin analysing the data using basic analytic methods taken from several approaches, viz. Conversation Analysis, Discourse Analysis and Thematic Content Analysis. A preliminary discussion of the methodological bases for these approaches will now be presented, followed by a description of the analytic methodology used by the researcher in this study.

5.10.1 The method of Conversation Analysis (CA)

CA involves selecting a particular sequence from a recorded interaction and then analysing the transcription of this sequence on a detailed, rigorous, systematic turn-by-turn basis. CA typically focuses on the constructs of turn taking, sequential organisation and repair sequences within the interaction (ten Have, 2000).

Seedhouse (2004) suggests that once a sequence has been located, the analyst should begin by characterising the actions in the sequence. Thereafter, the researcher should examine the action sequence(s) in terms of the organisation of turn taking, sequence and repair. It is also important to consider how the form, timing, turn taking and manner of accomplishment of the actions allow for certain understandings of the actions and implicate specific identities, roles and relationships for the interactive partners. CA aims to establish patterns and trends in interactions through systematic identification of occurrences of a particular phenomenon and detailed analysis of single instances of the phenomenon. It is also important for the researcher to consider deviant cases.

In terms of turn taking organisation, the researcher may consider aspects such as speaker change or selection, speakers' anticipation of turns, the length of turns, interruptions or overlaps, and how the turn taking is locally managed and

controlled within the interaction. When examining the sequential organisation of the interaction, the researcher might consider the occurrence of adjacency pairs (e.g. question-answer pairs), cycles of similar sequences, what prefaces a pair, or the absence of a pair. In terms of repair organisation, the researcher may examine aspects such as how repair sequences are initiated and by whom, whether repairs are successful and how repair sequences are received by the conversation partner (ten Have, 2000).

5.10.2 The method of Thematic Content Analysis (TCA)

TCA is a technique which focuses on themes and patterns that can be identified within collected data and then combined to generate a comprehensive picture of the informants' collective experience. The technique involves a number of steps usually applied to transcribed conversations or interviews (Aronson, 1994).

Firstly, the data should be read carefully to allow for the identification of recurring material, patterns and themes, as well as material that deviates from the rest of the content of the data. Any gaps in the data should also be identified. Then, the data should be matched to the already identified themes or patterns. This may include specific responses or behaviours relating to the themes.

After completion of initial classification of the data into themes, the researcher should attempt to generate propositions or associations and build a valid argument for choosing the themes. By piecing together the themes that emerge from the transcripts of interactions, a comprehensive picture of the participants' collective experiences can be generated. However, it is important to embed this within related literature and previous research (Aronson, 1994; Grbich, 1999).

This method of analysis is not typically critical in nature. Although it does allow for the identification of the 'what' in the data, i.e. the content, the researcher cannot make tentative explanatory statements based on the use of TCA alone. DA, on the other hand, looks at data in a more critical manner, in terms of what is

ideological, unexpected or embedded in contextual factors. This allows the researcher to begin to explain how or why a social phenomenon occurs (van Zyl & Bowman, 2007).

5.10.3 The method of Discourse Analysis (DA)

DA in the social science tradition does not postulate a method for analysis. However, several authors, including Van Dijk (2001), Potter and Wetherell (1987) and Parker (1992) suggest procedures for analysis; these suggestions have been synthesised by van Zyl and Bowman (2007).

Analysis should focus on the elements of the data that take the form of discourse, as well as on regularities in style and structure. The researcher also needs to identify the objects in the texts and how these are represented in the text or by the speakers of the texts. Once these discourses and objects have been identified, the researcher should consider their significance as well as what is not said about them. It is important to search for contrary examples or unexpected discourses and to consider how the data may have changed historically or chronologically. Finally, the researcher may need to search for extra-textual information (e.g. historical, economic, political or social events) which may allow the researcher to make sense of the text.

Traynor (2006) provides an interesting review of 24 papers published in a nursing journal which claim to have used various methods of DA. Although many of these papers incorporate some aspect of DA into their analyses, some do not describe the theoretical basis of DA, others provide an analysis that bears little resemblance to DA or merely ‘skims the surface’, and some do not link their theoretical background to the analysis or discussion. Traynor suggests that rigorous DA should employ a developed theoretical framework and include examples or extracts of text in the analysis. In addition, researchers need to do something more than simply summarise themes in the text: analysis should reveal the operation of language, as well as social influences on discourse.

5.10.4 Theme-oriented discourse analysis

Roberts and Sarangi (2005) suggest an approach which could be said to blend elements of CA, DA and TCA into a workable analytic solution. They call their method *theme-oriented discourse analysis*. Their approach involves several stages, viz.:

- Repeated viewing of recordings, in order to identify the phases of the interactions. This may be done through examination of content, prosodic cues, non-verbal cues and inferential markers.
- Transcribing the data using transcription conventions.
- Examining the outcomes of the whole interaction and if possible obtaining feedback from participants regarding the events.
- Reading and re-reading the transcripts in the light of linguistic, sociological and cultural concepts.
- Analysis of cases or comparison of phases of interactions across the data corpus.

The researcher found this proposed method of analysis to be particularly useful in guiding the process of analysis of the pharmacist-patient interactions in this study.

5.10.5 The process of micro analysis

This study began with the intention of describing the ‘how’ in pharmacist-patient interactions, through detailed analysis of interactional and communication phenomena using principles and methods of CA. Repeated viewing of the recorded interactions allowed the researcher to gain overall impressions of the interactions, as well as an idea of their general phases and characteristics. The aim was to keep the analytical constructs suggested by the CA literature in mind while viewing the videos (Heritage, 1993; Sacks, 1984), but not to let these constructs restrict what the data revealed.

This approach is elucidated in the CA literature: after transcription is completed, the researcher should begin analysis by viewing the data with the intent to discover new patterns or phenomena of interest *without* preconceptions or theoretical assumptions – i.e., the data should speak for itself. Schegloff (1989, as cited in ten Have, 2000, p. 104) refers to this process as “roughing the surface” prior to analysis. Sacks (1984) cautions that when one begins to look at the data, one should not consider what the results or findings might be.

However, he does suggest bearing certain constructs in mind while viewing the data; these include turn taking organisation, sequence organisation and instances of repair. Heritage (1993) expands on these suggested constructs to include overall structural organisation of the interaction, turn design, lexical choice, and forms of asymmetry. These additional constructs can be used to analyse tasks, roles, constraints and inferences that are specific to institutional interactions.

Therefore, a delicate balance needs to be maintained between using the data as evidence and the concepts suggested in the literature as a guide. This became the ‘mantra’ and the focus of the analysis process. The researcher strived towards a bottom-up, data-driven analysis of the data which was informed by the literature.

To begin the analysis phase, the videos and transcripts were viewed repeatedly on a superficial level, in line with the first step in Roberts and Sarangi’s (2005) analytic approach. The researcher made preliminary notes about some of the phases, structural and interactive characteristics that began to emerge during this stage of analysis.

After the researcher had repeatedly viewed the recordings and identified phases in the interactions, each interaction (as well as the data corpus as a whole) was considered in terms of its general outcomes (Roberts & Sarangi, 2005). At this stage, the researcher began to consider the various elements within an interaction which may contribute to a positive or negative outcome.

Obviously, it is impossible to know whether the patients in these interactions ultimately understood the ARV instructions or whether they adhered to treatment. However, the feedback provided by patients and caregivers during the post-interaction interviews does give some insight into the overall outcomes of the interactions, the participants' satisfaction with the consultations, their understanding of some of the information about ARVs provided by the pharmacists and their understanding of HIV-related terminology and concepts. Preliminary triangulation of the data from the interviews and the recorded interactions proved useful in this process (Roberts & Sarangi, 2005).

During the next stage of analysis, CA techniques were used to examine each interaction within the data corpus on a detailed, turn-by-turn basis through repeated examination of the original recordings in conjunction with the transcripts. This process of identifying themes and patterns was heavily data-driven, although informed by the linguistic constructs suggested by Sacks (1984) and Heritage (1993). Other themes and patterns, including unique aspects of each specific interaction, code switching behaviours, adherence-related aspects, the use of jargon, the use of interpreters, understanding-related issues, personal moments⁵ and interruptions, were also noted as they emerged from the data.

As a result of this analysis, specific patterns, trends and variations in the communication styles of the pharmacists became apparent, as well as communication processes and strategies which served to facilitate or inhibit collaboration and communication between pharmacists and patients. Many of the identified processes and strategies were found to be present across most or all of the 26 interactions.

It must be noted, however, that CA traditionally involves identification of a specific phenomenon, followed by analysis to determine the meaning of the phenomenon and how it is accomplished in interactions. This is achieved through

⁵ This term is defined in *Chapter 7* and discussed in *Chapter 8*.

searching for all instances of the phenomenon across the data (T. Koole, personal communication, November 2007). However, given the large scope of this project and the lack of available research into pharmacy interactions, the researcher considered it important to identify and describe phenomena and patterns across the data corpus in a more general manner. Although CA techniques were used for analysis, the study retained a focus on general communication processes and phenomena rather than analysing a few specific details in the interactions. The researcher also considered it necessary to present numerous extracts from across the data corpus in order to present a holistic picture of interactive phenomena in this setting.

After completion of CA, a table was compiled which described aspects of each interaction within the data corpus. The table included notes on participants' demographic information, unique aspects of each specific interaction, code switching behaviours, adherence-related aspects, the use of jargon, the use of interpreters, understanding-related issues, elements of collaboration, as well as the CA-related constructs suggested by Sacks (1984) and Heritage (1993). In addition, any other obvious characteristics or themes that emerged from the data were noted, including aspects such as personal moments and interruptions.

Although it is acknowledged that collating the emerging results into a 'taxonomic' tabulated format does deviate significantly from the philosophy of CA, the researcher needed to devise a way of managing and organising the large data corpus. This process also allowed the researcher to extract 'micro' themes from each interaction and to compare and contrast identified phenomena across the data corpus. The researcher was then able to draw some preliminary conclusions regarding the characteristics of each interaction as a whole, as well as the nature of the data corpus in its entirety. This proved to be a crucial stage in the analysis process and it became necessary for the researcher to move back and forth constantly between the data and the original research questions, in order to decide how best to focus the analysis and the presentation of the results.

It was then decided that a single case should be analysed and described in detail. Patient 11 was selected for this purpose because it appeared to be a typical case which represented many of the patterns and trends identified in the data corpus as a whole. This provided the researcher with the opportunity to fine-tune methods of micro analysis of linguistic elements in an interaction and focus on the emerging themes. This process also proved most useful in developing methods of non-verbal transcription. In addition, it enabled the researcher to prepare for the feedback session with the pharmacists at the Wellness Clinic and the extracts selected from the single case proved especially useful in reporting emerging themes and results to the pharmacists. Most importantly, perhaps, the table highlighted the apparent differences in communication and interactive style between the pharmacists in this data and those included in Pilnick's study (1998, 1999, 2001, 2003).

Thereafter, a comparison and contrast of the content and structure of the interactions in the data corpus was performed, to determine whether consistency existed across interactions and how this compared to pharmacist-patient interactions in other settings. This was based on the work of Pilnick (2001), who found that pharmacist-patient interactions in her data corpus had a specific 'template' or structure that was unique amongst institutional talk settings and unique to pharmacists. The researcher used her structural template and terminology and categorised each section of each interaction according to her classification system. This was expanded upon and new terms or classifications were added according to what emerged from the interactions. A comparison across interactions was made and a so-called 'standard' template was created to describe the structure and content of the interactions in the data corpus.

Throughout the analysis, the researcher engaged in a process of constant comparison within and between cases to identify analytic trends and patterns across the data corpus. Once a specific phenomenon had been identified, further examples in the data were sought out and analysed to identify similarities and

differences across patients and pharmacists. This process strengthened the findings in terms of both plausibility and generalisability across the data corpus.

5.10.6 The process of macro analysis and the inclusion of contextual information

During the process of micro analysis, it became apparent that merely providing a detailed description of communication and interactive processes would not be sufficient. The research context was filled with numerous so-called ‘macro’ themes, such as social issues, HIV/Aids-related factors and issues such as gender, poverty, the historical context, concepts of health and disease, stigma and disclosure of illness. These factors are sometimes directly spoken about in the data, but they are often implicitly visible and it could be said that they overshadow every interaction. Ignoring these factors and their possible impact on interactions would provide an incorrect, skewed portrayal of the setting and the recorded interactions. Therefore, the focus shifted to include a consideration of the ‘how’ and the ‘why’ elements present in the data corpus (in line with Silverman, 1999).

The researcher began by using thematic analysis techniques to identify these factors, in both the interviews and the recorded interactions, and attempted to group like themes together. The researcher reviewed her ethnographic observation notes and found anecdotal or reported evidence which concurred with these themes. The information supplied in the pharmacist interviews was also consulted and details from the researcher’s own experiences obtained while working at RPH were added. Finally, the researcher revisited the transcripts of each interaction and searched for places where these factors appear. This triangulation of the data provided some powerful insights into the pharmacists’ and patients’ motivations and interactive behaviours during their consultations.

Several ‘macro’ themes emerged from this thematic analysis, most especially in the post-interaction interviews conducted with the patients by the research assistant. Although patients were not asked directly, they often volunteered information about their experience of being ill, how it felt to be a caregiver, how

they had experienced stigma and how their socio-economic circumstances threatened their ability to adhere to clinic visits and to the ARVs.

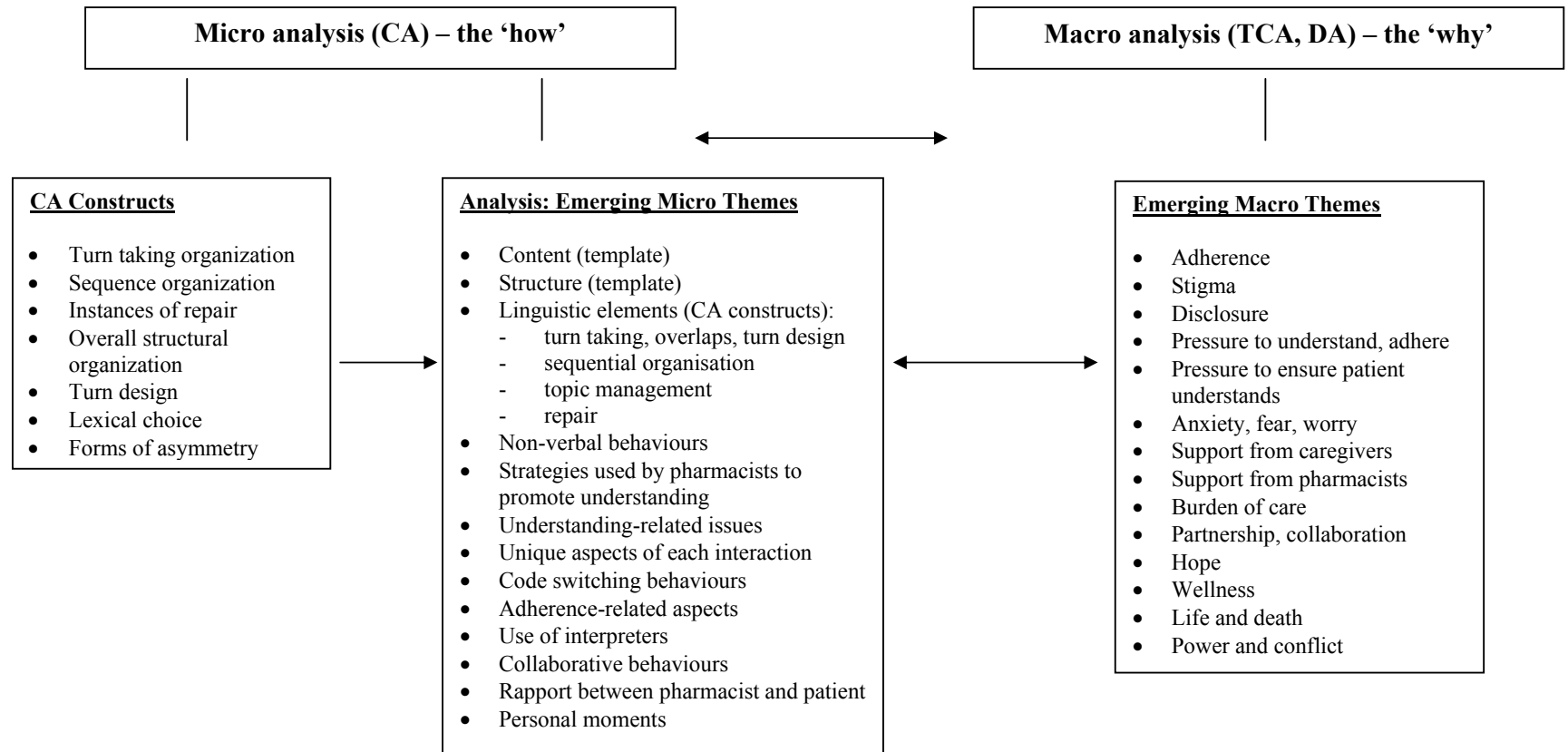
Subsequently, the researcher considered broader environmental influences such as HIV/Aids, the socio-political and economic context, and culture and traditional beliefs. Theories of health care interactions, the sociology of health and illness, institutional hierarchies, power in medical encounters, and social interactions were used to inform the discourse analytic process. Having identified certain macro entities and discourses present in the data and the characteristic ways in which they are regularly represented, the researcher considered how these differ or may differ from other institutions or interactions (van Zyl & Bowman, 2007) as well as unique characteristics of these interactions in this context.

At this stage, the researcher began to make tentative explanatory statements about the influence of the macro structure on the micro elements present in the interactions. Certain deviant or exceptional cases identified in the data corpus (i.e. cases that did not follow the typical pattern of pharmacist-patient communication) were explored using DA techniques.

Therefore, the micro and macro analysis of the interactions as described in this section provided a backdrop against which the researcher could begin describing the pharmacist-patient interaction in its context. The researcher drew from four data sources: ethnographic observations, recorded interactions and corresponding transcripts, semi-structured interviews and the researcher's own experiences of working in this setting.

Figure 7 presents an illustration of the process of analysis as described in this section.

Figure 7: The process of analysis



5.11 Ensuring rigorous qualitative research

Five principles of rigorous qualitative research are suggested by Burns and Grove (2001, as cited in Jacelon & O'Dell, 2005). These principles guided the research process:

- *descriptive vividness* – accuracy and clarity of the researcher's description of the study and the process of research;
- *methodological congruence* – consistency between the methodologies described and the methods actually used in the study;
- *analytical preciseness* – trustworthiness of the analysis and the link between the data and the interpretation;
- *theoretical connectedness* – clear expression of the theoretical framework and its relevance to the study; and
- *heuristic relevance* – relevance and applicability of the study to the existing body of research and knowledge.

Concerns have been raised about the quality and reliability of the use of qualitative methods in health care settings, especially in light of the fact that much published qualitative research is not necessarily of a good standard. The debate centres on the nature of the knowledge that is produced by qualitative investigations as well as whether the quality of such research can be legitimately judged (Mays & Pope, 2000).

Another common criticism, particularly in the medical field, is that qualitative research lacks objectivity, especially when compared to quantitative research (Malterud, 2001). Van Zyl and Bowman (2007), however, believe that the idea of 'objective research' is false, because even seemingly objective data or analyses are influenced by a researcher's choices and decisions during the process of analysis. In the same vein, 'subjective research' is also a misnomer: social constructionism teaches that in any social context, including interactions, regularity exists. For example, CA has demonstrated how conversations are rule-

governed and linguistic patterns and trends can be identified. Similarly, when analysing data, there are certain elements or features that may only be interpreted in one way and alternative meanings cannot exist. Therefore, even when analysing so-called 'subjective' data, an element of objectivity does exist.

Van Zyl and Bowman suggest that the so-called 'subjectivity' of qualitative research can be countered by using evidence which ultimately cannot be refuted. By following this process, the analysis and interpretation can be linked directly to the evidence provided in the data. In addition, by presenting data in the form of extracts from transcripts as part of the analysis and interpretation, the reader is able to draw his/her own conclusions regarding the data.

Long and Johnson (2000) provide several suggestions for improving rigour, reliability and validity of qualitative research. These include self-reflection and journaling, prolonged involvement and persistent observation of the research context, peer debriefing during the analysis phase and triangulation of data sets.

Peer debriefing was one tool used by the researcher to promote rigour. This involves continually sharing analysis, thoughts and ideas about the data with colleagues and peers. This process took several forms, including discussion of the analysis and interpretations with the researcher's supervisor and fellow researchers, presentation and discussion of the results with peers at postgraduate research seminars, presentation of the results at international conferences and engaging with the audience, submission of the research for publication and consideration of reviewers' comments, and discussion of the results with several experts in the fields of health communication and linguistics. Peer debriefing was a particularly valuable process which allowed the researcher to address several complex issues and dilemmas which arose during analysis as well as critical comments raised by other researchers and colleagues.

Triangulation of data sources also proved to be a valuable tool for promoting rigour. This process has already been discussed in various sections of this chapter.

Throughout the research process, the researcher engaged in a constant process of self-reflection. As Mishler (1984) points out, it is important for the researcher to remain neutral when analysing and interpreting data and the researcher's assumptions or presuppositions about the interaction should be laid aside. Despite the best intentions, however, it is easy for a bias to arise. At times, the researcher was forced to face and acknowledge her own biases and how these influenced the analysis process. Biases may well have arisen from the researcher's involvement in the pharmacy during the data collection process as well as her affiliation with the hospital through a year spent working in this setting.

5.12 Feedback

The researcher returned to the RPH Pharmacy after analysis of the data was partially completed. Verbal feedback and a written report were provided to the pharmacists involved in the study, as well as to all other pharmacists working in the Wellness Clinic and in the main hospital outpatients Pharmacy. The written report was also forwarded to the manager of the Wellness Clinic. Feedback to the patients and caregivers could not be given for practical reasons. The pharmacists responded positively to the feedback session and indicated an interest in sharing the results of the study with other hospitals in the district. The pharmacists also felt that the results might prove useful for training new pharmacists at the Clinic, specifically intern pharmacists with little experience of interaction with patients.

5.13 Summary of chapter

This chapter outlined the research process and provided a consideration of the theoretical and methodological background to the study. It began by detailing the aims and objectives of the study and described the researcher's methodological choices. A discussion of the process of informed consent highlighted some of the dilemmas inherent in obtaining consent from this vulnerable population.

The importance of a theoretical framework was highlighted and the framework within which this study is grounded was described in detail. The researcher utilised a hybrid qualitative analytic approach drawing from several different methods of analysis, including CA, DA and TCA, and this was outlined comprehensively in this chapter. The reasons for this choice of approach centre on the need to embed a micro or linguistic analysis of communication elements of the recorded interactions in a consideration of the impact and presence of macro contextual factors.

CHAPTER 6

ARVs AT RUSTENBURG WELLNESS CLINIC: ETHNOGRAPHIC BACKGROUND INFORMATION

This chapter will provide information that is deemed crucial for the reader's understanding of the results which will be presented in the following chapters. As discussed in *Chapter 5*, it is particularly pertinent to study the pharmacist-patient interaction within its context; therefore, inclusion of contextual information is essential. The researcher gained knowledge of the research context through ethnographic observations of the hospital, clinic and pharmacy environments; observation of the pharmacists' work; recording of anecdotal or reported evidence from pharmacists and patients; recording of comments made to the researcher during the interactions; recording of comments made between pharmacists; and evidence from the semi-structured interviews conducted with participants.

6.1 Description of Setting

6.1.1 Rustenburg Provincial Hospital

Rustenburg Provincial Hospital (RPH) is situated in the North West Province, in the centre of the mining and agricultural town of Rustenburg. The hospital serves a large population and an extensive area within the Bojanala district. The town also has two private hospitals. RPH already functions beyond its capacity, with insufficient beds in some sections and long waiting hours for patients. It has been suggested that a new hospital of the same size as RPH will soon be required to meet the needs of the local population.

The hospital currently has a capacity of 352 beds and offers a range of specialised medical and rehabilitative services. It was originally designed to serve a small community, with separate facilities for black and white patients on the same

property. The hospital has expanded greatly since its inception, with recent additions such as an administrative block, several new wards and rehabilitation services (see *Figure 8*). Approximately eighty doctors work at RPH and at some of the local clinics and many of the Hospital's specialist doctors come from Cuba and other African states⁶.

Despite the availability of a number of clinics in the district, patients prefer to travel long distances to the hospital in the belief that they will receive better care at a hospital. The hospital admits over 2 000 patients into its wards and treats over 8 300 outpatients every month (Bodibe, 2006). Most specialised services such as rehabilitative therapies, radiography and specialist medical disciplines are not offered at the clinics. This has put strain on the hospital and its limited resources: for instance, there are not enough beds in the maternity ward and mothers are forced to sleep on foam mattresses on the floor prior to delivery. Hospital staff continually encourage patients to seek medical care and collect medications at the local clinics, but RPH remains overburdened.

Whereas malaria and TB cases were the major diseases treated at the hospital during the 1980's (A. Venter, chief physiotherapist at RPH, personal communication, 2005), the advent of HIV/Aids has placed enormous pressure on the hospital and its staff. The care and treatment of patients living with HIV/Aids have become a hospital priority (Bodibe, 2006).

Other pressures on hospital staff also exist. Difficulties include a lack of facilities and financial resources and a lack of necessary posts needed to serve the large numbers of patients. Recent changes in the management structure of the hospital appear to have impacted negatively on the morale of staff at RPH. A visit by a union to the hospital (shortly after data collection) and a subsequent press statement highlighted some of the key difficulties which health professionals experience at RPH. These include "acute staff shortages, poor conditions of

⁶ During the 1990's, the South African Department of Health began recruiting groups of Cuban doctors to address the shortage of medical personnel in rural and disadvantaged areas.

service, unbearable workload, favouritism by management, and patients who are treated according to who they are” (NEHAWU, 2006, p. 1). Feelings of resentment and anger lead to a protest by staff and a call for the CEO to be suspended soon after completion of data collection (COSATU Weekly, 2006; Independent Online, 2006; News24.com, 2006).

Because of the large area served by the hospital and local clinics, doctors have experienced increasing demands for their services and they are often ‘spread thinly’ to share the load of patient care. Although there are many specialist doctors on the staff, most of the medical profession is comprised of intern and community service (CS) doctors⁷, some with very limited experience. The pressures experienced by CS health professionals have been documented by several authors (Khan, 2002; Reid, 2000; Roberts, no date; Strachan, 2000). The workload placed on CS professionals is often huge, the responsibilities and managerial duties often go beyond the call of the job, and the level of supervision available is variable and sometimes absent. The implementation of the CS programme appears to have had a negative effect on the career plans of some health professionals, who often decide to leave their jobs in the public service, or even to leave the country because of their CS experiences (Reid, 2000). At RPH, this means that there is a constant cycle of new CS professionals who work at the Hospital and then leave after a short period.

Despite all of this apparent negativity in the workplace, many health professionals at the Hospital are actively committed to providing their patients with the greatest level of care possible. They are prepared to go the extra mile, often putting considerable effort into caring for patients after working hours. There is a sense of needing to pull together for the benefit of the patients and the local community. The hospital also has a large community of volunteers who work in various departments as cleaners, palliative caregivers, nurses’ aides, or simply assistants

⁷ After graduating from medical schools, South African trained doctors are required to complete one year of internship followed by two years of CS at a government hospital (at the time of data collection doctors were required to complete only one year of CS).

who help with feeding patients in the wards. They work long hours for no remuneration.

Having spent a year working at this hospital, the researcher is familiar with this health care environment, its staff and with the patient population. The researcher is also aware of the challenges, difficulties and pressures involved in working at this hospital.

6.1.2 RPH Wellness Clinic

The Wellness Clinic is a refurbished building within the hospital grounds that has been pleasantly decorated to provide a friendly, comfortable, homely health care setting for patients (see *Figure 9*). It offers medical, pharmaceutical, nursing, dietetic and counselling services, with an emphasis on encouraging 'wellness' and health. Since its inception in 2004, a dedicated team of nurses, doctors, pharmacists, counsellors and dieticians has been established and many thousands of patients have benefited from the ARV rollout and additional services provided at the Wellness Clinic. Voluntary Counselling and Testing (VCT), as well as Prevention of Mother to Child Transmission (PMTCT) services are also provided.

Staff members working at the Clinic at the time of data collection included:

- 2 pharmacists
- 3 doctors
- 3 chief professional nurses
- 3 trained counsellors
- 1 social worker
- one human resources (HR) manager
- 2 receptionists

The Wellness Clinic has experienced its own set of problems. Although hailed by the CEO as a resounding success, it soon began to struggle to accommodate the

large number of patients. The flood of patients requiring ARVs has meant that space had to be cleared in the main hospital pharmacy in order to make way for the many boxes of new drugs and the extra numbers of patients. More doctors and other health professionals are desperately needed at the Wellness Clinic, but posts have not been made available despite numerous requests by Wellness staff members. The explosion of patients attending the Wellness Clinic has put pressure on other departments too: because there are more patients with HIV/Aids in the community, more of these patients seek medical treatment at the hospital or are admitted to the wards for palliative or rehabilitative care. Approximately 60 new patients visit the Clinic each day (Bodibe, 2006).

6.1.3 RPH Wellness Clinic Pharmacy

At the time of data collection, figures from the Department of Health showed a 29.0% HIV prevalence among antenatal clinic attendees in the North West Province during 2006, with the highest prevalence among 25 to 29 year olds. The prevalence of HIV/Aids was estimated to be 33.6% for 2006 in the Bojanala District (Department of Health, 2007a). According to the South African Chamber of Business Statistics for the Province, the number of adults on comprehensive HIV and AIDS treatment in the public sector for 2006 was 20884 and the number of children on treatment in the public sector was 695 (SACOB, 2006).

The Wellness Clinic Pharmacy (see *Figure 10*) started providing ARV drugs to patients in April 2004. As of June 2006, the pharmacy was providing ARVs to 3700 adult patients. As of January 2007, Clinic statistics were as follows (A. van Rooyen, pharmacist at RPH, personal communication, January 2007):

- 4567 adult patients started on ARV program
- 3333 adult patients currently on ART
- 528 paediatric patients started on ART
- Ratio of male to female adult patients on ART is 822 : 1595, thus 1:2
- Ratio of male to female paediatric patients on ART is 283 : 237

- 1234 total de-registered adults:
 - 825 adults stopped taking ARVs (reason unknown – patients may have defaulted, been transferred to another hospital, or passed away)
 - 103 adults transferred to another hospital
 - 306 deceased adults (reported by family or medications returned by family)

Generally two pharmacists work in the Wellness Clinic: one permanent HIV pharmacist and another community service pharmacist. A pharmacy assistant works at the outpatient (OPD) pharmacy and in the wards. She is sometimes called upon to assist the Wellness Clinic pharmacists with dispensing tasks or to act as an interpreter. The number of available pharmacists has not increased since the inception of the Wellness Clinic, despite numerous motivations by staff for the creation of new posts. Pharmacists at RPH are rotated between two OPD pharmacies and the Wellness Pharmacy. This means that a patient may see a different pharmacist during each visit.

Much additional work is involved in the management of ARVs and their distribution. Enough ARVs must be ordered so that there is surplus stock available in the event of a shortage of supply from the drug manufacturers. RPH also supplies ARVs to surrounding clinics. All of these drugs need to be stored and managed appropriately and some paediatric ARVs must be refrigerated.

A description of the research setting will now be presented. This is based on the researcher's first impressions of the clinic and ethnographic observations and notes made during the week of data collection. The researcher feels that it is important to 'set the scene' and provide the reader with an image of the Clinic. This section is written in the first person.

6.1.4 Ethnographic description of the Wellness Clinic Pharmacy

I drive my car into the hospital grounds. The sun shines brilliantly through the trees and between the various buildings on this chilly winter morning. I park, get out of my car and look around while collecting my thoughts and equipment. The Wellness Clinic is a newly renovated building, an old building with cream walls and a rusty red coloured tin roof. It looks like a house, not at all clinical or hospital-like. A narrow road passes in front of the building. Patients and hospital staff walk up and down under the covered walkways in front of the clinic. Some just sit on the benches, catching some warm winter sun. I wonder how long their day has already been – at what time did the patients awake? How long did they travel to get here? A woman from the main hospital kitchen walks past pushing a steel food trolley holding several plates, each covered with a teal green plastic cover. She stops to talk in a loud voice to someone and then carries on her way. The metal trolley makes quite a noise as it rattles over the uneven pathway.

There is no ‘big sign’ outside the clinic and nothing to identify it. But everyone knows what this building is all about. This is the HIV clinic. I walk inside the double doors that guard the entrance. I am immediately hit by a wave of warm air inside the clinic and by the thumping bass music emitting from a fancy stereo system. The foyer is like one large waiting room, with reception in the middle and chairs to the right and continuing down passageways to either side. There are lots of people here, patiently sitting and waiting for their turn to be helped. Some have bags, some have children. Others hold quiet conversations with each other.

I look towards reception. A large, solid fake oak desk stands in front of black lettering on the wall behind it: ‘Welcome to Rustenburg Provincial Hospital Wellness Clinic’. It is written in several languages. Someone has taken great care with the décor: this is supposed to be a welcoming place, a comfortable visit. Comfortable plastic-covered upholstered chairs, heavy floral and cream curtains, a few pot plants and freshly painted cream walls surround me. The front desk is crowded with about five people rushing around behind it, answering phones,

attending to patients who have queries, doing admin tasks. Apart from the smart stereo system, a rather fuzzy TV has been switched on to keep the patients occupied while they wait. Occasionally a doctor or nurse can be seen walking in the passage behind the waiting and reception areas. I wonder how many patients will pass through this building today.

I turn towards the pharmacy which is housed behind closed cream-painted double doors. It is to the left as you walk in the main door of the clinic. There are empty chairs along both sides of the passageway just before the pharmacy door. No patients are waiting for the pharmacist. A printed sign on the door says “first and second time patients can get their antiretrovirals from this pharmacy”. I tentatively knock and wait for an answer. I enter and am greeted by another warm, sunny room and a smiling, friendly face. The pharmacist invites me in. She sits at a computer in the middle of the room on the right hand side desk. Behind her are two steel cupboards – the medicine cupboards. In between the cupboards is a door to the back room, the tea and ‘chill out’ room. I am again aware of the thumping bass emanating from the sound system next door and this continues unabated through the morning. And the blue light on the ceiling, installed to kill TB and other pathogens that patients might bring in. It looks like something out of a Star Trek film. This place gives me a sense of health and healthiness, despite the fact that many sick people must pass through here each day.

I am struck by the ‘organised’ feeling in the room. Things have their place and all is in order. Two desks with a neat space in between. Four chairs, two on either side, with a grass green-coloured fabric on each seat. Two medicine cupboards. It’s almost perfectly symmetrical. Next to the main door is a fridge with a bunch of fake flowers and a small flag on top of it. On the other side of the door is a set of shelves, floor to ceiling, containing files and neatly stacked papers. A window on the left side of the room is draped with the same heavy floral curtains that I saw in the waiting area. Light streams in through the window and patients walk past it outside. I wonder about confidentiality and privacy – I can see out, they can see in. Surely they might see who is in the room with the pharmacist? What if

they recognised someone at the pharmacy? But that's the way things are done here. The grey steel cupboards are not bare, but are covered with various A4 size colourful posters, reminders about things patients should know about the ARVs. On the right wall of the room next to the computer are several printed pages. Telephone numbers, dosage calculators, regimen details.

The pharmacist opens one of the cupboards. Its shelves are filled with small cardboard boxes, each one carefully labelled and containing various medicine bottles, pots, packets and boxes. There is clearly a system here. She checks the boxes – some are getting low on stock. She goes to the back room where the surplus stock is kept on another floor-to-ceiling shelf. She fetches some more medicine boxes and carefully opens each one to remove the plastic pill container. The pill boxes are thrown away and the containers placed carefully into the correct place in the cupboard. She counts the containers. That should be enough for the next few days.

The senior pharmacist arrives a little later. She looks around at what needs to be done. The pharmacists never stop, not even for a moment it would seem. There's always something to be done and never enough time in the day. We sit, waiting for the crush of patients who will start to arrive sometime within the next hour. Today we hear that all three doctors are working and many patients are booked, which means the pharmacists will be busy.

One of the clinic directors enters the room: she needs 'paed stats', urgently. The MEC⁸ for health is expected to visit the hospital tomorrow and everything must be in place. There is a sense of panic in the room: the senior pharmacist groans, bemoaning the fact that they don't have the required stats. She knows that they should have them, but there is just no time to do these and far too many patients to keep track of. She promises to try and put something together by the next day.

⁸ Member of the Executive Committee.

A steady stream of a variety of patients enters the room over the next few hours. Some old, some young; children, men, women, moms, companions, spouses. Some speak English or Afrikaans, others don't and an interpreter must be sought. The senior pharmacist is always smiling and friendly. In between patients, she never sits still, always busy with something. While chatting animatedly to me about her work, she opens the medicine cupboard and comments on the apparent lack of logical organisation of the various medications. After staring at the shelves for a moment, she figures out that another pharmacist must have arranged them and there is in fact a logical system: vitamins on one shelf, ARVs on another, etc. She is itching to reorganise them alphabetically, but decides that it's probably better not to do this.

Lunchtime comes at last. One o'clock. But not quite yet: there is another knock on the door. A patient wants to be helped now. The pharmacist sighs and looks at the file. The patient is an OPD patient and he's taken a chance by coming here. Rules are rules, and OPD patients must not be helped at the Wellness Pharmacy. The pharmacist tells him to go back to OPD. He pleads desperately, begging to get his medications here so he can avoid a long, tiring wait at the OPD pharmacy. "The queues are so long that side", he says. She firmly shakes her head 'no' and he leaves disappointed and cross. After he has left, she feels the need to explain the situation to me. "I just can't start that. If I help one, it will never end". She feels bad about it. The pharmacist sticks a hand-written note on the door: 'Out for lunch'. She locks the door and retreats into the back room of the pharmacy for a much-needed break, flopping onto the couch with her lunch box in hand. She offers me coffee. That would be most welcome! I ask her how many patients she expects after lunch. "Lots", she answers.

Figure 8: Diagram illustrating the layout of Rustenburg Provincial Hospital

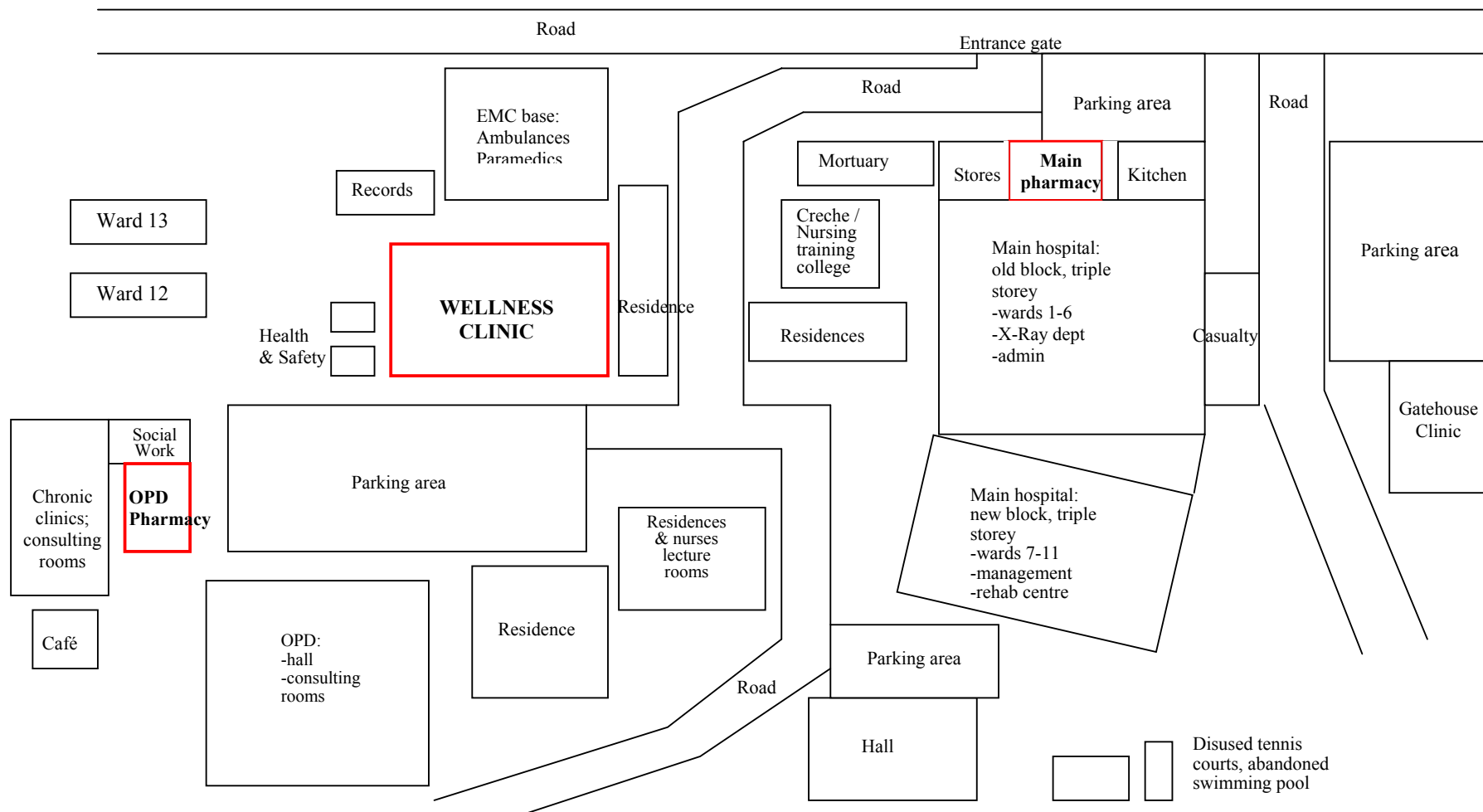


Figure 9: Diagram illustrating the layout of Rustenburg Provincial Hospital Wellness Clinic

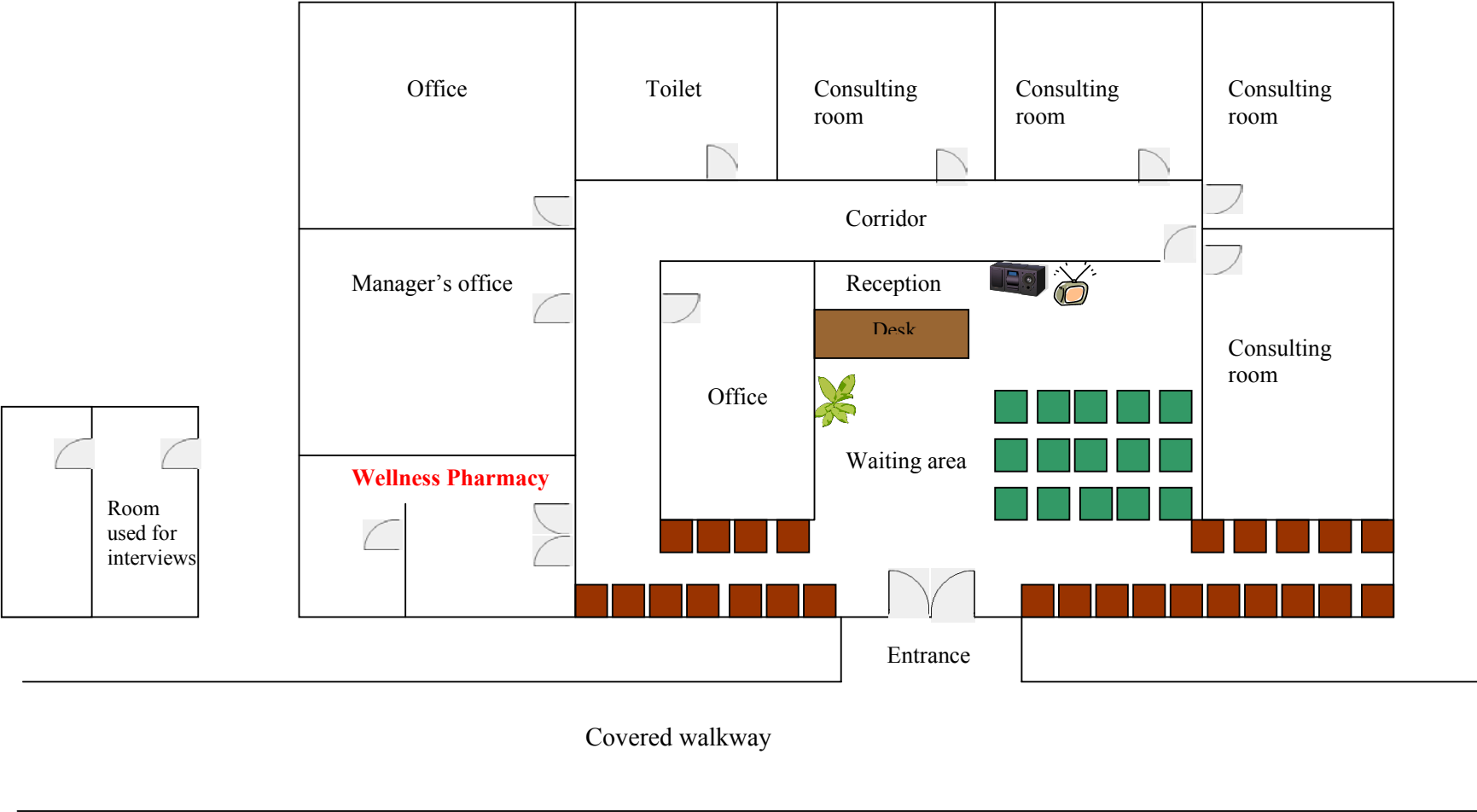
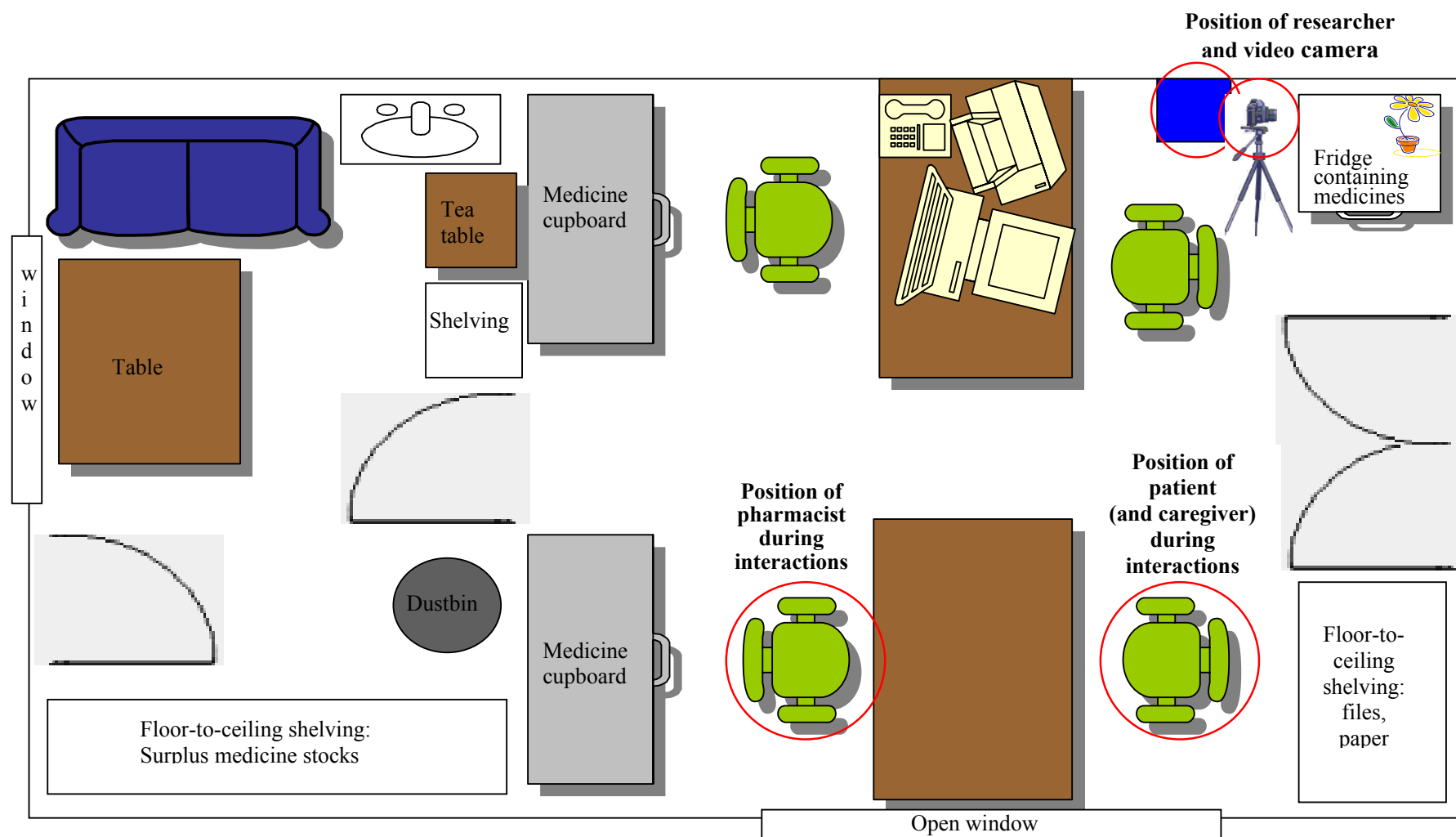


Figure 10: Diagram illustrating the layout of Rustenburg Provincial Hospital Wellness Clinic Pharmacy



6.2 Description of Participants

6.2.1 Pharmacists

Pharmacist A

Pharmacist A is a white female with extensive experience as a pharmacist and more recently as an ARV pharmacist. Afrikaans is her first language but she is fluent in English. She can speak some Setswana, especially pharmacy-related instructions, phrases and words. She holds a degree in pharmacy and has received some training in the area of HIV/Aids treatment. She has worked at RPH for several years and currently works on a part-time basis, rotating between OPD pharmacies and the Wellness Pharmacy. She has worked at the Wellness Pharmacy since its inception and was involved in the initiation of ARV rollout at this site.

Pharmacist B

Pharmacist B is a white female who is completing her community service year at RPH. This is the first year that she has worked in an HIV/Aids pharmacy and she rotates duties between the OPD and Wellness pharmacies. At the time of data collection, she had worked for approximately five weeks in the Wellness Pharmacy over a period of six months. She holds a degree in pharmacy and completed her intern year prior to working at RPH. Afrikaans is her first language but she has a good command of English. She has learnt a few Setswana words.

Pharmacist E

Pharmacist E is a black female who is trained as a Pharmacy Assistant⁹ and an HIV/Aids counsellor. She has worked with ARVs and HIV/Aids patients for one

⁹ Although Pharmacist E is a Pharmacy Assistant, she will be referred to as a Pharmacist throughout this thesis for ease of reference. A Pharmacy Assistant may perform certain duties under the supervision of a Pharmacist, including the sale of certain medicines; assist with compounding, manipulation or preparation of a medicine according to a formula and standard operating procedures approved by the responsible pharmacist; assist with manufacturing of a medicine according to a formula and standard operating procedures approved by the responsible pharmacist; re-packaging of medicine; distribution and control of stock of medicines; and provision of health information to patients (Department of Health, 2000a).

year. She is able to speak Setswana, isiXhosa, isiZulu, English and a little Afrikaans. Her work involves ward rounds to check inpatients' medications, working at the outpatient pharmacies, counselling patients with HIV/Aids, counselling treatment defaulters and assisting pharmacists with interpreting during consultations. She dispenses medications under supervision by a pharmacist.

6.2.2 Patients

Biographical information was collected from patients during semi-structured interviews with the research assistant (refer to *Table 1*). Details of each patient's treatment regimen were obtained from the recorded interactions. (Note that a review of patients' files was not conducted.) Patients were asked about the number of times they had attended the Pharmacy, the languages they spoke and understood, whether they were currently working and the highest level of education they had obtained. The research assistant felt that it would be culturally inappropriate to ask patients directly about their age; therefore, the researcher judged the approximate ages of the patients during observation of the interactions with the pharmacists. With certain patients, the research assistant did not feel comfortable to probe or push for answers to some of the questions. Therefore, the biographical information for some patients is incomplete.

The sample represents a range of levels of education, language proficiencies, ages and visits to the pharmacy.

Table 1: Biographical information for patients included in the study

Pt	Gender	Regimen	Other meds	Pharm	Visit	Length of visit (av 9:49)	Language of visit	Languages (fluent)	Education level	Currently employed	Approx age (yrs)
1	F	1A	Vitamins Bactrim ¹⁰ Dapsone ¹¹	A	Experienced pt ¹²	7:12	English	Setswana English Afrikaans	Certificate in assistant nursing	Yes	30-40
2	F	1A	Vitamin Bactrim	A	2 nd visit	6:18	English	Sesotho Setswana Understands a little English	Std 7	Yes	25-30
3	F	1A	Vitamin Bactrim	A + Interpreter	3 rd visit	8:02	English, Setswana	Sepedi Setswana	Std 4	No	30-40
4	F	1B	none	E	Experienced pt	5:45	Setswana	Setswana English Can write Afrikaans	N2 diploma: electrical engineering	Yes	25-30
5	M	1A	Vitamins Thiamine (Vit B1)	A	Experienced pt	8:20	English, Afrikaans	Setswana English Afrikaans	Unknown, but able to write	No	40-50
6	F	1B	Cream for oral thrush Vitamin Bactrim	B	3 rd visit	11:55	English	Setswana English Sepedi IsiZulu Afrikaans	BSc 2 nd yr (dropped out)	No	25-35
7	F	1A	Vitamins Bactrim Vaginal tablet	B	3 rd visit	9:42	English	Setswana English Afrikaans IsiZulu Xitsonga Tshivenda Sesotho Sepedi	Diploma in IT and programming	Yes	25-30

¹⁰ An antibiotic used to treat or prevent chest infections.

¹¹ A drug used to treat leprosy, skin conditions and to prevent Pneumocystis pneumonia (PCP) in patients with HIV.

¹² An 'experienced patient' is a patient who has been receiving ARVs for some time and who has experience with taking ART.

8	F	unknown	Escaltens (?) ¹³ Primasone Vitamin BCo Bactrim	B	2 nd visit	3:09	English	Setswana English Understands a little Afrikaans	Matric/Std 10	No	35-45
9	F	1A	Cream for face Flu medication	B + Interpreter	4 th visit	10:07	English, Setswana	Pt: Sesotho only C: Setswana IsiZulu Sesotho IsiXhosa English	Std 7	No	50-60
10	M	1A	Vitamin Bactrim	B	3 rd visit	16:12	English	Pt: Setswana only C: Setswana English Afrikaans IsiZulu Sesotho Xitsonga	unknown	No	45-55
11	F	1B	Vitamins Bactrim	B	1 st visit	20:17	English	Setswana English Afrikaans	Std 9	No	30-40
12	M	1C	Vitamin BCo	A	Experienced pt	11:22	English	Setswana English Southern Sotho A little Afrikaans	unknown	Yes	35-45
13	F	1A	Pain meds Thiamine (Vit B1) Vitamins Pyridoxine (Vit B6) Cough mixture Bactrim	A	2 nd visit	12:40	Afrikaans	Setswana Afrikaans	unknown	unknown	55-65
14	F	Paed 2	Antibiotic	B	1 st visit	19:37	English	Setswana English	unknown	unknown	25-30
15	M	1A	Bactrim	B	Experienced pt	6:39	English	IsiXhosa IsiZulu Setswana English	Matric/Std 10	No	30-40

¹³ Unknown drug – the name of the drug is not clearly mentioned in the original data tape.

¹⁴ An antihistamine used for symptomatic relief of allergic conditions.

16	M	1A	none	B + Interpreter	? Experienced pt ¹⁵	2:50	Setswana, English	Setswana	unknown	unknown	40-50
17	M	1A	Vitamins Bactrim	B	1 st visit	13:01	Afrikaans	Setswana Afrikaans	Illiterate, did not attend school	No	45-50
18	M	1A	Vitamin BCo Bactrim	A	1 st visit	16:20	English	Setswana English IsiZulu	N4 certificate in mechanical engineering	No	25-30
19	M	1A	Vitamins Bactrim	A	1 st visit	10:02	English	Setswana English	Matric/Std 10	No	20-30
20	F	1A	Vitamins Bactrim	A	1 st visit	9:34	English	Pt: Setswana only C: Setswana English Understands Afrikaans	Pt: Std 2	No	50-60
21	F	Paed 2	none	B	? Experienced pt	9:33	English	Setswana English	Grade 11	No	20-30
22	F	1A	Pain /fever meds Vitamin Bactrim	B	3 rd visit	6:28	English	Setswana Understands a little English	Std 4	Yes	50-60
23	F	1A	Vitamin Bactrim	B	2 nd visit	3:13	English	Setswana English	Matric/Std 10	Yes	25-30
24	F	1A	Bactrim	B + Interpreter	3 rd visit	5:29	English, Setswana	Setswana Understands a little English Understands a little Afrikaans	Std 3	No	40-50
25	M	1A	none	E	Experienced pt	13:52	Setswana	Setswana IsiXhosa	Std 4	No	40-50
26	F	1A	Bactrim	B	1 st visit	3:42	English	Setswana Struggles to understand Eng Understands a little Afrikaans	Std 2	No	40-50

¹⁵ The question mark indicates that this information was not specifically obtained during the interview with the patient but it was apparent from the interaction with the pharmacist that the patient had been receiving ARVs for some time and was familiar with the pills.

6.3 Information about ARVs and Regimens

6.3.1 What are ARVs?

Antiretrovirals are drugs that inhibit the replication of the HI-virus. The goal of ARV use is to decrease the incidence of HIV as well as morbidity and mortality related to HIV (Department of Health, 2004). Standard antiretroviral therapy (ART) involves the use of a minimum of three ARV drugs. When given in combination, they are known as Highly Active Anti-Retroviral Therapy (HAART). This combination may delay replication of the virus and immune deterioration, thereby improving quality of life and survival time. ARVs are a treatment option but not a cure for HIV/Aids (World Health Organisation, 2006).

Two ART regimens are recommended by the South African Department of Health for use in the public sector, namely Regimen 1 and Regimen 2. All patients should commence treatment on Regimen 1, unless contra-indicated (Department of Health, 2004). There are two similar regimens under Regimen 1, namely Regimen 1A and Regimen 1B. The majority of patients (66%) attending the Wellness Clinic are on Regimen 1A and 31% of patients are on Regimen 1B. If a patient defaults on treatment or experiences treatment failure, s/he may be put on Regimen 2. At RPH, 0.7% of patients are on Regimen 2.

ARVs are classified into various classes according to the specific phase of the life cycle of the retrovirus that is targeted by the drug. These include protease inhibitors (PIs) (e.g. Kaletra), nucleoside/nucleotide reverse transcriptase inhibitors (NRTIs) (e.g. Lamivudine, Zidovudine, Didanosin and Stavudine) and non-nucleoside reverse transcriptase inhibitors (NNRTIs) (e.g. Efavirenz, Nevirapine) (World Health Organisation, 2006). A combination of ARVs is recommended to create multiple obstacles to the rapid mutation and replication of HIV.

6.3.2 What is the referral process and how do patients obtain ARVs?

The referral process at RPH is outlined in *Figure 11*. A patient is seen by a number of professionals and there are several steps involved before ART can commence, as well as continual monitoring and follow-up after commencement of treatment. The Department of Health has also compiled an HIV management flowchart (see *Figure 12*).

Figure 11: RPH Wellness Clinic Referral Process

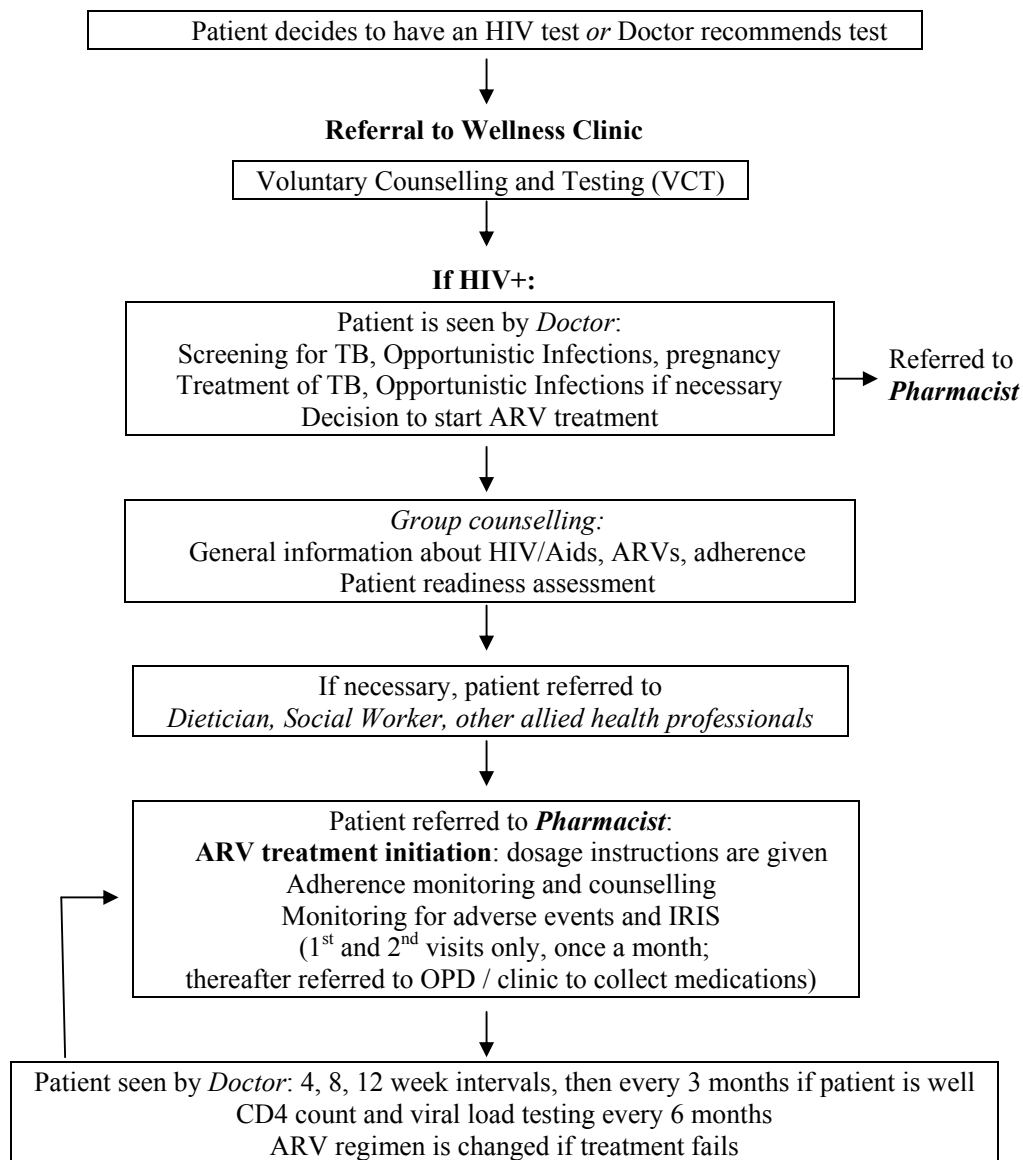
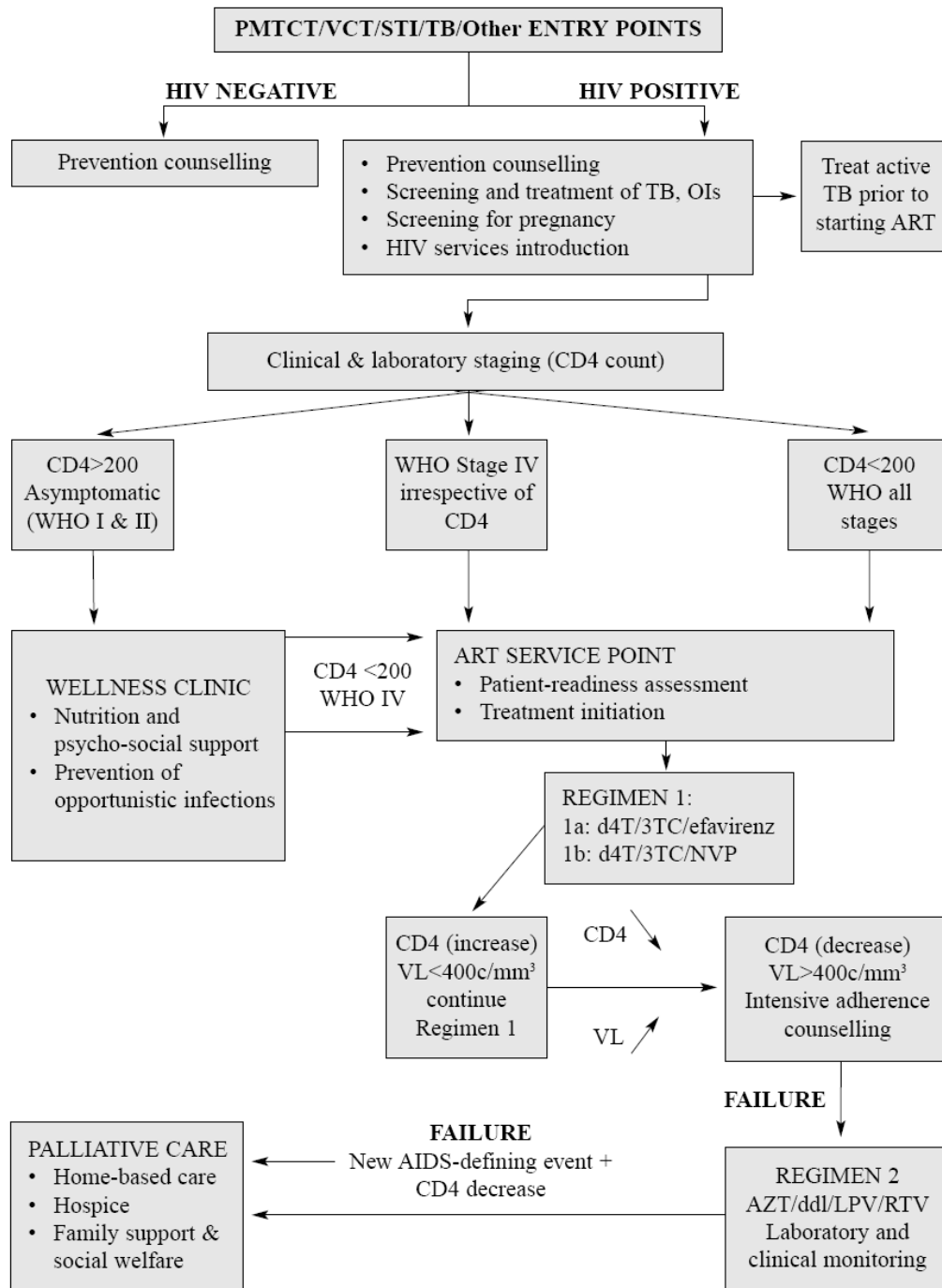


Figure 12: Department of Health Adult HIV Management Flowchart (2004, p. 25)

6.3.3 When should a patient begin ART?

Medical criteria for ART includes a CD4 count of less than 200 cells/mm³ or WHO Stage IV disease (i.e. severe HIV-associated clinical disease). The Department of Health (2004) adds that a patient must also express readiness to take treatment and adhere to it. A decision cannot be based solely on clinical criteria, but should also be based on immunological assessment of the patient and psychosocial factors such as patient readiness, reliability, disclosure, insight and ability to attend the clinic.

At RPH, emphasis is placed on the patient's level of commitment to treatment. This was confirmed during semi-structured interviews which the researcher conducted with the pharmacists: all three pharmacists reported that the most vital piece of information for patients to understand is the importance of commitment and that if a patient is not committed, treatment should not be started.

TB and opportunistic infections should be treated prior to commencement of ART, unless the patient has a CD4 count of less than 50. In such cases, the patient should complete at least two weeks of treatment for TB prior to starting ART. When a patient is well enough for their body to cope with the medications, ART can be initiated (Department of Health, 2004).

It is important to find out whether a patient has received ARVs before attending the Clinic, e.g. from a private hospital or another clinic, or if the patient is taking the ARVs for the first time. RPH differentiates between new versus naïve patients, new being those who are new at the clinic but who have previously taken ARVs, and naïve being those who have never taken ARVs. This information is important because patients may have received a different combination of drugs or varying instructions or counselling from another institution.

6.3.4 Who tells the patient about ARVs?

At RPH, doctors may give patients some information about ARVs. However, because different doctors work at the Wellness Clinic, this practice may vary. Generally, if the decision has been made to prescribe ART, the patient will receive group counselling from the Wellness Clinic counsellors who explain basic information about ARVs and HIV and discuss issues surrounding disclosure and stigma. In previous years, counselling was provided on an individual basis, but due to the large number of patients attending the Clinic, counselling is now provided in groups. The pharmacist is the health professional who is responsible for giving the patient dosage instructions.

6.3.5 How often does the patient visit the Clinic or Pharmacy?

After treatment on Regimen 1 has commenced, patients must attend the Clinic on a monthly basis to collect their ARVs. They should also be seen by a doctor at four, eight and twelve weeks for the first three months, and every three months thereafter. However, if complications arise or a patient is not well, s/he should see a doctor on a more frequent basis. Patients on Nevirapine should be seen by a nurse at two weeks after treatment initiation. In addition, CD4 count and viral load measurements should be taken every six months. Patients on Regimen 2 should see a doctor at four, eight and twelve weeks for the first three months, and every six months thereafter. Again, drugs should be collected from the pharmacy on a monthly basis. Currently, there is no requirement for monitoring of viral load for patients on Regimen 2. However, it is recommended that CD4 counts and viral load be tested at six monthly intervals (Department of Health, 2004).

6.3.6 How should ARVs be taken?

All ARVs must be taken at the same time each day, usually twice a day. Patients will be asked by the pharmacist to select the same suitable time in the morning and evening, e.g. 8am and 8pm. The ARVs must then be taken at exactly 8am and

8pm each day, or a maximum of ten minutes before or after this specified time. During group counselling sessions prior to commencement of treatment, patients are warned about this and so when they are referred to the pharmacist, many have already thought about and decided upon the time most suitable for them.

It is important to ensure reliable contraception if there is a possibility that a woman could fall pregnant while on ART. If a patient does fall pregnant, she needs to notify the doctor and/or pharmacist immediately. If she is taking Efavirenz, she needs to be counselled about the teratogenicity of the drug. The woman should then be given Nevirapine. Pregnant women should start on Regimen 1B and take Nevirapine, not Efavirenz (Department of Health, 2004).

In addition to ARV treatment, patients at RPH may be given multivitamins, or Bactrim to prevent or treat chest infections. All ARVs should be taken with food, unless otherwise indicated. However, they should not be taken with any fatty foods or alcohol, as these interfere with the drug and may decrease its effectiveness. In addition, if a patient takes the medications and then vomits within 30 minutes, s/he needs to take the tablets again. Patients are warned by the counsellors not to take traditional or homeopathic medicines in conjunction with ARVs, as this will compromise the effectiveness of ART.

6.3.7 What level of adherence is required?

Strict adherence is imperative and patients should miss less than three doses per month. The aim is to achieve 95 – 100% adherence for each patient, even though 80-95% adherence generally ensures treatment success (Gross et al., 2001; Paterson et al., 2000). All patients should carry their medications on them at all times, or at least one dose worth of tablets. This will enable the patient to take the tablets if an adverse situation arises, e.g. if the patient experiences transport problems or cannot get home in time to take the tablets. At RPH, some patients are provided with special tablet containers attached to a key ring, which will hold one dose worth of tablets in case of emergency.

6.3.8 Generics

Aspen Pharmacare currently supplies a large percentage of ARVs dispensed by government pharmacies in South Africa (Aspen Pharmacare, 2005), including RPH Wellness Clinic. However, ARV drugs may be dispensed in generic form; therefore, the packaging or appearance of the drug may change depending on the government tender.

6.3.9 Side effects

Although it is expected that patients will begin to improve clinically and immunologically during the first six months on ART, this does not always occur. Some patients may not respond as expected, may deteriorate initially, or may develop immune reconstitution inflammatory syndrome (IRIS), toxicities or side effects. Treatment failure may result from the failure of the drugs to suppress viral replication despite treatment adherence, and this leads to viral resistance. However, most patients will experience a rise in their CD4 count with the initiation of ART (World Health Organisation, 2006; Department of Health, 2004).

Toxicities arising from ART range from low-grade intolerances to life-threatening side effects and commonly include allergic reactions such as skin rashes, metabolic abnormalities such as fat accumulation or diabetes, renal toxicity, mitochondrial dysfunction and haematological toxicity. Depending on the severity of the toxicity, a drug substitution (or another regimen) may be required (World Health Organisation, 2006). Treatment may produce serious side effects including nausea, diarrhoea, fatigue, vomiting, peripheral neuropathy, metabolic changes, or peri-oral numbness (Max & Sherer, 2000).

IRIS involves a range of clinical signs and symptoms that may arise when the immune system begins to recover after treatment initiation. It could be described as the 'awakening' of the immune system which is restored to the point where it can start an inflammatory response. It has also been described as a condition that

occurs when improvement in the immune system unmasks a previously hidden opportunistic infection, i.e. the infection was present in the body but was not evident clinically. This syndrome develops in approximately 10 – 25% of patients on ART, and particularly in patients with a CD4 count of less than 50. Most frequently, patients develop TB and/or cryptococcal disease, but they may also experience sweating, weight loss, coughing, fever, shortness of breath, or a decrease in visual acuity. It is crucial for patients to understand that this does not mean that the treatment has failed and they should not stop taking ART (World Health Organisation, 2006; Department of Health, 2004).

If a patient continues to experience virological failure despite adhering to the drugs, the medical team may decide to change the patient to Regimen 2. If a patient continues to fail with this second regimen, ART should be continued until the patient no longer benefits clinically from the treatment. Treatment may need to be stopped and the patient should be referred for palliative care. If a patient develops TB while on ART, treatment should be continued while the patient receives TB treatment. However, the regimen may need to be changed (Department of Health, 2004).

At RPH, pharmacists generally inform patients about side effects, but they stress that side effects such as nausea, headaches or body pains (e.g. pains in the legs) will only last for the first two weeks after ART initiation. The pharmacists related that it is important to retain a balance between giving too much information about side effects, which may frighten patients into non-adherence, and giving too little information. They advise patients that if the side effects become unbearable, they should not stop taking the ARVs but should rather come to see a doctor at the Clinic. The pharmacists have also found that caution is necessary when addressing a patient's concern about side effects: if a patient knows that one specific ARV may be causing a certain side effect, s/he may stop taking that drug.

One of the RPH pharmacists related that IRIS often leads to defaulting behaviours amongst patients at the Wellness Clinic because they think that the ART is not

working or that it is harmful because it appears to be making their condition worse. If a patient's condition improves, s/he may also decide to stop taking the ARVs because s/he feels better. Another common misconception is that if patients drink all of the ARV drugs at once (i.e. take a large dose) their HIV/Aids will be cured.

6.3.10 Adult ARV Regimens

Details of each regimen are outlined below. Abbreviations or alternative names for each drug are provided in brackets and the name most commonly used by the pharmacists is highlighted in bold. *Tables 2-4* depict each regimen.

Regimen 1A (5 tablets per day)

- **Stavudine** (d4T) 40mg twice daily every twelve hours (i.e. one in the morning and one at night, at the patient's chosen time);
- **Lamivudine** (3TC) 150mg twice daily every twelve hours; and
- Efavirenz (EFV; **Stocrin®**) 600mg once daily at night.

Regimen 1B (initially 5 tablets, then 6 tablets per day)

- **Stavudine** (d4T) 40mg twice daily every twelve hours (i.e. one in the morning and one at night, at the patient's chosen time);
- **Lamivudine** (3TC) 150mg twice daily every twelve hours; and
- **Nevirapine** (NVP) 200mg once daily for the first fifteen days, then twice daily every twelve hours thereafter.

Regimen 2 (9 tablets per day)

- Zidovudine (**AZT**) 300mg twice daily every twelve hours;
- Didanosine (ddI; **Videx®**) 400mg once daily, taken alone, dissolved in water on an empty stomach; and
- Lopinavir/Ritonavir (LPV/r; **Kaletra®**) 400/100mg twice daily every twelve hours.

Table 2: Regimen 1A

Time	Morning		Night		
No. of Pills	1	1	1	1	1
ARV Pills					
Pack-aging					
Drug	Stavudine (d4T) 40 mg	Lamivudine (3TC) 150 mg	Stavudine (d4T) 40 mg	Lamivudine (3TC) 150 mg	Efavirenz (EFV; Stocrin) 600 mg

Pictures are taken from GRIP Poster (2005) and Aspen Pharmacare (2006).

Table 3: Regimen 1B

Time	Morning			Night		
No. of Pills	1	1	1	1	1	1 (only after 15 days)
ARV Pills						
Pack-aging						
Drugs	Stavudine (d4T) 40 mg	Lamivudine (3TC) 150 mg	Nevirapine (NVP) 200 mg	Stavudine (d4T) 40 mg	Lamivudine (3TC) 150 mg	Nevirapine (NVP) 200 mg

Pictures are taken from GRIP Poster (2005) and Aspen Pharmacare (2006).

Table 4: Regimen 2

Time	Morning		Night		
No. of Pills	1	3	1	1	3
ARV Pills					
Pack-aging					
Drugs	Zidovudine (AZT) 300 mg	Lopinavir/ Ritonavir (LPV/r; Kaletra ®) 400/100 mg	Zidovudine (AZT) 300 mg	Didanosine (ddI; Videx ®) 400 mg	Lopinavir/ Ritonavir (LPV/r; Kaletra ®) 400/100 mg

Pictures are taken from GRIP Poster (2005) and Aspen Pharmacare (2006).

6.3.11 Paediatric ARV Regimens

Although this study focuses on adult patients, the data corpus includes two paediatric cases. Therefore, information about paediatric regimens will be provided.

Paediatric ARV regimens tend to be more complicated than adult regimens, because the dosage must be calculated according to the mass of the child and some medications must be administered orally using a syringe. Some medications also require refrigeration – if a fridge is not accessible to the patient or caregiver, the chosen regimen must be changed to one in which the medications do not require refrigeration. In addition, the caregiver needs to understand that the medications must be put into the refrigerator, not the freezer. The syringe can only administer 10ml at a time; therefore, if a child requires 13.5ml, the caregiver needs to understand that s/he must give 10ml + 3.5ml of the solution to the child. If a regimen includes tablets, the pharmacist needs to ascertain from the caregiver

whether the child is able to swallow tablets. If not, the caregiver needs to crush the tablet, mix it with a little food and then give it to the child.

Paediatric ARV regimens are as follows (*Tables 5-7* provide visual depictions of these regimens):

Paediatric Regimen 1A (dosages calculated according to weight of child)

6 months to 3 years:

- Stavudine (d4T; **Zerit**®) – powder must be mixed with water which has been boiled and then cooled; solution requires refrigeration
- **Lamivudine** (3TC; Epivir®)
- Lopinavir/Ritonavir (KLT; **Kaletra**®)

Over 3 years and greater than 10kg:

- Stavudine (d4T; **Zerit**®) – powder must be mixed with water which has been boiled and then cooled; solution requires refrigeration
- **Lamivudine** (3TC; Epivir®)
- Efavirenz (EFV; **Stocrin**®)

The two paediatric patients who participated in the study were both prescribed a modified version of Regimen 1A, consisting of:

- Stavudine (d4T; **Zerit**®)
- **Lamivudine** (3TC; Epivir®)
- **Nevirapine** (NVP; Viramine®)

According to DOH guidelines, Nevirapine may be used in place of Kaletra if a change in treatment is necessary and if it has not been used to prevent mother-to-child transmission of HIV (Department of Health, 2004).

If no refrigerator is available, Regimen 1A must be swapped to Regimen 1AZ.

Regimen 1AZ

6 months to 3 years:

- Zidovudine (AZT, ZDV; **Retrovir** ®)
- **Lamivudine** (3TC; Epivir ®)
- Lopinavir/Ritonavir (KLT; **Kaletra** ®)

Over 3 years and greater than 10kg:

- Zidovudine (AZT, ZDV; **Retrovir** ®)
- **Lamivudine** (3TC; Epivir ®)
- Efavirenz (EFV; **Stocrin**®)

A second regimen also exists, as follows:

Regimen 2

6 months to 3 years:

- Zidovudine (AZT, ZDV; **Retrovir** ®)
- Didanosine (ddI; **Videx** ®)
- **Nevirapine** (NVP; Viramine®)

Over 3 years and greater than 10kg:

- Zidovudine (AZT, ZDV; **Retrovir** ®)
- **Didanosine** (ddI; Videx ®)
- Lopinavir/Ritonavir (KLT; **Kaletra** ®) / Efavirenz (EFV; **Stocrin**®)

Table 5: Paediatric Regimen 1A

Age of child	ARVs		
6 months – 3 yrs	 Stavudine (d4T; Zerit ®)	 Lamivudine (3TC; Epivir ®)	 Lopinavir/Ritonavir (KLT; Kaletra ®)
Over 3 yrs and greater than 10kg	 Stavudine (d4T; Zerit ®)	 Lamivudine (3TC; Epivir ®)	 Efavirenz (EFV; Stocrin®)
Modified regimen	 Stavudine (d4T; Zerit ®)	 Lamivudine (3TC; Epivir ®)	 Nevirapine (NVP; Viramine®)

Pictures are taken from GRIP Poster (2005) and Aspen Pharmacare (2006).

Table 6: Paediatric Regimen 1AZ

Age of child	ARVs		
6 months – 3 yrs	 Zidovudine (AZT, ZDV; Retrovir ®)	 Lamivudine (3TC; Epivir ®)	 Lopinavir/Ritonavir (KLT; Kaletra ®)
Over 3 yrs and greater than 10kg	 Or Zidovudine (AZT, ZDV; Retrovir ®)	 Lamivudine (3TC; Epivir ®)	 Efavirenz (EFV; Stocrin®)

Pictures are taken from GRIP Poster (2005) and Aspen Pharmacare (2006).

Table 7: Paediatric Regimen 2

Age of child	ARVs		
6 months – 3 yrs	 Zidovudine (AZT, ZDV; Retrovir ®)	 Didanosine (ddI; Videx ®)	 Nevirapine (NVP; Viramine®)
Over 3 yrs and greater than 10kg	 Or  Zidovudine (AZT, ZDV; Retrovir ®)	 Didanosine (ddI; Videx ®)	 Or  Lopinavir/Ritonavir (KLT; Kaletra ®) or Efavirenz (EFV; Stocrin®)

Pictures are taken from GRIP Poster (2005) and Aspen Pharmacare (2006).

6.4 Information that patients need to understand about ARVs

6.4.1 Adult regimens

The following list of information that patients must understand about ARVs was compiled based on information provided by the RPH pharmacists, observations of pharmacist-patient interactions and posters displayed in the pharmacy.

What are ARVs?

- ARV medicines will not kill the HIV virus, but they strengthen the body's immune system so that the virus becomes weaker.
- ARVs are not a cure for HIV/Aids.
- For patients who are HIV positive, ARVs are needed only when a patient's immunity is affected and the CD4 count is below 200.
- If a patient forgets to take the ARVs, the virus can become resistant to the medicine and the symptoms can worsen.

How to take ARVs

- Patients must never forget to take their ARVs.
- All three medicines must be taken at the same time every day for the rest of their lives i.e. if the patient has chosen 8am/8pm, then the tablets must be taken at exactly 8am and again at 8pm.
- Patients should never stop taking ARVs without consulting their pharmacist or doctor, even if they feel stronger or better.
- ARVs should not be taken with alcohol.
- Some ARVs should not be taken with fatty foods.
- ARVs should not be taken with traditional medicines.
- If a patient takes the ARV tablets and vomits within 30 minutes, it is likely that the tablets did not enter the digestive system. Therefore, the tablets must be taken again.

- The ARVs may cause side effects in some patients, such as nausea, headaches, or body pains, but these should disappear after two weeks. If the patient feels ill, s/he must not stop taking the tablets, but should come to see the doctor.
- Patients must carry their ARVs, or one dose, with them at all times.
- Patients must tell the pharmacist if they are taking other medicines, because these can interfere with the ARVs.
- If a woman wants to have a baby, she must speak to a doctor about this, as some ARV drugs can be harmful to the unborn baby.
- If a woman falls pregnant while on ARVs, she needs to speak to her doctor so that the medications can be changed.

6.4.2 Paediatric regimens

In addition to the above information, caregivers of paediatric patients on ARV regimens must also understand the following information:

- Some medicines like Stavudine solution have to be kept in a fridge (not a freezer) after being mixed.
- If a patient does not have a fridge, s/he must tell the doctor so another medicine can be given which does not require refrigeration.
- As the child grows, the doctor will increase the dose of the ARVs.
- The child may be given tablets or a liquid solution or syrup.
- If the child cannot swallow the tablets or capsules easily, they can be opened or crushed and mixed with a small amount of food.
- The pharmacist will show the patient how to open the child-proof lids on the pill pots (push down and twist).
- The pharmacist will show the patient how to measure the correct dose for the child with a syringe (e.g. 13.5ml = 10ml + 3.5ml).
- Keep medicines out of reach of children.
- Keep medicines in a cool place.
- Do not share medicines between several children.

- If the child is at crèche, the caregiver at the crèche must be shown how to give the child the medicines. Make sure the medicines are sent to the crèche with the child every day.
- Give the child the unpleasant-tasting medicine first.
- Hide the taste of the unpleasant medicine by giving the child ice to numb the tongue, mixing the medicine with vitamin syrup, or giving the child peanut butter to eat.
- School-age children: give them responsibility to take their medicines, but always supervise them.
- Teenagers: they must take responsibility for their own medicines.

6.5 Adherence practices at RPH

6.5.1 Pharmacists' views on adherence

The necessity for strict adherence to ARVs is a driving force which guides much of what the pharmacists do when they dispense ARVs to patients. All three pharmacists who participated in the study stated that adherence and commitment are the most important concepts to convey to patients. Dispensing at the Wellness Pharmacy involves much more than merely handing over tablets, and the data shows that issues of adherence form an important part of each interaction.

When asked about adherence-related difficulties experienced at the Wellness Pharmacy, the pharmacists related the following challenges: recording and following up on defaulters, patients not admitting they have missed doses, lack of time to spend with patients due to large patient numbers, patients forgetting to take their tablets, patients **not understanding** how ARVs work, patients **not understanding** how to take the ARVs, **language barriers**, and poor commitment from some patients towards taking the ARVs (bold text has been added to emphasise those responses which relate to understanding of information).

The pharmacists all considered it important to ensure that patients understand the instructions given. It is also essential to explain the instructions well, provide information about the importance of adherence and repeat the instructions until patients understand them. All three pharmacists believed that their ability to convey information and the patients' ability to understand definitely impacts on adherence – if a patient understands how to take the ARVs, s/he is more likely to adhere to the treatment. Therefore, they reported that they put in extra effort when providing explanations and they attempt to ensure that patients understand the dosage instructions (see *Chapter 7* for a description of these strategies).

6.5.2 Adherence support tools used in the Wellness Pharmacy

Various adherence support tools and monitoring strategies are used in the pharmacy. Some of these tools and strategies include: motivating and encouraging patients through demonstrating their improved health and CD4 counts; the provision of posters in the pharmacy which reinforce ARV instructions and information (see *Appendix 8*); an educational video translated into Setswana, which is screened in the Wellness Clinic waiting area and which reinforces ARV instructions and information; and a yellow diary card which is given to patients to assist them in remembering to take their ARVs (see *Appendix 6*).

Patients are also given surplus stock of ARV tablets, so that should something happen to prevent them from coming to the clinic to collect their repeat prescription, they will have enough 'emergency stock' tablets for an extra month. Patients who do not attend their clinic visits for several months are telephoned and the Clinic then attempts to locate the patient to determine the reason for their lack of attendance (e.g. the patient may be too ill to travel, s/he may have passed away, or s/he not have been able to afford to travel to the Clinic).

The effectiveness of these support tools in promoting positive adherence behaviours is not known and a discussion or analysis of their effectiveness is beyond the scope of this research.

6.5.3 Adherence strategies used in the Wellness Pharmacy

Various strategies are used by the pharmacists to encourage patients to adhere to the ARV regimen. One strategy is to reinforce the importance of adherence during every patient's visit to the pharmacy. Extracts will now be presented to illustrate typical discourses used by the pharmacists. Boldface is used to indicate specific phrases which are repeatedly used by pharmacists across the data corpus:

- Patients must never stop taking the ARVs;
- Patients must not miss a dose or forget to take their tablets;
- Patients must take the ARVs at the same time every day for the rest of their lives;

Extract 001: Patient 26 (Ph B, 1st visit)

11	B:	So it's eight o'clock every morning (.) eight o'clock every night
		---- ^ nods ---- ^ nods
12		for the rest of your life. You can't ever forget to take your tablets, you
13		can't ever skip to take a tablet (.) if you go somewhere you must always
		---- ^ nods
14		make sure that your tablets is with you.

- If patients stop taking the ARVs, the virus may replicate, causing them to become ill again;

Extract 002: Patient 12 (Ph A, exp pt)

		<i>leans forward, shakes head</i>	<i>points to ARVs</i>	<i>points to a box</i>
		v	v	v
		-----	-----	-----
77	A:	No you must <u>never</u> forget, ↑nè ¹⁶ , if you ↑forget or you take your medicine		

¹⁶ Nè is an Afrikaans word which means 'isn't it?', 'not so?' or 'right?'.

- Patients must carry an emergency supply of ARVs with them at all times.

In the extract below, the patient proudly tells the pharmacist that she remembered to bring a supply of tablets with her (lines 64-66). The pharmacist praises the patient for doing so (line 70).

Extract 006: Patient 13 (Ph A, 2nd visit)

- 64 P: Ek het vandag nog er er in die oggend, het ek in 'n bakkie gesit, een van
I put more today er er in the morning, I put into a small bowl, one of

 ^ ^
taps fingers on desk repeatedly cups hands together
- 65 die, en een van ↑hierdie, en een van- twee van van
these, and one of these, and one of- two of of

 ^ ^ ^
picks up a box, picks up another box, points to another box
- 66 [van wat hulle vir my] gegee vir die bors
of what they gave me for the chest

 ^
rubs chest with both hands in circles
pats pill packet on desk, then pats chest
 v
- 67 A: [van hierdie vir die bors, ↑nè]
of this for the chest
- 68 A: ↑Ja=
Yes
- 69 P: =Ja. Ek het pille hier gebring.
Yes. I brought pills here.

 ^
points to the right
nods twice shakes hand towards window points to pills emphatically
 v v v
- 70 A: Di:s goed. So as die taxi breek of iets jy weet jy het jou pilletjies by jou.
That's good. So if the taxi breaks down or something you know you have
your pills with you.
- 71 P: Ja, (ek het dit).
Yes, (I have it).

 ^
nods slowly

Pharmacist B encourages patients to learn the names of the ARVs and tells patients that during their next visit to the pharmacy, she will check whether they know the names of the drugs:

Extract 007: Patient 7 (Ph B, 3rd visit)

		<i>arms on desk, hands up</i>	<i>touches chest</i>
		v	v
		-----	-----
88	B:	Next time when I see ↑you I want you to <u>tell</u> me what medicine you are	
89		drinking. You must know the names of the medicine.	

			^
			<i>P nods</i>

On several occasions, pharmacists warn patients that when they come to the Pharmacy for a follow-up visit, they will check whether the patient took the tablets correctly and if they understand how to take them:

Extract 008: Patient 6 (Ph B, 3rd visit)

			<i>spreads arms around ARV boxes</i>
			v

150	B:	And the next time I see ↑you for your second ↑visit (.) bring <u>all</u> your tablets	

			^
			<i>P nods</i>
		<i>taps desk with side of each hand</i>	<i>puts hands flat over y card</i>
		v	v
		-----	-----
151		with ↑you (.) so we see how you took your ↑tablets (.) as well as your small	

		^	
		<i>P nods</i>	

152		little yellow card.	

Extract 009: Patient 19 (Ph A, 1st visit)

132	A:	I want to see that you understand when you come and tell me.
-----	----	--

6.5.4 Verification of patients' adherence behaviours

Several adherence-monitoring strategies are used by the pharmacists. All of the pharmacists reported that they rely on pill counts to check numbers of leftover tablets, when time permits. However, although pharmacists do ask if patients have brought their ARVs with them, pill counting is not evident in most of the interactions because patients do not remember to bring their tablets with them. Sometimes the pharmacist asks the patient to give an approximation of how many tablets are at home, as a general indication both of patient understanding and of adherence. The following comment was made by Pharmacist B to the researcher:

Extract 010: Ph B interview

Um... this is what [Pharmacist A] talked about um when they bring their tablets with. We're supposed to do the pill count and whatever. It takes up too much time.

Patients are strongly encouraged to bring their tablets with them to the consultation, especially because of the variations in generic pill boxes. If a patient is given a different box at a follow-up visit, s/he may become confused or think that s/he has been given the incorrect medicine. In addition, if a patient brings the tablets to the consultation, the pharmacist can check whether the patient has the expected number of tablets left over, whether s/he has adhered to the regimen, and whether the patient understands how to take the tablets.

This method of asking patients to bring their medicines to pharmacy consultations was first introduced in the USA during the 1980's and is officially known as the 'brown bag medication review'. It has been found to be an efficient way of identifying patients' medication-related problems, identifying gaps in patients' knowledge of drugs and dosage instructions, and checking for over- or under-utilisation of medicines and side effects (Larrat, Taubman, & Willey, 1990; Nathan, Goodyer, Lovejoy, & Rashid, 1999). Caskie, Willis, Schaie and Zanjani (2006) evaluated the congruence of pharmacy prescription records with the brown bag review. They found that medication reports obtained from patients using the

7		started with them? <i>opens box, looks inside</i> v -----
8		(4.0)
9	P:	°Bosigo fela.° <i>night only</i> ----- ^ <i>taps one of the pill pots twice</i> <i>gestures towards outside</i> v -----
10	A:	Bosigo fela. It's still at home? <i>at night only</i>
11	P:	Ee ja. <i>Yes.</i> <i>nods</i> v ----- <i>moves hands away from each other</i> v -----
12	A:	Ok. That's fine. But it's <u>still</u> ↓ <u>half</u> (.) it's <u>not</u> fedile? <i>finished</i>
13	P:	Uh-uh.
14	A:	° Ok. That's fine.°

Although not a particularly reliable source of information, pharmacists do rely on patient self-reports of adherence. For instance, they ask questions such as “Did you take your tablets?”, “Did you experience any problems with taking the ARVs?”, or “Do you forget to take your ARVs?”. These direct questions often lead to a moment of shared humour, followed by a reinforcement of the importance of adhering to the drugs.

In the extract below, Pharmacist A casually but directly asks the patient whether she forgets to take the ARVs (line 12). The patient responds with a rather indignant answer (line 14) and A verifies her understanding of the importance of good adherence behaviours (line 15). The patient does not know the answer, so she laughs (line 16) and the moment turns into an episode of shared humour (line

18). However, it quickly turns serious and A emphasises why the patient must not forget to take the ARVs (lines 19, 21).

Extract 012: Patient 1 (*Ph A, exp pt*)

- waves hand over medicines*
v

- 12 A:And do you forget to take this medicine
13 sometimes?
14 P: ↑>No<
15 A: Never because you know if you forget ↑it what happens?
16 P: ((laughs))
smiles while wagging finger playfully at patient
v

17 A: What happens?
shifts around in her chair
v

18 ((P and A laugh))

^
shifts around in her chair
gestures with finger for emphasis *puts hands and fingers together*
v v

19 A: hhh it's very important cos the [virus=
20 P: [mm
hands and fingers together *moves hand to indicate 'stop'*
v v

21 =starts to grow again and then the medicine doesn't work well.
22 P: Oh ok.

^
nods slowly

In the following extract, Pharmacist B asks the patient in a less direct manner about her adherence, offering her a choice of answers i.e. is it easy or difficult to remember to take the pills (line 10). Through a series of questions she is able to ascertain that the patient seems to be adhering (lines 11, 15, 21) and that the patient knows what time to take her tablets (lines 17, 19).

Extract 013: Patient 23 (*Ph B, 2nd visit*)

- 10 B: And the tablets? Is it easy for you to take them, or are you forgetting?
- 11 P: No I don't forget.
- 12 B: You don't forget?=
 13 P: =mm-mm.=
- 14 B: =You take them every single day.
- 15 P: Every single day.
- 16 B: Oh [what time?
- 17 P: [In the morning and in the after[noon.
- 18 B: [Afternoon. At what time?
- 19 P: Quarter past eight.
- 20 B: Quarter past eight. °Ok. ° Every single day, nè?
- 21 P: Every single day.
- ^
smiles

The pharmacists revealed to the researcher that most patients are not willing to tell the pharmacist if they have defaulted on treatment, possibly because they fear that the pharmacist will be angry or disappointed with them. Pharmacist A reported that “it’s just a handful that actually tell us if they’ve done something” and Pharmacist B said that patients sometimes “let something slip”, which may lead to the discovery of defaulting behaviours or a misunderstanding of dosage.

6.5.5 Disclosure and adherence

As discussed in *Chapter 2*, stigma or fear of stigma may influence patients’ medicine taking and adherence behaviours. It is important for patients to have support when taking ARVs but in order to receive this support, they need to disclose their HIV status and treatment. Some patients mentioned to the pharmacist that their family helps them to remember to take their ARVs, for example, their children or grandchildren. Pharmacist A cited the example of one of the patients at the Clinic: the patient’s child has learnt to associate the time of his favourite television show with the time when his mother needs to take her ARVs. When the

television show starts, he reminds his mom to take her medicines.

One patient mentioned that her mother supports her and tells her when it is time to drink her tablets:

Extract 014: Patient 8 interview (conducted in Setswana, translated into English)

I get the support from my family...I remember every time 'cos my mother supports me, every time she tells me it's time to drink pills.

The patient in the extract below reveals that she and her grandchild support each other in terms of adherence. The patient's grandchild also attends the Wellness Clinic and they take their medicines together (line 107). The pharmacist reinforces the fact that because the patient has disclosed to her grandchild, she has someone to assist her in taking the pills (lines 110-111). In the interview with the research assistant, this patient revealed that her grandchild is an HIV/Aids counsellor and that together they discuss jargon terms and HIV/Aids-related concepts. Her grandchild had disclosed her status prior to when the patient began attending the Clinic and this may have encouraged the patient to disclose her status.

Extract 015: Patient 13 (Ph A, 2nd visit)

- 96 P: Ek het 'n kind, er 'n kleinkind [wat (loop)
I have a child, er a grandchild that (walks)

 ^
rocks gently forward and back
- 97 A: [↑mm
 ... ((discussion about when the grandchild started attending the Clinic))
- 107 P: Ons drink dit nou saam.=
We drink it now together.
- 108 A: =↑hmm=
- 109 P: =Sy drink agt uur ook. (Hy)-
She also drinksat eight o'clock. He-
- 110 A: So jy pas haar ↑op en sy pas jou [op. En dit maak dit beter want dan weet mens
So you match her and she matches you. And it makes it better because then

111		iemand gaan jou help, ↑nè ((sound of labels being printed)) °Ag dis goed.° <i>people know someone will help you</i> <i>Oh it's good.</i>
112	P:	[Ja. Yes. ----- ^ grins

Caregivers are also of great importance in ensuring that patients adhere to ART, especially those patients who are too young (babies and children), too ill or who are cognitively impaired and cannot be completely responsible for remembering to take their tablets. On several occasions, pharmacists stress to caregivers the need to ensure that patients know how to take the ARVs, or that they themselves learn the routine of taking the tablets each morning and night (refer to the case of Mary and James in *Section 9.2*).

6.5.6 Factors which may jeopardise adherence

Several negative socio-economic factors were mentioned by patients during the interviews with the research assistant. These are of concern, because they may jeopardise adherence to ARVs. Two patients were concerned about coming for their clinic appointments or collecting tablets from their local clinic, because they had transport problems.

Extract 016: Patient 7 interview (conducted in Setswana, translated into English)

I have transport problems. They want to transfer me to another clinic and I don't have a means of getting there even if I wanted to.

Two other patients spoke about their battles with substance addictions. One patient mentioned that she was not sure that she would be able to adhere, because she liked to drink beer, especially on the weekends. She had been told that she should not drink alcohol, so she had coordinated her drinking with her tablets: she took the ARVs at nine o'clock in the morning and evening, and drank at around two o'clock in the afternoon. When asked what she does at a social function, she

replied, “I just relax and drink my beer, I don’t care...I’ll just see how things go”. Pharmacist A explained that some patients had simply stopped taking the ARVs on weekends so they could drink alcohol. In addition, patients do not admit to drinking or taking drugs, which makes it difficult to know whether they are adhering.

Another patient related that she used to take snuff, but that since she started coming to the Wellness Clinic to receive treatment she had realised that this was not a positive behaviour. In fact, if she continued, she felt that she would be “stealing [her] own life”, “I will be destroying my life”. Therefore, she had “just disciplined [her]self not to take it anymore”; “I just told myself that I don’t want it anymore”.

A detailed discussion of these risk behaviours is beyond the scope of this thesis. However, there is a large body of literature which investigates and describes various risk factors associated with HIV infection and transmission, substance abuse and HIV, unsafe sexual behaviours and non-adherence to ARVs. The diagnosis of HIV can have a profound effect on a person’s behaviours. People may react in different ways to this news and various studies have highlighted this. People may abstain from sex, become depressed or addicted to drugs or alcohol, or they may seek out an HIV positive partner (Schiltz & Sandfort, 2000). In South Africa, substance abuse and risk taking behaviours are often linked to factors such as poverty, stigma, lack of basic living resources, community stressors, or misconceptions about HIV/Aids (Eaton, Flisher, & Aaro, 2003; Kalichman, Simbayi, Jooste, Cherry, & Cain, 2005).

6.6 Summary of Chapter

This chapter provided background and contextual information to the study. This information constitutes part of the results of the study, based on ethnographic observations of the research site, collection and consideration of props and materials used in the Pharmacy, discussions with the pharmacists, collection of

biographic data from participants, as well as pertinent background information gleaned from the recorded interactions themselves.

Contextual information about the Pharmacy was presented, including discussion of the history and current functioning of Rustenburg Hospital and the Wellness Clinic and an ethnographic description of the Pharmacy. Information about ARV drugs and regimens was provided, based on the practices in the Pharmacy and treatment guidelines stipulated by the Department of Health. This chapter highlighted the complexity of the ARV regimen as well as the large amount of information about ARVs which patients must understand. A description of adherence-related practices and behaviours in the Pharmacy and Clinic was also given, using relevant extracts from the interactions and semi-structured interviews.

Following the description of the development of a framework for analysis and the presentation of background contextual information, the findings of the study will now be presented. The results will attempt to provide an integrated, comprehensive description of the pharmacist-patient interaction, paying special attention to the inclusion of so-called ‘macro’ themes and how they influence the ‘micro’ or linguistic and interactional elements.

CHAPTER 7

LINGUISTIC AND COMMUNICATIVE ASPECTS OF THE PHARMACIST-PATIENT INTERACTION

The dispensing of ARV drugs to patients is the primary activity in each pharmacist-patient interaction in the context of the study. Detailed analysis of each interaction and comparisons across the data corpus reveal a structure present in each interaction and a variety of specific communication strategies which are employed by the pharmacists.

In line with the primary aims of this study, this chapter will focus on a presentation of the micro structure of the pharmacist-patient interaction. The results that will be presented in this chapter are based primarily on Conversation Analysis of the data. The chapter will begin with a description of the content and structural phases of the interaction. It will then shift to a report of the communication strategies and processes evident in the interactions, including the manner in which the pharmacists explain ARV dosage instructions to patients, verbal and non-verbal communication strategies evident in the data, code switching and interpreting behaviours, verification of patients' understanding of instructions, and finally, a discussion of potential facilitative and inhibitive communication processes identified in the interactions.

Data extracts have been identified as representative or interesting illustrations of the communication strategies and themes identified in the data corpus. These extracts are integral to the presentation and interpretation of the results. Many extracts will be included in this chapter, some of which illustrate more than one phenomenon. Such extracts will be referred to across the following chapters using cross-referencing. The micro analysis presented in this chapter will facilitate illustration of the macro themes in the next chapters. Equally, some extracts from the next chapters may serve to reinforce phenomena presented in this chapter.

7.1 Organisation of the pharmacist-patient interaction

Because pharmacist-patient interactions in an HIV context have not been documented previously, the researcher considered it important to begin the linguistic analysis of the interactions by examining both the overall content and structure of the interactions. The description of interactional structure is based on the work of Pilnick (2001) and makes use of her template and terminology. It must be noted that much of this section focuses on the pharmacist's (rather than the patient's) role and contribution to the interactions.

7.1.1 Content of the pharmacist-patient interactions

Examination of the transcripts reveals distinct phases across most of the interactions, both in terms of content and organisational structure of the pharmacist-patient interaction. Although each interaction has its own unique characteristics, a general profile is apparent across the data corpus and specific structures or sequences appear repeatedly across interactions and pharmacists. The typical pattern of content and structure of the pharmacist-patient interactions will now be described (bearing in mind some observed individual variation in length, emphasis and/or order of the various elements of structure and content).

The following list encapsulates the general content of 'first visit interactions' between pharmacists and naïve patients (i.e. patients who are starting ARV treatment for the first time). Several points are displayed in brackets: these are topics which are discussed in a few, but not the majority, of interactions. The order of the list is representative of the most frequent order of the interactions.

In 'first visit interactions', the pharmacist:

- Greets the patient
- Obtains patient details: names, address, telephone number, date of birth

- Enquires whether the patient is naïve or not, i.e. has the patient taken ARVs at another hospital or on a previous occasion
- (Explains how ARVs work against the virus, specifically that they don't kill the AIDS virus)
- Discusses the patient's preferred times to take the ARVs
- Emphasises the importance of good adherence behaviours
- Encourages the patient to learn the name of each drug
- Provides information about each drug, including its name, purpose and how it works
- Provides dosage instructions for each drug
- Checks the patient's understanding of dosage instructions, usually through eliciting a demonstration of comprehension
- Gives a yellow diary card to the patient and demonstrates how to use it every day to assist with adherence
- Emphasises that no fatty foods should be taken with Stocrin at night
- Emphasises that no alcohol should be taken with ARVs
- (Explains CD4 count, viral load count)
- (Mentions the possibility of side effects during the first two weeks on ARVs; emphasises that the patient should not stop taking the ARVs should side effects arise)
- Discusses the patient's next appointment date or the agenda for the following visit
- Sticks instruction labels onto each medicine container
- Packs drugs into a brown paper bag (enough tablets are given for one month, plus a surplus supply should the patient be unable to collect his/her next prescription)

Analysis of 'subsequent visit interactions' (i.e. second, third, fourth visits, or interactions with experienced patients) reveals similar content to 'first visit interactions'. Pharmacists also check patients' understanding of dosage instructions both at the beginning of a consultation and at regular intervals during the interaction. They also revise, repeat or summarise dosage instructions at some

stage in the interaction. Although the interactions generally contain similar content, the order of this content varies considerably across the interactions.

The reason for this variation appears to lie in the different focus of initial versus subsequent visits. While initial visits focus on providing the patient with dosage instructions and introducing him/her to the ARV regimen, subsequent visits tend to focus more on how the patient is coping with the ARV regimen, both in terms of health status, understanding of dosage instructions and adherence to the regimen. During subsequent visits, patients often raise concerns about understanding or side effects, or the pharmacist may discover that the patient has misunderstood instructions. Therefore, the pharmacist may follow the patient's lead and address concerns or correct misunderstandings and then return to the 'business' of the consultation, hence the variations in the order of content. The sequence of the list presented below is based on an amalgamation of the most frequently occurring order of content elements.

In 'subsequent visit interactions', the pharmacist:

- Greets the patient
- (Obtains patient details: names, address, telephone number, date of birth, ID number)
- Checks pharmacy records to ensure that the patient is correctly entered in the record system
- Enquires how the patient is doing
- (Enquires whether the patient has experienced any problems with the ARVs, in general)
- Checks whether the patient brought left-over pills with them; if not, encourages the patient to bring pills to the pharmacy during each visit
- Asks the patient to finish taking any surplus pills before starting on the new prescription
- Checks when the patient is taking the ARVs

- Checks how the patient is taking pills, usually through eliciting a demonstration of understanding of dosage instructions from the patient
- Corrects any errors in the patient's understanding of dosage instructions
- (Revises information about each drug, including its name and purpose)
- Clarifies any confusions due to generic drugs or different packaging; explains that the drugs are the same but the containers are different
- Revises and repeats dosage instructions for each drug
- Discusses the patient's adherence behaviours, or reminds the patient of the importance of good adherence behaviours
- Asks whether the patient has experienced any side effects; these are discussed and the patient is referred to a doctor if necessary
- Gives a new yellow diary card to the patient
- Discusses the patient's next appointment date or the agenda for their next visit (e.g. patient can go straight to OPD pharmacy or their nearest clinic)
- Packs drugs into a brown paper bag (enough ARVs are given for one month, plus a surplus supply should the patient be unable to collect his/her next prescription)

In terms of variations across pharmacists, Pharmacist A sometimes includes more content elements in 'first visit interactions', such as explanations of how the virus or ARVs work. One element that consistently appears in all interactions, across pharmacists and often multiple times in an interaction, is the verification of understanding of dosage instructions, which will be discussed later in this chapter. The importance of adherence behaviours is also stressed in most interactions.

Therefore, analysis reveals that the structure of each consultation between patient and pharmacist is similar across patients but may differ across visits. Presentation and discussion of analysis of the structure of pharmacist-patient interactions will now follow.

patient's name appears to fill this purpose, but it is also used to create rapport between pharmacist and patient and it as a verification of the patient's name (African patients often have both a western and a Setswana name; therefore, the pharmacists need to check which name is most commonly used by the patient).

As Pilnick (2001) notes, encounters between pharmacists and patients are not necessarily anonymous: patients may have built relationships with the pharmacist(s) over several visits, and indeed in this data, the pharmacists know some of the patients by name. At some stage in almost every interaction, the pharmacists refer to the patients by name or by some term of reference, the latter either in English or Afrikaans (e.g. *mommy*, *ouma* (*grandmother*), *papa* (*father*)).

When this research was presented at an international conference (Watermeyer & Penn, 2007a), the audience's response was to question the pharmacists' use of the referent 'mommy', which they considered a patronising and condescending behaviour that indicated the pharmacists' power and control over patients. However, these referents are culturally appropriate in Afrikaans (the first language of the pharmacists) and in Setswana (the first language of most of the patients). As is the case in many African tribes, Tswana children are expected to address and speak to elders with politeness, using appropriate relationship terms. Kinship terms may be used to refer to people both within and outside of the family; for example, an older woman may be referred to as 'mme' (*mother*) (Kuper, 1978).

In Afrikaans, many situations are status-marked, i.e. specific structures are used to indicate status. For example, the use of the respectful term 'u' (*you*) or specific terms of address are common. In addition, Chick (1995, p. 236) points out that Afrikaners sometimes make "extensive use of positive politeness" terms such as 'oom' (*uncle*) or 'tannie' (*aunt*) "well beyond those with whom the speaker has kinship ties". These terms are used extensively by the Afrikaans speaking pharmacists in this study, e.g. 'mommy', 'papa', 'ouma'. In addition, Afrikaans speakers may use diminutives as terms of endearment, as seen in this data corpus, e.g. 'oumatjie' (literally translated as *little grandmother*).

In light of this information, it would appear that the use of these politeness terms in the pharmacist-patient interactions is not intentionally condescending and may simply represent an attempt to establish rapport with patients and/or accommodate to the norms of address of the patients' language (Clyne, 2008). The pharmacists' use of Afrikaans terms of politeness while speaking English immediately appears odd because these are not commonly used in South African English (Chick, 1995).

The *how-are-you* sequence generally forms part of the greeting sequence (i.e. a polite automatic utterance and a common South African greeting), rather than necessarily serving as an invitation for patients to provide information about their health or how they are feeling while taking the regimen. Pharmacists sometimes prompt patients to reveal information about their health after initiating the *how-are-you* sequence, but generally, they ask specific questions about the patient's health, their experiences with taking the ARVs, or about side effects later on in the interactions.

Initial greeting sequences are usually followed by one or more *question-response* sequences, usually regarding patient details, whether the patient has received ARVs previously or matters related to the ARVs. These sequences take various forms and occur throughout the interactions. They usually follow a simple pattern of the pharmacist asking a question and the patient responding, but if a question is ignored or not responded to, the pharmacist may be required to repeat the question until she obtains a response from a patient. The question may be repeated in different ways, or using code switching¹⁷ between English and Setswana in order to present the questions in different languages. Therefore, a common variation of the question-response format is as follows:

Question

No response

Repetition of question (in English or Setswana)

Response

¹⁷ Refer to *Section 7.6 - Code Switching* for an explanation of this phenomenon.

Prior to the delivery of instructions or information, pharmacists sometimes use an *approach*, i.e. some indication of their intention for the consultation or of the task or action which will follow; however, they tend to move directly into delivery sequences. When an approach is used, it is generally framed in a direct, rather than a cautious manner. The researcher has made a further differentiation between an *approach* and an *agenda-setting statement*: the approach is an introductory statement presented prior to giving instructions and the agenda-setting statement is a more specific statement used to describe to the patient what information or instructions will be explained or how this information will be presented.

The following extracts illustrate the use of an *approach* (lines 57, 122-123) and an *agenda-setting statement* (lines 74-75) (indicated in boldface). In lines 57 and 122-123, the pharmacist begins with a general introductory statement before she begins providing dosage instructions for oral thrush medication and instructions for using the yellow diary card. In lines 74-75, however, she uses a more specific statement in which she details how she is going to proceed with giving the dosage instructions and why she has chosen this order of explanation.

Extract 018: Patient 6 (Ph B, 1st visit)

- 57 B: **Let's start with the easy ones** ↑*nè* (.) this is for the (.) oral thrush in the
 58 ↑mouth you can apply this four times a day.
 ... ((gives dosage instructions for oral thrush medication))
- points to pill pot with pen*
 v
- 74 B: **And this (.) these two**
moves another pot to side of desk *puts hand over this pot* *splays fingers*
 v v v
- 75 **I'm going to explain to you first because this one is a** ↑*bit* **different**
puts hand over pill pot and box
 v
- 76 **from these two.**
 ... ((gives dosage instructions for ARVs))

		<i>writes on yellow card</i>
		v
122	B:	This card is very ↑easy (.) it's to help you to remember to take your
		<i>writes on yellow card</i>
		v
123		medicine.

One of the primary tasks involved in each interaction is the *delivery of instructions* to patients. These include instructions concerning dosage, adherence behaviours and required lifestyle changes related to the ARV regimen. The delivery sequence frequently differs within and across interactions. Sometimes a response solicitation immediately follows the delivery, or else the delivery is followed by a clarification request from the patient and a repair by the pharmacist.

Pilnick (1999) and Garner and Watson (2007) discuss the differences between advice, information and instruction in pharmacist-patient interactions and they emphasise that advice-giving is not the same as information-giving. They draw on the work of other authors, such as Heritage and Sefi (1992) and Silverman (1997).

Generally, advice is a specific description of a preferable rather than a definite course of action, which is personalised for a patient. Advice is often phrased in a cautious manner, e.g. 'we would strongly encourage you to do X' (refer to Pilnick (2003) for a discussion of various techniques for advice-giving in pharmacy interactions). Information, on the other hand, is more general and factual and is not necessarily specific to the patient. However, as Pilnick (2001) points out, pharmacist consultations involve instruction-giving, where dosage details are given to patients. Because there is only one correct way of taking medications, dosage instructions are not generally framed as advice-giving sequences.

The interactions in this study generally contain multiple instances of delivery sequences of dosage instructions or information about the ARVs. ART requires strict adherence and traditional or alternative healing methods that may impede treatment success are discounted and discouraged. Therefore, advice-giving

sequences are rare and even those sequences which involve the activity of advice-giving appear to be phrased in an imperative tone rather than in a cautious or implicative tone.

The following two rare extracts illustrate how pharmacists tend to provide advice to patients in this context. In *Extract 019*, the pharmacist provides advice to the caregiver of the patient (indicated in boldface) – note that the caregiver has not requested this advice. In *Extract 020*, the patient requests clarification regarding when to take vitamin tablets (line 126). Because it is not imperative that the patient takes the pills at a specific time each day, the pharmacist's answer is framed as an instance of advice-giving (lines 129-130; indicated in boldface). Interestingly, in both extracts the pharmacist makes use of a more emphatic phrase – 'it's best to do X' – and she excludes herself (and the institution) from this advice-giving. This choice of wording may well be used because of the nature of the disease and the ARV treatment which necessitates that patients follow the dosage instructions strictly. The pills must be taken at exactly the same time every day and patients are therefore not offered a choice about when to take them or an opportunity to accept or ignore advice.

Extract 019: Patient 10 (Ph B, 3rd visit)

190 B: **It's hhh best for him if he can know the name of the tablets that he is**
 191 **using. For you as well.**
 192 C: °Ok. °
 193 B: To know the names of the tablets.

Extract 020: Patient 22 (Ph B, 3rd visit)

126 P: This one only in the morning, nè?
 — — — — —
 ^
looks at packets
 127 B: Ja.
Yes.
 128 P: Not not in the evening?
 —————
 ^
picks up vitamin packets, shakes head

			<i>uses hands for emphasis</i> v
129	B:	>No.< You can take it in the morning <u>or</u> the evening, but it's best to	-----
130		take it in the morning. °Then it works the <u>whole</u> day.°	

The pharmacists in this study tend to use a clear instructional tone when providing instructions or information to patients. For example, in the extract below, Pharmacist A tells the patient that he should not drink alcohol with the ARVs and she presents it as a definite statement (indicated in boldface in lines 198-199) – again, this is not framed as an advice-giving sequence and the patient is not given an opportunity to decide whether to accept or reject this instruction. She uses both verbal and non-verbal strategies to emphasise the instruction:

Extract 021: Patient 19 (Ph A, 1st visit)			
			<i>holds up hands, palms outwards; shakes head slowly;</i> <i>eyebrows up, serious facial expression</i> v
198	A:	°(and then) this ↑one° and you know <u>no phuza</u>¹⁸. No wine, no beer	-----
			<i>drinking</i>

		^	^
		<i>looks at pill pot</i>	<i>looks up at A</i>
		<i>holds up hands, palms outwards; shakes head slowly;</i> <i>eyebrows up, serious facial expression</i> v	
199		°with any of this medicine°.	-----
200	P:	Mm.	-----
		^ ^	
		<i>puts pot down; clasps hands in lap</i>	

After the delivery of the information or instruction, the pharmacist expects a *response* from the patient. The patient's response usually takes the form of a minimal acknowledgement or response token (e.g. “mm”, “yes”, “ok”), a non-

¹⁸ The literal translation of this isiZulu word is ‘to drink’. However, the word is used in several other African languages and carries connotations of drinking alcohol. The use of this word is discussed further in *Section 7.6 - Code Switching*.

verbal response (e.g. a head nod), repetition of what the pharmacist said, or a request for clarification of the instruction or information. Some authors describe responses such as “mm” or a head nod as ‘backchannelling’, i.e. the listener indicates that s/he is listening, acknowledges that the speaker is holding the conversation floor and indicates that s/he wishes the conversation to continue (Heinz, 2003).

If a response is not forthcoming from the patient, a *response solicitation* in a tag question position may be used by the pharmacist to encourage or elicit the required response (e.g. “nè?”, “ok?” or “alright?”). Generally, tag questions are used pragmatically to express a speaker’s uncertainty or they may serve a general politeness function by inviting the listener to join the discourse (Brown & Levinson, 1987). However, in these interactions they appear to serve as response solicitations (Jefferson, 1981), i.e. they request a response from patients to information or instructions presented. They are used in order to trigger a verbal contribution from the conversational partner, either a confirmatory response or a response which rejects the speaker’s proposition (Andersen, 1998). The use of this structure appears to serve several functions, namely, to act as a response solicitation, to obtain a confirmatory response from a patient, to give the patient the opportunity to request clarification, or merely to check whether the patient is satisfied with the information or instruction given.

In the extract below, the pharmacist waits for a response or acknowledgement from the patient after providing an instruction (line 87), but receives no such reply (line 88). She therefore repeats the instruction and attaches a response solicitation, ‘nè’, to prompt a response from the patient (line 89). In line 90, the patient provides the response and the pharmacist continues with her explanation.

Extract 022: Patient 11 (Ph B, 1st visit)

87	B:	Two tablets in the morning.
		<i>writes on packet</i>
		v

88		(3.08)

		<i>puts packet on side of desk</i>
		v

89	Ph:	Two ↑tablets in the morning, ↑nè
90	P:	Ok.

Interestingly, Pilnick (2001) notes that pharmacists sometimes use pauses which act as ‘understanding checks’ or as response solicitations which signal the end of the pharmacist’s turn at talk. In her data, where these pauses fail to elicit a response, more overt response solicitations are used, such as ‘okay?’. In this study, the pause is sometimes used by the pharmacists in this manner (e.g. line 88 in Extract 10), but in most cases it appears to be too subtle a means of eliciting a response from patients. An overt response solicitation is usually required (e.g. ‘nè’ or ‘ok’), which provides a more explicit indication of what the pharmacist requires from the patient. This appears to indicate how linguistic barriers may impede the patients’ detection of more subtle interactive processes and it points to the need for clinicians to adopt a more explicit communicative style.

The following extract illustrates a complete, typical delivery sequence. It begins with an approach (line 200) in which Pharmacist B indicates her intention to provide instructions. This approach is phrased as an invitation for the patient to join in the activity. She moves on to the delivery of a dosage instruction (line 202) and she receives minimal responses from both patient (line 203) and caregiver (line 204). The patient then responds again and requests clarification (line 205); Pharmacist B provides this clarification (line 206), to which the patient and the caregiver respond (lines 207, 208). Pharmacist B then uses a response solicitation (line 209) to verify whether the patient is following the discussion and to offer him an opportunity to request clarification. He responds with a minimal acknowledgement (line 210). She continues by delivering another instruction (line 211) and the patient responds by repeating some of the instruction (line 212) and uttering a minimal response (line 213). A similar sequence is repeated in lines 214-217: delivery, response, response solicitation and response.

Extract 023: Patient 17 (Ph B, 1st visit)

- arranges ARV pots in a row with labels facing P*
v

- 200 B: Kom ek wys jou nou mooi.
Come I'll show you nicely now.
- 201 (3.0)
points to 2 ARV pots with index fingers; holds fingers on lids
v

- 202 B: Hierdie twee pillies, [jy gaan <gabedi> ka letsatsi drink.
These two pills, you're going to drink twice a day.
- 203 P: [(Daar's hy).
There we go

^
nods
- 204 C: O[k.
- 205 P: [Twee?
Two

^
raises index and middle finger together; nods
nods deeply
v

- 206 B: <Gabedi.>
Twice
- 207 P: [Ehe.
Yes

^
nods
- 208 C: [(Ja).
Yes

^
nods
nods slowly; lifts index fingers up off ARV lids
v

- 209 B: Ok?
- 210 P: Ee ja.
Yes

^
nods

		<i>points to 2 ARV pots with index fingers; holds fingers on lids</i> v	<i>lifts fingers</i> v
211	B:	----- So dis <u>one</u> pillie eight o'clock phak- ^o ag ^o nine o'↑clock, [↑phakela <i>So it's one pill eight o'clock in the morn- oh nine o'clock in the morning</i>	
212	P:		[Nine o'clock. ----- ^ <i>nods</i>
213	P:	↑Ehe Yes. <i>points to 2 ARV pots with index fingers; holds fingers on lids</i> v	
214	B:	----- One ↑pillie nine o'clock bosigo. at night ----- ^	
215	P:	Bosigo.= C <i>nods</i> <i>At night</i> ----- ^ <i>nods</i> <i>lifts fingers</i> v	
216	B:	=Ok?	
217	P:	Dis ↑reg <i>That's right</i> ----- ^ <i>nods</i>	

Following the delivery of instructions, the pharmacists usually initiate a sequence to *check understanding* of dosage instructions. Various direct or indirect methods used by the pharmacists to check each patient's understanding of information or instructions are consistently evident on multiple occasions in all of the recorded interactions. These methods are described in *Section 7.4*.

Checking of comprehension, especially through the elicitation of a demonstration of understanding, is often followed by encouragement or reassurance from the pharmacist if the patient has understood correctly, or else repetition or summary

of the instructions or repetition of the delivery sequence if the patient has not understood correctly. Several interactions contain multiple cycles of approach or agenda-setting statements, delivery of information or instruction, patient response, checking of understanding, and patient response, until such time as the pharmacist is satisfied that the patient has correctly understood and demonstrated an understanding of the dosage instructions.

A *close implicature* (which signals the endpoint of a delivery phase or the interaction, often when the pharmacist's routine work is completed) is frequently present as early as halfway through each interaction. This may take the form of pharmacist statements such as "there we go", "ok, that's it" (e.g. *Extract 026* (p. 205) line 209), or the action of reaching down to pick up a brown paper bag. It appears that these statements act like a prompt for the pharmacists: they know they are moving towards the end of the interaction but they need to think about whether they have discussed or delivered all the information or instructions they need to, or whether they need to do anything else in the interaction. It would appear that they have a 'mental checklist' of what should be discussed during a consultation.

Generally, however, one or more *reclose implicature* sequences ensue before the end of the interactions. In such a case, after the initial close implicature, the pharmacists usually return to a question-response sequence or initiate another delivery sequence and this may be followed by a reclose implicature or a final closure of the interaction.

The end of each interaction is signalled by the non-verbal action of packing the medicines into the brown paper bag, either by the pharmacist or by the patient. This is followed by some kind of *exit* or *farewell greeting* or an encouragement for the patient to "keep well" and, in over half of the interactions, a "thank you" or "dankie" (Afrikaans for *thank you*) in response from the patient. Pilnick's data showed an absence of a specific endpoint to some of the interactions, which is also noted in a few of the RPH interactions in which patients merely stand up, pick up the bag of medicines and exit the room without issuing an exit greeting. In

general, however, the combination of the brown paper bag plus an exit greeting serves as a definitive endpoint.

Therefore, based on analysis of the data corpus, the proposed template for the pharmacist-patient interactions in this context is as follows (note that items presented in brackets indicate those structures that occur in some, but generally not all, of the interactions):

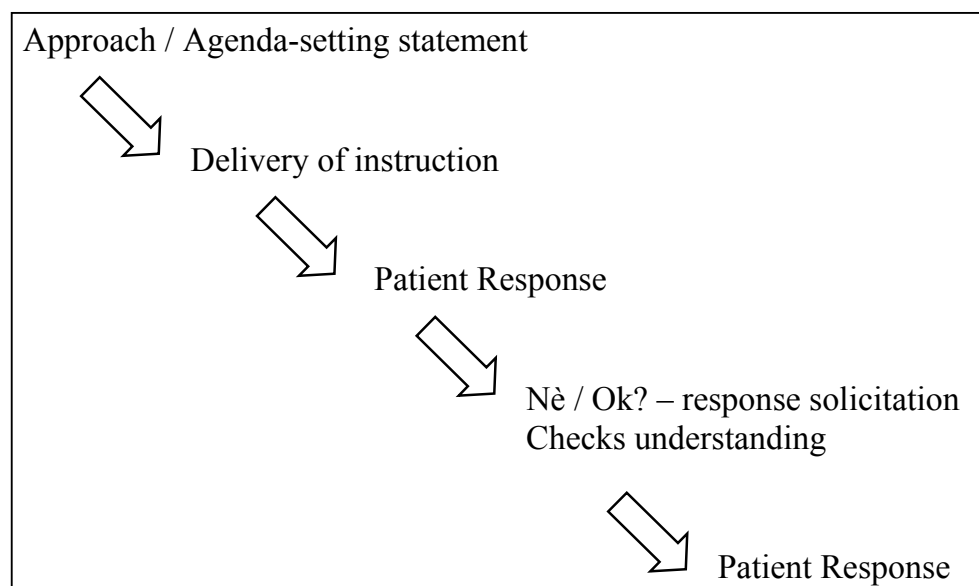
Greeting
Identification
How-are-you sequence
Question
Patient Response
(Approach / agenda-setting statement)
Delivery of information / instruction
Patient Response
(Response solicitation)
(Patient Response)
Checks understanding
Patient Response + (Scaffolding, prompting ¹⁹)
(Reassurance / Encouragement) or (Repetition / summary of information / instruction)
(Patient Response)
Close implicature
(Question)
(Patient Response)
Delivery of information / instruction
(Response solicitation)
Patient Response
Reclose implicature
Exit

A simplified version of this template is presented in *Figure 13* below. This illustration indicates the cycle of approach, delivery, patient response, checking

¹⁹ Refer to *Section 7.4* for a detailed description of these concepts.

understanding, followed by patient response. This cycle is often repeated during an interaction.

Figure 13: Distinct cycle in the pharmacist-patient interaction



Of particular interest is the fact that this template is present across interactions and pharmacists. Based on discussions with the pharmacists involved in the study as well as on observations of interactions, it would appear that this so-called 'protocol' for interactions is not something which has been explicitly discussed or decided upon by the pharmacist team, but rather is a practice which has evolved over time and with experience.

The template for pharmacist-patient interactions within this context differs somewhat to that proposed by Pilnick (2001) and it contains some different processes and structures. However, it is acknowledged that her putative template emerged from analysis of advice-giving sequences, whereas the data in this study is concerned mostly with the activity of instruction-giving. It is also acknowledged that Pilnick's data is taken from monolingual interactions and that her data focuses on a different disease (cancer). These differences confirm that the way in which pharmacists interact with patients and the communicative activities

in interactions will differ according to the specific site and disease context. The following sections in this chapter will further explore the unique characteristics and communication styles in the pharmacist-patient interactions.

7.1.3 Summary of section

This section examined the structure and organisation of the pharmacist-patient interactions. Specific content themes were found to be similar across interactions, although they may vary depending on whether the interaction is a first or subsequent visit to the pharmacy. Pilnick's template, which was used as a basis for the work in this section, was expanded upon and novel elements present in the data were described, such as the use of response solicitations and verification of patients' understanding. The following section will focus on various communication strategies and processes identified in the data.

7.2 Explanations and instructions

Conversation Analysis of the data corpus revealed that the pharmacists employ a number of communication strategies which appear to promote understanding of information and instructions by the patients and encourage them to become empowered through gaining knowledge about ARV treatment. These include the provision of clear explanations and demarcation of drugs, the use of visual demonstrations and props, use of gesture, verification of patient understanding, initiation of repair strategies, repetition and reinforcement of information or instructions and code switching, among others. The patients in turn respond by participating in the interactions, collaborating with the pharmacists and using some of their own communication strategies.

The pharmacists have a selection of communication strategies which they use when interacting with patients. Some of these strategies are used across the data corpus with most patients, while others are used with a few patients only. The selection of these strategies appears to be based on a combination of the

pharmacists' experience, intuition, skill and knowledge and/or assessment of the patient's needs. Some of these strategies and processes will now be discussed in detail.

7.2.1 Stipulation of agenda

During several interactions, the pharmacists clearly stipulate their agenda for the session, i.e. what they intend to do or the order of their explanations. (Note that the use of 'agenda' in this section denotes a specific statement of intention to commit a particular action and it should be distinguished from the concept of 'agenda' used to describe the entire sphere of activity of a consultation or the health professional's or patient's expectations for the interaction. The latter is defined in *Chapter 4 Section 4.4.3.*)

These agenda-setting statements usually take the form of "I'm going to explain to you now", as evidenced in the two extracts below:

Extract 024: Patient 11 (*Ph B, 1st visit*)

83 B: °I'll explain to you now.

Extract 025: Patient 18 (*Ph A, 1st visit*)

101 A: Alright, >I'm going to show you now<.

Sometimes the pharmacists provide a 'running commentary' of their actions during the session. The extract below is taken from an interaction with a particularly ill patient who has come to the pharmacy with his father. The pharmacist appears to have realised that the patient is experiencing difficulty in concentrating, and so throughout the interaction, she explains her planned actions, e.g. making labels (line 1), explaining dosage (line 92) or giving a yellow diary card (line 251). This strategy appears to be used in an attempt to encourage the patient to focus on the tasks of the consultation.

Extract 026: Patient 18 (*Ph A, 1st visit*)

- 1 A: I'll be with you ↑now I'm just making the ↑labels
... ((F exits the room to answer his cellphone))
- 11 A: I'll wait til he comes back, alright? We'll speak together.
... ((discusses record keeping procedures with R))
- 74 A: >Ok<, can we start? I just want to write down his ↑details
... ((praises P for disclosing status to his father and discusses importance of disclosure))
- 92 A: I'm going to explain to you exactly now.
... ((discusses dosage times; obtains patient details))
- 179 A: >Ok< so now I've got all of ↑this now we can talk about the medicine.
... ((checks P's understanding of dosage instructions for vitamins))
- 207 A: °Let me just put this on here for ↑you° ((A is referring to a label))
...
- 209 A: There we go, ↑G*** (.) °let me just write on this ↑here° ((A is referring to a label))
... ((discusses concepts of CD4 and viral load; gives dosage instructions for Stocrin))
- 241 A: Then the other ↑ones let me show you what they look ↑like
... ((explains dosage instructions for other ARV drugs))
- 251 A: So I'm going to give you this to help you. ((A is referring to a yellow diary card))
... ((explains how to use diary card and revises ARV dosage instructions))
- 312 A: °I'll just mark it here eight and ↑eight° ((A is referring to diary card))

Pharmacists sometimes make use of an agenda-setting statement in the form of a reassurance, especially when patients appear nervous or anxious about the drugs or instructions. For example, in the extract below, Pharmacist B places various medicine boxes on the desk. In line 66, the mother appears somewhat nervous and she sits backwards, staring at the collection of boxes. After a while, she puts a hand out tentatively, picks up a box, opens it and looks inside curiously. The pharmacist seems to sense how overwhelmed the mother must feel. She reassures her by telling her that she will explain how to give the ARVs to the baby and she adds “don't worry” – an emotional statement to set the mother's mind at rest (line 67 – indicated in bold).

Extract 027: Patient 14 (Ph B, ? visit)

		<i>puts 6 boxes, 2 bottles, 1 packet on desk one by one</i>	<i>goes to cupboard</i>	<i>puts 2 more boxes on desk</i>
		v	v	v
66		(1 min 53 sec)		
		-----	-----	-----
		^	^	^
		<i>sits backwards</i>	<i>puts hands in lap</i>	<i>puts hand out, picks up a box, opens it, looks inside</i>
67	B:	°I'll show you everything now don't worry.°=		
				
68	M:	=°Ok.°=		

7.2.2 Demarcation of ARVs from other drugs

Another strategy employed by the pharmacists is the careful verbal and non-verbal differentiation and demarcation of drugs, especially the segregation of ARVs from other drugs. The following extract illustrates this strategy.

The pharmacist begins her explanation of the drugs with an agenda-setting statement (line 83). She places a pile of pill packets (the non-ARV drugs) in front of the patient (line 84) and keeps the ARV drugs at the side of the desk. By doing this, she not only sets the agenda for the following task, but also prepares the patient for the instructions which will follow and visually indicates which drug she will be discussing. She continues to separate the ARV drugs from non-ARV drugs and shows the patient the relevant packet or container as she talks about each drug (indicated in boldface in the extract).

Extract 028: Patient 11 (Ph B, 1st visit)

83	B:	°I'll explain to you now. These ones ↑first°
		<i>leans forward, puts pile of pill packets in front of her</i>
		v
84		(2.91)
		<i>touches packet with one hand, points to label with pen in other hand</i>
		v
85		This is just a ↑vitamin to make you stronger, ↑nè

Usually, the pharmacists provide explanations for the non-ARV drugs such as Bactrim or vitamins prior to explaining the ARVs (e.g. *Extract 029*). In addition, non-ARV drugs are not considered as important as ARVs and this is sometimes explicitly stated, as seen in *Extract 030* below where Pharmacist B refers to the vitamins and Bactrim as “the easy ones”:

Extract 030: Patient 10 (Ph B, 3rd visit)

The pharmacist's reference to the other medicines as "the easy ones" is interesting in that it demonstrates her experience of working in an ARV clinic. The medicines are 'easier' because the dosage instructions are not particularly complicated and the impact of non-adherence is less problematic than with ARVs.

7.2.3 Explanation of dosage instructions for ARVs and other medications

Much of each interaction comprises the provision of instructions about the ARVs. Generally, the pharmacists begin by explaining any non-ARV medications prescribed for the patient and they are careful to demarcate the ARVs from other drugs both verbally and non-verbally, as explained above. A strong feature of the interactions is the pharmacists' use of carefully worded and deliberate explanations which are reinforced non-verbally using props.

The pharmacists tend to present the instructions simply, often using code switching and focusing on how the tablets look. The following extract is a typical scenario: Pharmacist A introduces the drug by name and gives the dosage instruction for this drug (line 57). She repeats the instruction (line 61) and proceeds to the next drug, which she describes in terms of its appearance (lines 61-62). Again, she gives the drug name (line 66) followed by the dosage instruction (lines 67-68). The dosage instructions are given in Setswana and repeated in English (line 68). The last of the three ARV drugs is introduced by way of an analogy ("big strong one") (line 71) and the dosage instruction is given (lines 71-72).

Extract 031: Patient 19 (Ph A, 1st visit)

- 57 A:So you can see Stavudine e ↑lenngwe ka ura ya eight mosong.
one at eight o'clock in the morning
- 58 P: Mm.
- 59 A: °E ↑lenngwe ka ura ya eight bosigo°.
one at eight o'clock at night
- 60 P: [mm.
- 61 A: [↑Ok °so it's e lenngwe gabedi ka letsatsi°. The next ↑one is this
one twice a day
- 62 white ↑one
- ... ((A pauses))
- 66 This white ↑one you see ↑Lamivudine ↑Lamuvudine (.)↑nè [and there's
- 67 a white ↑tablet so it's also e lenngwe ↑mosong ka ura ya eight,
one in the morning at eight o'clock,

68		e lenngwe bosigo ka ura ya eight. One in the morning, [one at night. Ok? <i>one at night at eight o'clock</i>
69	P:	[mm. [mm.
70	P:	mm.
71	A:	And then the <u>last</u> one is this big strong ↑one you can see it's <u>only</u> at
72		night.
73	P:	mm.

It is interesting to note how the pharmacists introduce each medication to patients. Pharmacist B is particularly methodical in this regard, as evidenced in *Extract 028* (p. 206). First, she states the name of each drug, followed by an explanation of the purpose of the drug (line 85). Next, she provides the dosage instruction for each drug (line 87). While she talks about each drug, she points to the relevant packet or container and sometimes to the label so it is clear which drug she is discussing. This pattern is repeated with each medication.

On several occasions, pharmacists relate information to patients' knowledge, to explanations given during previous visits, or to information provided during pre-ARV counselling sessions. By doing this, pharmacists acknowledge patients' familiarity with the treatment regimen. In the two extracts below, the pharmacist reminds the patients that she is giving them the same medicines which they received during previous visit to the pharmacy (indicated in boldface).

Extract 032: Patient 14 (Ph B, ? visit)

90	B:	This is a ↑antibiotic ↑nè
91	M:	[°Ok. °
92	B:	[That he <u>always</u> used to used to ↑get (.) one spoon a day.

Extract 033: Patient 15 (Ph B, exp pt)

87	B:	This is your ↑Bactrim
88		(4.0)
89	B:	Ja. You used to take this as ↑well, it's your ↑Bactrim exactly the same <i>Yes</i>
90		as these pillies, two tablets in the morning.

Pharmacists also sometimes link explanations to patients' previously stated concerns. In the extract below, the patient mentions that she is experiencing leg pains (line 17) and headaches (line 44). Towards the end of the interaction, the pharmacist returns to the patient's initial complaint, explains the purpose of the medication (lines 99-100) and provides a dosage instruction for the pain killer (line 100). By doing this, she reassures the patient that her complaint is being attended to.

Extract 034: Patient 22 (*Ph B*, 3rd visit)

15 P: It's only my legs.
 16 B: That's paining?
 17 P: Oh my leg is paining.
 ... ((B checks P's understanding of dosage instructions))
 44 P: and sometimes my (.) head ache
 ... ((B checks P's understanding of dosage instructions))
 99 B: This is for pain and ↑fever ↑nè **for the pain in your ↑legs**
 100 **and the pain in the ↑head** two pillies three times a day.

7.2.4 Provision of additional information

The pharmacists often provide information about side effects, generics, vitamins, antibiotics, ARVs, viral load count, CD4 counts, and additional instructions or information about the ARVs. However, although information about vitamins or antibiotics is provided to all patients who take them, concepts such as 'CD4 count' and 'viral load' are only explained to some patients. In addition, the pharmacists' use of certain jargon terms, such as 'antibiotic', differs across patients. The following set of extracts has been selected to illustrate the pharmacists' use of explanations for different concepts. Patients' understanding of some of these concepts is discussed later in this chapter in *Section 7.4.2*.

- How ARVs work:

An explanation referring to the virus is provided in only six interactions. These explanations usually include the fact that the ARVs will not kill the virus in the

body, but will make it smaller and prevent it from ‘growing’ or spreading, provided the patient adheres strictly to the regimen. Such an explanation seems important as misconceptions about ARVs abound. For example, research conducted in the Western Cape indicates that patients often believe that ARVs are a cure for HIV/Aids (Evans, 2007).

Extract 035: Patient 19 (Ph A, 1st visit)

- 8 A: Have they explained to you that this medicine can’t kill the °AIDS inside you°.
- 9 P: Mm
- 10 A: >You know that,< it can only make the AIDS very small then it can’t
- 11 grow anymore and you can stay strong and you can come uh become a
- 12 old madala, ↑nè
wise man
- ...
- 35 A: ↑Remember if you forget to take it then this virus is gonna start to grow
- 36 again. And then sometimes the medicine doesn’t work so good.

- Viral load and CD4 counts:

Extract 036: Patient 18 (Ph A, 1st visit)

- 216 A: And the **viral load** is the blood test where they’ve taken the blood, to look
- 217 how much virus is in the blood. Then in the beginning it will be high,
- 218 >nè< and as the medicine makes the virus smaller, it’s going down, down
- 219 down. Then we know the virus in your body is always a little bit, but
- 220 remember it never goes away completely, ↑nè.....
- 221 A:And the other one, the ↑CD4 do you know what your CD4 is?
- 222 (3.0)
- 223 P: Ja I er [I understand it was, twenty four.
Yes
- 224 A: [CD4
- 225 A: °Twenty four.° >Ok<. <The **CD4** is the soldiers in your body who can
- 226 fight against any infection, ↑nè> and the CD4 must be thousand or
- 227 something and yours has gone down, down down °because of AIDS.° So
- 228 the soldiers in your body that can fight are just a little bit. But when you
- 229 start taking this medicine you’re going to see the CD4 is going up, up
- 230 over two hundred, ↑nè and we’ll see you getting strong.

		<i>picks up pot and box</i> v	
29		----- but sometimes it's the medicine. It could be one of these, but I <u>don't</u>	
		----- ^	----- ^
		<i>nods</i>	<i>nods</i>
		<i>holds hands splayed towards medicines</i> v	
30		----- want you to stop any of the medicine without speaking to doctor first.	
		----- ^	
		<i>nods</i>	
31	P:	°(Alright). °	

The pharmacists' choice of presentation in their explanations of side effects is interesting – although an in-depth analysis of this phenomenon is beyond the scope of this study, a brief discussion is warranted. The pharmacists explained to the researcher that experience has shown that patients often associate the ARVs with side effects. Because of the potential for patients to default on treatment in an attempt to prevent or stop such side effects, it is important for them to discuss side effects in vague, unspecified terms. Therefore, the pharmacists may use strategies such as mitigation, deliberately not informing the patient about the true cause of the side effects, not specifying which of the ARV drugs may be causing the side effects, or vaguely alluding to the possible cause of the side effects.

In the extract presented above, the pharmacist uses mitigative language such as “either”, “can” and “sometimes”, so that the patient is not made explicitly aware of the exact cause of his side effects. She also presents several possible causes for the side effects (lines 28-29 above), thereby using mitigation to convey a lack of specificity and to remove responsibility for the side effects (Delbene, 2004). Therefore, the patient is hopefully discouraged from defaulting on the treatment.

In addition to the use of such strategies, pharmacists also stress that patients must not stop taking the medications but should return to the hospital and consult the doctor should the side effects become unbearable. Pharmacists often emphasise that side effects will not last longer than approximately two weeks and that the body will “get used to the medicine”.

Dyck et al. (2005) found similar results in their study which investigated pharmacists' discussion of side effects from various medications. Pharmacists often used imprecise, vague terminology. Dyck et al. suggest that the pharmacists in their study were conveying the message that the patients could get side effects, but that they should not stop taking the medicines. However, they felt that the pharmacists' intentions were to provide an explanation of risk in non-technical language and to prevent patients from becoming alarmed, rather than to promote adherence, as appears to be the reason in this context of HIV/Aids. Delbene (2004) explains that mitigation is often used by doctors when providing poor prognoses or bad news to patients and the use of mitigative language may defuse an unwelcome response from the patient.

- Bactrim (an antibiotic to treat or prevent chest infections) and its purpose:

Extract 038: Patient 7 (Ph B, 3rd visit)

56 B: And then this is a ↑antibiotic **to protect the chest from any**
57 ↑infections.....

Extract 039: Patient 18 (Ph A, 1st visit)

196 A: >Do you know what this one does, it's got nothing to do with the AIDS,
197 **it just helps you so that your< lungs don't get an infection.** Because
198 maybe someone is standing close to you and coughing ack ack and then
199 you can become sick, ↑nè (.) so while the CD4 is low we're still giving
200 you this one.

Generally, pharmacists' explanations of Bactrim follow the pattern of *Extract 038*, i.e. to protect or 'help' the chest, or to make the chest better. However, in *Extract 039*, the pharmacist provides more information and links her explanation to the concept of CD4.

- Vitamins and how they work:

decision about whether to follow the instruction or not, hence the use of the imperative. The same is true for the instructions regarding refraining from drinking the ARVs with alcohol, as evidenced below.

- No alcohol to be taken with ARVs:

Extract 042: Patient 19 (Ph A, 1st visit)

- 198 A:and you know **no phuza**. No wine, no beer
drinking
- 199 °with any of this medicine °.
- 200 P: Mm.
- 201 A: Remember this medicine goes through the liver and if you still drink
- 202 alcohol then the liver won't work well and you'll still be sick.
- 203 P: °Yes °.

- What to do if the patient vomits after taking ARVs:

This is a rather complex instruction which is presented to only a few patients by Pharmacist A.

Extract 043: Patient 20 (Ph A, 1st visit)

- 140 A: >Have I told you anything< if she- did I tell you about if she vomits?
- 141 C: No.
- 142 A: >Ok< if she takes the tab- if she takes the tablets and she vomits before
- 143 thirty minutes
- 144 C: Ja.=
- Yes.*
- 145 A: =it means the tablets haven't reached her stomach and they haven't been
- 146 absorbed yet.
- 147 C: °Ok: °=
- 148 A: =So then she must take them again.
- 149 C: O[k:
- 150 A: [°>Ok<° but if she takes the tablets and vomits after an hour or two, it's
- 151 fine you don't have to worry because the ta- tablets are already absorbed.
- 152 C: Ok:

On occasion, patients use their own analogies when demonstrating comprehension of the dosage instructions. In the extract presented below, the patient uses the analogy of the pills ‘going together’ (line 299 – indicated in bold). The pharmacist repeats a variation of this analogy shortly after the patient uses it (line 305 – indicated in bold).

Extract 046: Patient 17 (Ph B, 1st visit)

- 297 P: Jy [vat weer (.) een.
You take again (.) one.
- 298 B: [vat
take
- 299 P: Dan vat jy same, (daai ook). **Hy loop [saam.**
Then you take same, (that one also). It goes together.
- 300 B: [En dan
And then
- 301 B: [Ja.
Yes
- 302 C: [Ja.
Yes
- 303 B: En dan by die aand
And then in the evening
- 304 P: Ee ja.
Yes.
- 305 B: Hierdie eene, **hy kom mos nou by.**
This one, it also comes along

7.2.6 Repetition and summation of information

Another strategy commonly employed by the pharmacists is constant repetition, reinforcement and summation of information or dosage instructions in different ways, as follows:

- Repetition of the names of ARV drugs;
- Repetition of dosage instructions or information;

- Repetition of instructions in Setswana;
- Using clarification opportunities to reinforce and repeat instructions;
- Reminding patients of instructions and simultaneously checking their comprehension of instructions;
- Summarising instructions; and
- Summarising instructions in a slightly different manner to previously stated instructions.

It is also interesting to note how the pharmacists vary their explanations or initiate a more detailed demonstration of dosage instructions, depending on the demonstrated level of understanding of the patients. For instance, if a patient does not appear to understand the instructions easily, the pharmacist may summarise what she has just said in a slightly different manner, in order to provide varying explanations for the patient.

In the extract below, the pharmacist first provides the dosage instructions for the ARVs in one turn without stopping to check that the patient understands (lines 114-120). The patient immediately responds with a clarification request (line 121) and the pharmacist realises that she needs to explain the instructions again (line 124). In her second explanation, she repeats the instructions in a slightly different manner, making them more explicit both verbally and visually by talking about each drug individually (lines 127-131). In lines 132, 135 and 137, Pharmacist B summarises and repeats what she has just said, again in a slightly different manner: three tablets must be taken in the morning. This strategy of summarising and repeating instructions provides varying explanations for the patient. Soon after this extract occurs, the patient demonstrates understanding of this instruction (refer to *Extract 068* (p. 249)).

Extract 047: Patient 11 (Ph B, 1st visit)

puts hands on 3TC and d4T boxes

v

114 B: -----
These two are a bit easier than this one, for the first fifteen days. You

		<i>taps box with pen</i> v	<i>points index finger left</i> v	<i>points index finger right</i> v
115		going to take one ↑tablet eight o'clock in the ↑morning one tablet eight		
				<i>taps NVP box with pen</i> v
116		o'clock at night. Exactly the same as these two. Then <u>this</u> one, ↑mommy		
		<i>points to label with pen</i> v		
117		I wrote the label there for you. One ↑tablet eight o'clock in the morning.		
		<i>moves hand up and down</i> v		
118		For the first <u>fifteen days</u> . Until the <u>fourth</u> of July. <u>Then</u> you going to start		
119		taking it together with these two. One tablet eight o'clock in the		
120		↑morning one tablet eight o'clock at night.		
121	P:	I'm going to start to drink this one?		
		<i>puts hand over 3TC and d4T boxes</i> holds hand out towards boxes v		
122	B:	Ev- <u>all</u> of ↑this		
123	P:	(all [of this).		
124	B:	[all of this. Ja. Let me try and explain differently. For the <u>first fifteen</u>		
		<i>Yes</i>		
125		days, [↑nè		
126	P:	[days yes.		
		<i>touches 3TC box with pen</i> v		
127	B:	You going to take [one ↑pillie tomorrow] morning.		
128	P:	[one (strong) (.) tomorrow.]		
		<i>wags index finger</i> <i>taps 3TC box with pen</i> v	<i>taps d4T box with pen</i> v	
129	B:	You going to take one ↑pillie eight o'clock. One pillie eight o'clock in		
		<i>taps NVP box with pen</i> v		
130		the [↑morning] one pillie eight o'clock °in the [morning.°		

131	P:	[morning.]		[°ok.°]
		----- ^ <i>holds up index finger</i>		
			<i>leans forward</i> v	<i>leans back</i> v
132	B:	In other ↑words for the first fifteen days it's <u>three</u> tablets in the morning,		
133		[↑nè		
134	P:	[yes yes.		
		<i>waves pen in the air</i> v	<i>taps pill box with pen</i> v	
135	B:	And then at <u>night</u> , tomorrow night, it's one pillie eight o'↑clock=		
136	P:	=ok.=		
		<i>taps pill box with pen</i> v	<i>moves box to side of desk</i> v	<i>waves pen in air for emphasis</i> v
137	B:	=one pillie eight o'clock. That's all. Ok? For the <u>first</u> fifteen days.		
			----- ^ <i>nods repeatedly</i>	

Another form of repetition occurs regularly when the pharmacists repeat information given by patients. For example, the pharmacist asks the patient a question, the patient answers and the pharmacist then repeats the information given by the patient. This strategy appears to allow the pharmacist to check whether she has understood the patient correctly, as well as to provide an opportunity for the patient to clarify information or change their answer. Pharmacists also repeat patients' non-verbal answers verbally, for the same purpose (e.g. if a patient shows one finger to indicate one pill, the pharmacist repeats this verbally to check whether she has understood what the patient is saying).

For example, in the extract below, the pharmacist asks the patient when he takes his ARVs (lines 18-19). He answers (line 20), but she repeats his answer (line 21) to check whether she has correctly understood him. The patient then verifies that this is the correct information (line 22).

Extract 048: Patient 5 (Ph A, exp pt)

- 18 A:So what time do you take your ↑tablets
 19 ka nako mang?
at what time
 20 P: °At seven o'clock. °
 21 A: Seven?
 22 P: °Ja. °
Yes
 23 A: Seven ↑mosong
in the morning

Interestingly, patients also sometimes repeat information given by the pharmacist. This appears to fulfil the same function as when pharmacists repeat information given by patients: patients seem to want to check whether they have understood instructions correctly or request clarification by repeating the information in a question form. In some cases, the patients' use of this strategy appears to fulfil a reauditorisation or rehearsal function to enable the information or instruction to be processed and stored in memory (Henson, Burgess, & Frith, 2000).

The following extract is taken from an interaction with a patient who is illiterate. His brother accompanies him to the consultation. On several occasions throughout the interaction, as evidenced below, the patient repeats the instructions given by the pharmacist (lines 212, 215, 237) as if to help him to remember each point. At certain points in the interaction, he repeats the information in the form of a question (line 235), as if to check whether he has understood correctly. Later in this interaction, the patient is able to demonstrate correct understanding of the instructions.

Extract 049: Patient 17 (Ph B, 1st visit)

211-217: Refer to Extract 023 (p. 198)

... ((B discusses an analogy to help P remember that Stocrin is taken at night only))

- 233 B: Jy [begin by mo- [morê ↑oggend <nine o'clock.>
You begin to- tomorrow morning

234	C:	[uh- [oh oh oh
235	P:	Nine o'clock, ee?= yes
236	B:	=Jy <u>begin</u> . You start
237	P:	Ek begin. I start

7.2.7 Summary of section

This section provided a description of various communication strategies which are utilised by pharmacists to provide information about ARVs and dosage instructions. These include the following:

- Stipulation of agenda (through the use of an agenda-setting statement) and provision of a running commentary during the interactions. This serves to focus patients' attention on the explanation, especially with patients who have poor concentration abilities;
- Demarcation of ARVs from non-ARV medications. This strategy is similar to the use of agenda-setting statements and provides a clear link between the drug and the corresponding explanation;
- Careful and deliberate explanations of dosage instructions and additional information about medications. These are regularly related to patients' knowledge or stated concerns. The use of mitigative language and imperative tone is noted in some instances;
- The use of analogies to convey abstract concepts and promote understanding and recall of instructions; and
- Repetition, reinforcement and summation of information and instructions. Repetition of information by both patients and pharmacists also provides opportunities to verify understanding.

7.3 Non-verbal behaviours, visual demonstration and use of props

During transcription of the data, it was immediately obvious to the researcher that non-verbal behaviours such as eye gaze, body language and posture, facial expression, gesture, prosody and specifically the use of props constitute vitally important components of each interaction. These non-verbal behaviours are integral to the meaning of communication and cannot be separated from the content of the interactions – “to ignore gesture is to ignore part of the conversation” (Goldin-Meadow & Wagner, 2005, p. 234). Non-verbal behaviours are also of particular importance in cross-cultural interactions and often constitute politeness behaviours (Kasanga & Lwanga-Lumu, 2007).

Non-verbal communication forms an important part of exchanges between health professionals and patients and can affect patient outcomes and satisfaction (Schmid Mast, 2007). The goal of any such interaction is to ensure the successful exchange of information and to encourage the development of rapport and a therapeutic relationship. Part of the process of achieving these goals involves the level of the participants’ involvement, affiliation and reciprocity, which are reflected in the expression of non-verbal behaviours (Street & Buller, 1987).

The following sections will describe various non-verbal behaviours that are present in the interactions, in particular the use of props to supplement instructions. Gesture, body posture, intonation and eye gaze will also be discussed.

7.3.1 Visual demonstration and props

Throughout the interactions, the pharmacists use the pill containers, packets and boxes, as well as the actual pills and the dosage labels, to provide detailed and deliberate explanations of the ARV dosage instructions and to reinforce these explanations. The use of conversational props adds communicative realism to the discussion as well as visual reinforcement of verbal explanations.

As discussed in *Section 7.2.2* above, one strategy employed by the pharmacists is the careful verbal and non-verbal demarcation of drugs, especially the segregation of ARVs from other drugs. As the pharmacists talk about a specific drug, they move the relevant boxes and containers to the centre of the desk or towards the patient and the other boxes are moved to the side. This ensures that patients know which drug is being discussed and this helps to eliminate any confusion that may arise when the pharmacists provide dosage instructions.

Another strategy that the pharmacists employ is to point to each box while giving an instruction. For instance, while giving ARV dosage instructions, the pharmacist may point to the Lamivudine box and give an instruction, then the Stavudine box and give an instruction, followed by the Nevirapine or Stocrin box with an instruction. By doing this, the pharmacists provide a visual reinforcement of their verbal instructions. Pointing to the boxes is often coupled with the use of gesture, for example, holding up a finger to indicate one pill and then pointing to the relevant box while giving the instruction.

When necessary, the pharmacists may actually open the box or container and show the pills to the patient. On several occasions, the pharmacists cut the pill sheets into single pills in order to demonstrate dosage instructions. When this strategy is used, the pharmacists are careful to ensure that they place each pill on top of the relevant container so that patients can associate the particular pill with its corresponding container.

In the extract below, the pharmacist has already explained the dosage instructions several times to the patient, but the patient does not understand them correctly. The pharmacist begins another explanation, but instead of merely pointing to the relevant drug containers (as she has done during her previous explanations), she decides to employ a different method of explanation. She takes the pills out of the containers, cuts up the pill sheets into single pills and then arranges the pills in a row on the desk (line 179). She emphasises how the pills look (line 180) and then puts each pill in front of its corresponding container (lines 181-183). She then

begins her explanation and picks up each pill as she gives the dosage instruction (lines 185-188). By using the individual pills to supplement her verbal explanation, she provides the patient with a more concrete visual cue which ultimately assists the patient in understanding the instructions (a demonstration of this understanding is included in *Extract 068* (p. 249)).

Extract 050: Patient 11 (*Ph B, 1st visit*)

- picks up ARV box, opens lid*
v
- 178 B: You'll get it now, don't worry.
takes pills out of containers, cuts pill sheets, arranges pills on desk
v
- 179 (28.34)
- 180 B: So now you see also how your tablets looks. How your tablets look like, ↑nè
puts pill on pot lid *moves pot closer to P* *puts pill on pot lid*
v v v
- 181 (.) ((unintelligible)) °pills with ↑those (.) this ↑one (.) that is that one ↑there
puts pill sheet back in box
v
- 182 (.) and this ↑one
puts pill on top of box
v
- 183 (3.94)
puts pill down on desk *picks up pills, puts them on NVP box*
v v
- 184 B: Then it's this one, nè. (.) then this ↑one ↑Nevirapine this is how this one
pushes boxes forward *puts arms around boxes* *takes pill off pot lid, puts it on desk*
v v v
- 185 looks.° Now tomorrow morning eight o'clock (.) you take one.=
- 186 P: =One.
takes pill off box and puts on desk *takes pill off box and puts on desk* *takes pill off pot lid and puts on desk*
v v v
- 187 B: You take one. You take one. Tomorrow night at eight o'clock (.) you take

		<i>takes pill off box</i>		<i>puts hands over box</i>
		<i>and puts on desk</i>		
		v		v
		-----		-----
188		one. You take one. You don't take.		
189	P:	Ee.		
		Yes		

The pharmacists' use of other props such as labels (see *Appendix 7*) and the yellow diary card (see *Appendix 6*) appear to be equally important non-verbal strategies which are used in the interactions. A label detailing dosage instructions is placed by the pharmacist on each box or container. The pharmacists sometimes point out this label to patients and these labels act as a visual reinforcement of verbal instructions.

Pharmacists take care to ensure that patients can match the actual pills or containers to the pictures of each pill which appears on the yellow diary card. The card is explained to patients and they are shown how to tick off when they take each pill morning and evening. It also provides the pharmacists with an opportunity to explain or repeat dosage instructions and to verify patients' understanding of dosage instructions.

Interestingly, patients often use the pill boxes and containers as props, usually when demonstrating their comprehension of dosage instructions or when telling the pharmacist how they take their ARVs. Patients appear to find it easier to explain by pointing to the relevant pot, as they do not always know the names of the drugs but rather rely on what the container or the actual pill looks like. Even those patients who are not fluent English speakers are able to demonstrate their understanding simply by pointing to the pots and using a few English words mixed with Setswana phrases to explain when they take the pills. This highlights the importance of visual consistency and the potential difficulties which may arise because of generic variations in the packaging of the drugs.

The extract below illustrates how a patient is able to use the props to demonstrate his understanding of the dosage instructions. Although this patient reported that he is proficient in English, he uses minimal language when explaining and instead relies on the props. It is easier for him simply to point to the relevant boxes (e.g. line 25) than to use the rather lengthy and complex drug names. The pharmacist knows exactly what the patient is trying to say (line 28) and he is able to demonstrate his understanding of the dosage instructions clearly.

Extract 051: Patient 5 (Ph A, exp pt)

- 25 P: °This.°

 ^
pulls two boxes together with left hand
- 26 A: How many?
- 27 P: ↑One

 ^
points index finger at each box
points index finger at each box
 v

- 28 A: E lenngwe and e lenngwe. One. Ok that's fine.....
One one

Patients are often curious and indicate a desire to 'explore' the pills. They may pick up a pill container and look at it or open a box to see what the pills look like, often without an invitation to do so from the pharmacist. Sometimes patients study the labels on the pill pots, either to read the instructions on the label or to read the name of the pill. Pharmacists encourage patients to have a look and 'interact', so to speak, with the pills. For example, on several occasions while the pharmacist is busy with a dispensing or administrative task, patients are asked to put pill sheets back into pill boxes or to close pill pot lids.

In *Extract 052* below, Pharmacist B demonstrates how to measure the drug which the mother will need to give to her child using a syringe. The pharmacist holds up the syringe and the mother reaches for it, as if she wants to hold it and look at it (line 152). The pharmacist does not relinquish the syringe. The mother continues to

touch the syringe while the pharmacist gives an instruction and then tries to pull it down while it is still in the pharmacist's hand (line 153).

This could be construed as a rather intrusive behaviour which disrespects the pharmacist's personal and professional space and interferes with the task which she is trying to perform. However, the pharmacist permits it and does not attempt to move her hand away from the mother or take back the syringe; it is the mother who eventually relinquishes the syringe (line 155). This indicates that the pharmacist understands that the mother is merely curious and her action does not constitute a threat. In addition, the pharmacist perhaps realises the mother's inquisitive need to interact with the medicines and the syringe and that by permitting her to do this, it may in fact promote her understanding of the dosage instructions.

Extract 052: Patient 14 (*Ph B, ? visit*)

			<i>holds up syringe</i> v	
152	B:	 and you've ↑mixed, then you give the baby <u>twelve millilitres</u> .		
				<i>reaches for syringe</i>
			<i>holds syringe</i> v	
153		Seven o'clock ↑phakela seven o'clock at night, ↑nè		
		<i>in the morning</i>		
			^	^
154	M:	Yes.	<i>touches syringe while B holds it</i>	<i>pulls syringe down</i>
			<i>holds syringe</i> v	<i>picks up ARV bottle, puts syringe into bottle</i> v
155	B:	So you going to <u>pull</u> it up. You going to put the syringe <u>in</u> the bottle, ↑nè		
			^	
		<i>releases syringe but keeps hand held up</i>		
156	M:	Yes.		

The brown paper bag is another important prop used in the interactions. A brown bag is traditionally used by pharmacists in many different pharmacy contexts, both public and private, and is given to patients to carry their pills. In the

Similarly, in the extract below, the brown paper bag is used again to signal the end of the session. This time the patient utilises this prop as a close implicature. This extract is prefaced by a discussion between two pharmacists who are attempting to solve a computer problem. When they are finished their discussion, Pharmacist A turns towards the patient and signals that she is finished talking with Pharmacist B (line 312). The patient initiates a close implicature by requesting a paper bag (line 313), which the pharmacist gives to her. The patient opens the bag (line 315) and starts packing in the pill boxes (line 317), signalling that the interaction is over. The pharmacist responds with a verbal close implicature and gives a final instruction about the diary card (line 319).

Extract 054: Patient 13 (Ph A, 2nd visit)

picks up pill packets, puts them in front of P

V

312 A: Daars hy ↑M****

There we go

writes on patient register

V

313 P: ⁰(Het jy nie 'n sakkie)⁰?

Don't you have a small bag?

— — — — —
22222

—

picks up pill packets and holds them (simultaneously looks at pill packets, then turns to look at side of desk)

• • •

moves head to side reaches down to pick up bag from floor gives bag to P

v

315 A: Ek het 'n ou sakkie ↑here, (ons gaan) gou ↑gou (.) (dan sal) jy sommer

I have an old bag here, we're going quickly then you'll just put (it)

$$\wedge$$

reaches for bag

$$\wedge$$

opens bag

sticks label on box

v

316 self insit.

inside yourself.

		<i>writes in P's file</i> v -----	
317		(7.5) ----- ^	
		<i>packs medicines into bag</i>	
...		<i>moves pill box closer to P</i> v	<i>holds up yellow diary card</i> v
319	A:	<i>Daar's al jou ↑goeitjies (en dan) next time dan vul jy hierdie eenetjie</i> <i>There're all your things and then next time then you fill this one</i> <i>puts yellow card on desk</i> v	
			<i>turns towards B</i> v
320		----- <i>mooi ↑in en dan kom wys jy vir ons [hoe lyk dit, hoor?</i> <i>in nicely and then you come and show us how it looks, hear?</i>	
321	P:	[Ek sal. <i>I will.</i> ----- ^	
			<i>packs yellow card into bag</i>
322	P:	Ek sal. <i>I will.</i>	

7.3.2 Gesture

In line with Yoshioka's (2005) work, gesture will be discussed in terms of hand and arm movements which are produced to achieve communicative intent and which may or may not be accompanied by speech. Various types of gestures exist, including *symbolic* gestures (highly conventionalised culture-specific behaviours such as a 'thumbs up' sign), *deictic* gestures (pointing), *iconic* gestures (represent the size, shape or orientation of an object), *pantomimic* gestures (to show the movement of an object or tool) and *interactive* gestures (certain hand shapes which help to regulate the flow of conversation) (Rime & Schiaratura, 1991, as cited in Billinghamurst, 2002; Yoshioka, 2005).

The pharmacists regularly use various types of gestures to supplement verbal instructions. These include symbolic (e.g. giving a 'thumbs up' sign), deictic

(pointing to pill pots), iconic (e.g. pointing to the chest), pantomimic (e.g. to demonstrate how to use a syringe) and interactive gestures (various non-specific hand shapes used throughout conversations). In the pharmacist-patient interactions, gesture fulfils the function of reinforcing verbal instructions non-verbally (through gesture-speech match and illustration of speech), emphasising important information, explaining information and regulating the flow of the interaction (Goldin-Meadow, 1999; Goldin-Meadow & Wagner, 2005).

A study conducted by Driskell and Radtke (2003) revealed that gestures aid both speakers and listeners. Gesture has a direct enhancing effect on listeners' comprehension and when speakers use gesture, they produce speech that is more effective. Gestures are able to reflect thoughts that cannot necessarily reflect speech (Goldin-Meadow, 1999) and they often provide a context for accompanying verbal explanations (Goldin-Meadow & Wagner, 2005). In the pharmacist-patient interactions, the use of gestures in conjunction with the use of props (e.g. pointing to the relevant pill box) enables patients to know exactly which drug the pharmacist is discussing.

For example, in line 91 in the extract below, the pharmacist uses an iconic gesture – patting her chest while talking about Bactrim, an antibiotic given to prevent chest infections. This type of gesture is typically linked to a lexical component of the talk (in this case the word ‘chest’) and does not require an explanation to link it to the talk; it is self-explanatory (Schegloff, 1984). Although this patient appears to be proficient in English and may not require gestural supplementation, it does however serve to facilitate understanding and provides a visual reinforcement and reminder of the instruction for the patient. The instruction is also clearly linked to the relevant drug.

Extract 055: Patient 11 (Ph B, 1st visit)

		<i>picks up packets</i>	<i>pats chest</i>
		v	v
		-----	-----
91	Ph:	Then we have your Bactrim. It's to protect the ↑chest from infections.	

			^
			<i>nods</i>

Patients also use gestures in the same manner. In the extract below (line 128), the patient iconically lifts her index finger while the pharmacist talks, to indicate ‘one’ pill. By doing this, she demonstrates to the pharmacist that she has understood the instruction. The non-verbal gesture alone is sufficient to communicate this.

Extract 056: Patient 11 (Ph B, 1st visit)

		<i>touches 3TC box with pen</i>
		v

127	B:	You going to take [one ↑pillie tomorrow] morning.
128	P:	[one (strong) (.) tomorrow.]

		^
		<i>wags index finger</i>

Gestures have been found to assist speakers by reducing cognitive burden, freeing up effort involved in speaking, and assisting speech (Goldin-Meadow, 1999). In this context, gesture use by patients appears to assist with overcoming language barriers. In her study of Black South African township youths, Brookes (2005) notes that gestures may be used to add information that is not presented verbally and they may also fulfil communicative functions rather than simply depict aspects of spoken language. Similarly, in some instances in the pharmacist-patient interactions, gestures are used by patients to supplement verbal information, but they may also be used in place of or in preference to spoken language in order to convey information easily. An illustration of how patients use props and pointing gestures to demonstrate understanding is presented in *Extract 051* (p. 228).

It is important to note, however, that the use of gesture (and other non-verbal behaviours) varies cross-culturally. An example of this is the handshake, which differs between western and African cultures in terms of form and function (Hall & Hall, 1983, as cited in Pennycook, 1985). In fact, the same gesture may hold different meaning in different cultures and this phenomenon has been well documented (Kirsch, 1979). In addition to cultural specificity, gestures also differ in terms of frequency. For example, Brookes (2005) notes that in the South

African context, young African men may gesture less when interacting with older persons and especially with women. Gesture holds a specific aesthetic communicative value but its excessive use is viewed as disrespectful. Brookes also notes that adults make less use of spontaneous representational gestures in conversation – it is assumed that she is referring to African adults.

7.3.3 Body posture

Non-verbal behaviours are also used by the pharmacists to signal to patients when it is their turn to explain or demonstrate their understanding. For example, in the extract below, the pharmacist has just finished explaining the dosage instructions. She then pushes the pill boxes to the centre of the desk, leans backwards and folds her arms, while simultaneously requesting that the patient explain the dosage instructions (line 31). This provides a non-verbal reinforcement of the verbal command and indicates that the pharmacist is finished speaking and that it is now the patient's turn to speak.

Extract 057: Patient 26 (*Ph B, 1st visit*)

		<i>pushes three ARV boxes to centre of desk</i>	<i>leans backwards, folds arms</i>
		v	v
31	B:	Ok? So please tell <u>me</u> how you're going to take the tablets.	
			^
			<i>puts head to the side</i>
32	P:	((sniff)) ((unintelligible: 2 syllables)) one, eight o'clock.	
			^
			<i>points to pill box</i>

In the same manner, patients sometimes indicate that they have finished talking by using non-verbal behaviours such as body posture. In the extract below, the patient is finishing off her explanation of the dosage instructions. She touches the last box and provides the dosage instruction. When she is finished, she sits backwards and puts her hands in her lap, to indicate that she has completed her explanation (line 114).

112 P: Eight o'clock

taps pill box

V

113 B: mm.

 $\wedge$

touches pill box

 $\wedge$

leans backwards, puts hands in lap

7.3.4 Emphasis of information and instructions

For instance in the extract below, the pharmacist uses the word ‘mommy’ (bolded in line 101) with rising intonation to get the patient’s attention and to indicate that the patient needs to listen carefully to the information or instruction that will follow. She also stresses the words ‘your ARVs’, which further emphasises that it is important for the patient to listen carefully.

v

101 B:And these three, ↑**mommy** are **your** **ARVs**.

Emphasis is used especially when pharmacists provide dosage instructions for Stocrin, which must only be taken at night. It is important for pharmacists to stress this instruction because it differs from the instructions for the other ARVs in the regimen.

In the extract below, the pharmacist picks up the Stocrin pill pot and holds it up for the patient to see. Just before she begins to give the instruction, she leans forward in a ‘conspiratory’ posture and her facial expression becomes rather serious, as if to prepare the patient for the important information that will follow (line 233). She lowers the pot and clearly circles the pot label to show the patient that the dosage instruction is written on the pot. She gives the instruction in Setswana and repeats it in English, stressing the word ‘only’, using gesture and a serious facial expression to supplement this important verbal instruction (line 234).

Extract 060: Patient 18 (Ph A, 1st visit)	
	<i>writes in file</i> V <i>leans forward; picks up pill pot, holds it for P to look at; eyebrows up, serious facial expression</i> V
233	A: So I can say this one is e lenngwe ka ura ya ↑eight and we said this one <i>one at eight o'clock</i> <i>looks at pot, lowers it</i> <i>circles label with pen</i> <i>holds up index finger, moves it back and forth twice for emphasis; eyebrows up, serious facial expression</i> V V V V
234	↑was bosigo fela. Remember it's the big strong ↑one so it's <u>only</u> at night. <i>at night only</i> ----- ^ <i>nods</i>

7.3.5 Eye gaze

Eye gaze behaviours also appear to be of particular non-verbal importance in interactions, in terms of establishing joint attention and verifying understanding. Joint attention refers to coordinated, collaborative sharing between two

communication partners where the goal is for both to attend to an object or aspect of the environment, e.g. both looking at an object (Kaplan & Hafner, 2006). The use of props in the interactions serves to establish and maintain joint attention, because both patient and pharmacist concentrate on the same pill pots or boxes while the pharmacist verbally and non-verbally explains dosage instructions.

In the following extract, Pharmacist B is explaining dosage and mixing instructions to the patient. As she explains, she alternates her gaze between the patient and the bottle to which she is pointing. It would appear that the pharmacist is doing this in order to check whether the patient is following the explanation. The second time she looks up at the patient, the patient nods slowly and this is coordinated with the pharmacist's eye movements (line 128). Again, the eye movements of both parties are coordinated in line 129, and both look up at each other simultaneously.

Further on in the interaction, while the pharmacist explains the dosage for one of the ARV drugs, both parties focus on the medicine box while the pharmacist points to the relevant information on the box label (lines 189-190). Again, the pharmacist glances up at the patient at regular intervals – she may be looking at the patient's facial expression and/or waiting for a head nod to ascertain whether the patient is following the discussion or whether further clarification is required. In line 190, she glances up at the patient and receives a head nod in return. She then looks back at the box, and then quickly glances up at the patient, who responds with an affirmative “ok”. Again, in line 192, there is coordination of the eye gaze of both parties as they glance between the box and each other. In addition, when the pharmacist glances up the first time, she pauses and this may prompt a response from the patient. The patient then looks up at the pharmacist and says “yes”.

Extract 061: Patient 14 (Ph B, ? visit)

		<i>B alternates gaze between bottle and P</i>	
		<i>points to bottle with pen</i>	<i>slides pen down side of bottle</i>
		V	V
		-----	-----
			
128	B:	And you mix one ↑bottle, when the baby is finished with the one bottle	
		-----	-----
			^
			<i>nods slowly</i>
		<i>points to another bottle with pen</i>	
		V	

			
129		<u>then</u> you mix the next.	
			
		^	
		<i>looks at B</i>	
130	M:	°Ok.°	

		^	
		<i>nods slowly</i>	
		... ((B explains how to measure the correct amount of ARV drug using the syringe))	
		<i>picks up box</i>	<i>points to label on box</i>
		V	V
		-----	-----
			
189	B:	Then of <u>this</u> one, you going to give the baby <u>five</u> millilitres, seven	
		-----	-----
		^	
		<i>looks at label while B talks</i>	
		<i>points to description on label</i>	<i>puts box down on desk</i>
		V	V
		-----	-----
			
190		o'clock ↑phakela twelve milli- ag <u>five</u> millilitres, seven o'clock [bosigo.	
		<i>in the morning</i>	<i>at night</i>
		-----	-----
		^	^
		<i>looks at label while B talks</i>	<i>nods</i>
		-----	-----
		^	^
		<i>nods</i>	<i>nods</i>
191	M:		[Ok.

174	F:	Ok:= ----- ^ nods <i>gestures for emphasis (looks at P while talking)</i> v -----
175	A:	=But <u>later</u> . We're going to let doctor look after him first, see that <i>looks at P while talking</i> v -----
176		he gets stronger, <u>then</u> we'll send the medicine ^o to the clinic. ^o ----- ^ <i>nods, sits backwards</i>
...		
179	F:	((asks unintelligible question to P))
180	P:	mm. ----- ^ nods <i>rearranges pill boxes on the desk</i> v -----
180	A:	>Ok< so now I've got all of ↑this now we can talk about the
181		medicine.
182		(3.0) <i>looks at P while talking</i> v -----
183	A:	<u>Last</u> ↑ <u>time</u> did you get vitamin tablets?
184	P:	Yes.

This extract clearly illustrates the sensitivity of the pharmacist to the 'status' of her conversational partners. She is aware of their levels of concentration and participation and she adapts her dialogue accordingly. Instead of trying to attract the patient's attention, she merely turns her attention to the father and then back to the patient when he indicates that he is ready to rejoin the interaction. A similar example of this sensitivity towards the patient's needs is provided in *Section 7.2.1*, where the pharmacist provides a running commentary throughout the interaction and ensures that the patient is aware of her intended actions.

Mirror symmetry is a phenomenon that is commonly observed in conversations. Communication partners mirror each other's gesture and posture while they talk and there is a rhythmic symmetry which exists in every interaction (Boker & Rotondo, 2003). When there is a high level of affiliation between the health professional and patient, their non-verbal behaviours tend to be reciprocated (Street & Buller, 1987).

Various reasons for this symmetry have been postulated. One such theory suggests that this symmetry allows interlocutors to assess the somatosensory inner state of the communicative partner i.e. that by being aware of the partner's gestures, body language and facial expressions, one may be able to gain information about their cognitive states (Boker & Rotondo, 2003). Schmid Mast (2007) points out that when we make interpersonal judgements of communicative partners, these judgements are largely based on non-verbal cues, information and perceptions.

This theory can be applied to both extracts presented above: by alternating her eye gaze and 'checking' on the patient's responses, the pharmacist gleans information which may alert her to the patient's level of understanding, or points at which the patient may become confused. It would appear that she is looking for both non-verbal responses (e.g. a head nod) and verbal responses which may affirm understanding or give an indication of the need to clarify explanations. In addition to monitoring the patient's responses, the pharmacist may also be analysing her facial expressions, which may also provide clues as to whether or not the patient has understood the information.

However, it must be noted that cross-cultural barriers, cultural variations in non-verbal communication, or even gender differences in non-verbal behaviours may negatively affect the process of mirror symmetry. For example, in Tswana culture, it is a sign of respect to maintain a downward gaze when addressing an elder (Kasanga & Lwanga-Lumu, 2007). Therefore, mutual eye gaze between pharmacist and patient may not take place as would be expected based on western politeness norms. Although the pharmacist is continuously assessing the 'state' of

the patient and his/her responses, the patient's response may not be what is expected by the pharmacist or the patient may not produce the desired response based on the pharmacist's cultural norms. For this reason, it is important for clinicians to become aware of the existence of cultural differences in non-verbal communication behaviours.

The examples presented above are particularly important because they provide evidence of the fact that pharmacists are aware of patients' status, be it physical, psychological or cognitive, as well as patients' responses to information and instruction. Similar pharmacist behaviours are noted across the data corpus. An awareness of such factors allows the pharmacists to consider the patients' needs and tailor information giving and communication styles according to these needs.

7.3.6 Summary of section

This section presented evidence of various non-verbal behaviours which appear to play an important role in the interactions. These include the following:

- Visual demonstration and the use of props (pill boxes and containers, labels, brown paper bags, diary cards). The use of these strategies serves to reinforce explanations and provide communicative realism. Patients are able to use props to demonstrate understanding of information and this lessens the impact of linguistic barriers.
- Various types of gestures which are used by pharmacists to supplement instructions and by patients to demonstrate understanding.
- Body posture which is used to signal turn taking shifts or the end of turns.
- Emphasis of information and instructions using combinations of varied intonation, pauses, slower speech rate, softer speech, code switching, gesture and posture.
- Eye gaze which establishes and maintains joint attention.

In particular, pharmacists' sensitivity to patients' non-verbal behaviours appears to be an important strategy used to verify patients' understanding, attend to patients' communicative needs and adapt their communication style accordingly.

The following section will present a discussion of several strategies which are used to verify patients' understanding of information and instructions. This action is vital in terms of its implications for adherence to the ARV regimen.

7.4 Checking understanding

The pharmacists' verification of patients' understanding of instructions forms an important part of each interaction. Indeed, during the interviews with the researcher, the pharmacists all indicated that they believe that misunderstanding of instructions plays a part in patient non-adherence and that ensuring understanding is vital in promoting adherence. Various direct or indirect strategies used by the pharmacists to check each patient's understanding of information or instructions are consistently evident on multiple occasions in all of the recorded interactions. These will now be discussed.

7.4.1 Strategies used to verify patients' understanding of ARV instructions

Most often, verification of understanding takes the form of an open-ended request for the patient to "tell" or "show" the pharmacist how they will take or are taking their ARV medications. As Pilnick (1999) points out, an actual demonstration of understanding is preferable to a mere assertion of understanding. This request to demonstrate understanding is sometimes repeated several times during an interaction. By issuing such a request, patients are required to demonstrate their understanding and the pharmacists are able to ascertain directly whether the patients have understood the dosage instructions for each drug. On several occasions, patients' responses reveal a misunderstanding or a lack of understanding of an instruction and pharmacists are then able to clarify and repair the misunderstanding.

patients' implicit understanding, on indirect demonstrations of understanding by patients, or on assertions of understanding. In this study, however, the pressure felt by the pharmacists to ensure understanding of the ARV dosage instructions appears to be a driving factor which supersedes any possible insult that patients may feel.

In many of the interactions, the pharmacists also ask questions to verify understanding of specific content, rather than only using an open-ended invitation to demonstrate understanding. These include variations of questions such as “what time do you take the medicine?”, “how many pills do you take?”, “do you know this medicine?” or “what is the name of the medicine?”. The extracts below illustrate some of these specific questions (highlighted in bold). They also show how the pharmacists' use of a direct question often provides scaffolding to patients which enables them to demonstrate knowledge of the dosage instructions quickly and easily.

Extract 064: Patient 8 (Ph B, 2nd visit)

- 40 B: G***** show me quickly **which ones is the one that you take twice a**
 41 **day and which is the one that you take at night?**
 42 P: Eh this one=

 ^
 reaches out and picks up pill bottle
 43 B: =↑mm=
 44 P: =at ↑night=

 ^
 shakes bottle
 45 B: =↑mm
 46 P: This twice a day.

 ^
 picks up a bottle and box and holds them up

Extract 065: Patient 18 (Ph A, 1st visit)

- 190 A: And the other ↑one is the ↑Bactrim, **do you remember that one?** The
 191 white ones?

192		(3.0)		<i>smiles</i> v

193	A:	↑Oops this one. Do you know this? When do you take them?		
194	P:	In the morning.		
				<i>nods</i> v

195	A:	In the morning. How many?		
196	P:	Two.		

Extract 066: Patient 21 (Ph B, ? visit)

172	B:	Ok: and tell me what is the quantity that you giving of each?		
173	M:	Which?		
...				
				<i>touches each box with flat hand</i> v v v v

176	B:	Of every, tell me this one this one this one <u>and</u> this one.		
177	M:	Ok.		
178	B:	How many are you giving the baby?		
179	M:	mm. This one is one point s- eh this one is four=		

				^ ^ ^
				<i>scrunches points to box points to next box</i> <i>face</i>

Extract 067: Patient 25 (Ph E, defaulter)

162	E:	With these ones, Papa, you cannot afford to skip a dose. Do you	
163		still remember how you drink them?	
164	P:	Yes, in the morning and at night.	

During patients' explanations of the dosage instructions, pharmacists usually provide prompting and scaffolding. Scaffolding is a term frequently used in the fields of education and learning. It is "the use of some 'external support' that makes a particular learning process possible and...can be discarded after the learning has taken place" (van Geert & Steenbeek, 2005, p. 116). This may take

the form of constant verbal and non-verbal reassurance, repetition or expansion of what the patient says.

In the extract below, the prompts or scaffolds provided by the pharmacist appear to serve a dual function in that they also provide reassurance to the patient that she has understood the information correctly. The overlaps which occur between the patient's and pharmacist's speech (lines 202, 204) illustrate the involvement of the pharmacist in the patient's explanation as she checks each step in the patient's explanation. In line 206, the pharmacist revises what the patient says in line 205, thereby supporting the patient's explanation but clarifying what she has said.

Extract 068: Patient 11 (Ph B, 1st visit)

- 201 P: Then on the ↑night I take [↑one

 ^
points to 3TC box
- 202 B: [↑One
- 203 P: And [I take one.

 ^
points to d4T box
- nods nods, smiles*
 v v
- 204 B: [You take one. ↑Ok (.) daar's ↑hy

there we are
- 205 P: Mm this I forget (.) to drink twice. Yes.

 ^
puts hand on NVP box
- smiles*
 v
- 206 B: Ja. You don't forget to drink it twice, [you know you should
 Yes. -----
 ^
holds up index finger
- 207 take it once.
- 208 P: [Ja.
 Yes

In addition to requesting a demonstration of understanding, pharmacists employ certain indirect strategies to verify patient understanding, including the frequent use of questions which require a simple yes/no assertion from the patients. These questions are usually a variation of “do you understand?” (e.g. lines 168, 170 in the extract below). Again, this method obtains only an assertion of understanding from a patient and does not elicit a demonstration of comprehension.

In cross-cultural interactions and institutional interactions in general, patients may respond positively to such questions out of politeness or deference to the authority of the health professional, making this an unreliable verification strategy (Meeuwesen et al., 2007). Indeed, it has been documented that during interactions in which health professionals and patients are not of the same culture, patients may respond politely to questions with an affirmative ‘yes’ even when they mean ‘no’ (Cass et al., 2002). Ellis (2004) notes that Zulu patients will reply positively when asked if they understand what was discussed during a consultation, out of respect for the status of the health professional, even if they have not understood. Therefore, asking patients whether they understand may not provide pharmacists with a true reflection of understanding of instructions.

Extract 069: Patient 14 (*Ph B, ? visit*)

- 168 B: Ok? You understand this [one?
 169 M: [Yes.
 170 B: You’re very clear on this [one?
 171 M: [Yes.
 172 B: °Ok. Let me go (onto) the next one.°

Pharmacists sometimes repeat these questions rather insistently, as if to check whether the patients are indeed satisfied with the information or instructions provided and to give the patients multiple opportunities to request clarification or indicate a misunderstanding. On occasion, patients do use the opportunity to request clarification of information and the pharmacists then initiate repair

sequences²⁰. These clarification sequences are also sometimes used by the pharmacists to provide further explanation or repetition of instructions, or to recheck patients' understanding of instructions.

Another common strategy involves the use of so-called 'response solicitations' in a tag question position, such as "nè?", "ok?", and "isn't it?". As discussed in *Section 7.1.2*, these appear to fulfil several functions, including checking whether the patient has understood the information, checking whether the patient is following the discussion and inviting the patient to request clarification of information.

Interestingly, a few instances exist in which patients use a response solicitation. For example, in the extract below, the patient gives a response (lines 116-117) to the pharmacist's question but she appears to be unsure of the information. She then asks a question and attaches a response solicitation ("nè?") to the end of her question. The pharmacist responds and affirms that the patient is correct (line 119). This would appear to indicate that the patients are not offended by the pharmacist's use of this somewhat interrogative element, but rather that both patients and pharmacists know the importance of ensuring understanding and collaborating to achieve this common goal. The response solicitation is a way of obtaining a response from the other party and ensuring that the other person is following the discussion.

Extract 070: Patient 13 (Ph A, 2nd visit)

- | | | |
|-----|----|--|
| 115 | A: | M****, weet jy van die kaartjie om in te vul as jy die medisyne vat?
<i>do you know about the little card to fill in if you take the medicines?</i> |
| 116 | P: | Ek het hom sommer nou die dag gegee (om) [maar ek weet nie dit der der hier
<i>I just gave it the other day but I don't know it der der here</i> |
| 117 | | is it mos in die aand, nè?
<i>is it in the evening</i> |
| 118 | A: | [↑ok |
| 119 | A: | °Dis reg°, kom ek wys jou mooi.....
<i>That's right, come I'll show you nicely</i> |

²⁰ See *Section 7.5 - Repair Sequences* below for a description of this phenomenon.

Checking understanding occurs at different intervals in the interactions. In particular, with returning patients (i.e. not first-visit patients), pharmacists tend to ask patients to provide a demonstration or an explanation of how they are taking their tablets. With new patients, the instructions are provided by the pharmacists and the patient is then requested to tell the pharmacist how they should take the regimen. Misunderstandings usually emerge quickly and the pharmacists then provide another explanation of the information, sometimes using a different manner of explanation (e.g. cutting up the pill sheets into individual pills). The patient's understanding is then reassessed and the interaction proceeds in a back-and-forth manner until the pharmacist is satisfied that the patient understands the instructions.

Pharmacists also check their understanding of information provided by patients, usually in response to a question. For example, if a pharmacist asks a question and the patient provides an answer, the pharmacist sometimes repeats the information in the form of a question. This strategy appears to perform several functions and is used to verify whether the pharmacist has understood the patient's information correctly, to request clarification from the patient, or to repeat verbally what the patient has expressed non-verbally.

On several occasions, patients volunteer demonstrations of their understanding without being requested to do so by the pharmacist. Some patients appear keen to show their knowledge of the treatment regimen, while others want to verify that they have understood correctly by giving the pharmacist an opportunity to correct them if they are wrong.

In the extract below, the pharmacist begins to give an instruction (line 61). The patient interrupts her, however, and states the times at which he is taking his pills (line 62). The pharmacist immediately joins in and allows him to demonstrate his understanding, providing scaffolding while he explains (lines 62-72). When he is finished explaining, the patient places his hands in his lap (line 73). The pharmacist affirms that he has understood the dosage instructions correctly (line 74). She seems to realise that the patient is perhaps unsure of himself and needs to

check his understanding, or that he wants to demonstrate his competence in order to receive praise from her. Regardless of the reason, she allows him to do this.

Extract 071: Patient 12 (*Ph A, exp pt*)

- 61 A: Ok. What I want to tell [[↑]you-
holds up index finger
 v
- 62 P: [⁰It's eight, eight, nine.⁰
moves pen over each pot
 v v v
- 63 A: [[>]Ok-<
points to each of the 3 ARV pots individually
- 64 P: [Eight morning [eight night, eight morning and eight at night.=
points to box with pen
 v
- 65 A: [eight [↑]morning
points to 3TC points to a box points to 3TC points to box
 ^ ^ ^ ^
- 66 A: =gabedi ka letsatsi [yes.
puts hand on 3TC pot, pulls it towards her
 v
- 67 P: [Ja.
 Yes.
 ^
 nods
- 68 A: This one?
points to box
 v
- 69 P: Two times a [day.
 ^
points to box
 nods puts hand over box, then over 3TC pot
 v v v
- 70 A: [Also gabedi ka lesatsi, [↑]yes
 twice a day

In line with Pilnick's study (1999), the pharmacists in this study wait for a response from the patient when they ask about understanding, or they use a response solicitation to elicit a response before continuing with their explanation of dosage instructions. For example, in *Extract 022* (p. 196), the pharmacist gives an instruction (line 87), but receives no reply from the patient (line 88). She repeats the instruction and attaches a response solicitation, 'nè', to prompt a response from the patient (line 89). In line 90, the patient provides the response and the pharmacist continues with her explanation.

During the interviews with the researcher, the pharmacists indicated that verification of patients' understanding often necessitates an awareness of more subtle misunderstandings and cross-linguistic barriers. For example, careful monitoring of question-answer sequences (and especially patient responses) may provide clues that a patient has not understood the language used by the pharmacist, as reported in the extract below.

Extract 073: Pharmacist B interview

... you normally ask them a question that's not a yes or no answer, and they answer you yes and then you know [that they did not understand]. You actually wanted the answer, so that's when you also know.

The importance of regularly verifying understanding using questions is undeniable. Pharmacist E provides insight into the usefulness of routinely asking patients whether they have understood or eliciting a demonstration of understanding and how these methods can alert the pharmacists to the presence of misunderstandings, both quickly and effectively.

Extract 074: Pharmacist E interview

You ask them what you have said ((laughs)). Then sometimes when you just when you ask her she will just look at you then you will see that she doesn't understand. Then you have to start all over again.

7.4.2 Evidence of comprehension of instructions

The post-interaction interviews between the research assistant and patients and/or caregivers provide insights into their level of understanding of ARVs and the dosage instructions, as well as their understanding of HIV/Aids-related concepts. Most patients indicated that they were satisfied that they had understood the pharmacist and that the pharmacist had understood them.

Several patients felt that they had successfully understood the instructions and the overall meaning of what the pharmacist explained to them. However, language barriers sometimes interfered with patients' ability to comprehend the instructions fully. Patient 2, for instance, indicated that she understood some of what was said to her and she was able to comprehend the overall meaning of what the pharmacist was saying. *Extract 011* (p. 176) provides some evidence of this patient's difficulty in understanding and speaking English, as well as a dependence on the pharmacist's code switching behaviours. The patient also speaks in Setswana to the pharmacist and relies on an assumption that the pharmacist will understand her.

Extract 075: Patient 2 interview (conducted in Setswana, translated into English)

RA: *But do you understand when the doctor speaks to you in English?*

P: *Yes, but here and there.*

RA: *Do you eventually get the overall meaning of what the pharmacist is explaining to you?*

P: *Yes, I do.*

The responses from some patients revealed a reliance on what they had been told by nurses or counsellors prior to their consultation with the pharmacist. Several patients indicated that they tried to match what they had been told previously about the ARVs to what the pharmacist said. The patient in the extract below had trouble in understanding the pharmacist due to language barriers and she required the assistance of an ad hoc interpreter. Therefore, the fact that she had received information during the counselling sessions became essential in terms of her ability to make sense of what the pharmacist told her.

Extract 076: Patient 3 interview (conducted in Setswana, translated into English)

I had an idea of what she was trying to tell me because the counsellor and the nurse had already explained the medicines to me...and both of them were explaining in Setswana, that's what made it easy for me to understand...even when the pharmacist explained I was just trying to relate it to what the counsellor and the nurse had told me before.

In addition, patients appeared to feel more confident about their interaction with the pharmacist when they had received information prior to the consultation. The patient in the interaction below reported that she was able to understand and speak English fluently. Despite being able to understand what the pharmacist told her without any difficulty, she felt more confident about her level of understanding because she had heard the information on several occasions prior to her consultation with the pharmacist.

Extract 077: Patient 4 interview (conducted in Setswana, translated into English)

...especially from the doctor I consulted with the first time I came. He explained everything to me about HIV/Aids and the viral load...what helped me was that I was seen by a counsellor first.

In general, patients showed a lack of understanding of basic HIV/Aids-related terms, concepts and abbreviations such as CD4 count, viral load, ARV, etc. For example, in *Extract 036* (p. 211) the patient demonstrates a lack of understanding of the concept of CD4 and the comments presented below also illustrate this:

Extract 078: Patient 5 interview (conducted in Setswana, translated into English)

RA: *On your first consultation, were there words that you did not understand?*

P: *Yes.*

RA: *Do you perhaps remember some of the words?*

P: *No, I knew nothing.*

RA: *Try to remember specific words that, when mentioned, you got confused.*

P: *Abbreviations like ARV... and c-c...*

RA: *You mean CD4?*

P: *Yes that one.*

Extract 079: Patient 19 interview (conducted in Setswana, translated into English)

I only knew what CD4 was, but viral load and the rest I didn't know.

Extract 080: Patient 24 interview (conducted in Setswana, translated into English)

P: ...there are many words, but I can't remember them, like virus, what is a virus?

RA: Mogare.

P: Okay, now I see.

It appears that patients are often aware of their lack of understanding – sometimes indicating anxiety about this, as in the extract below – but they do not feel confident or comfortable enough to request clarification from the pharmacist. Again, this may be linked to a culturally motivated need for patients to maintain respect for the pharmacist as an authority figure. Interestingly, the patient in the extract below indicated satisfaction with the level of care she had received at the hospital and felt able to volunteer information about side effects and other concerns at regular intervals during the interaction (see *Extract 034* p. 210 and *Extract 072*, p. 254), yet she did not feel able to ask for clarification about the concept of CD4.

Extract 081: Patient 22 interview (conducted in Setswana, translated into English)

That CD my friend, I still don't have a clue what it means. It really worries me. I was told it was 40... my daughter explained that I was dying because my CD4 was very low, however I was not sick at all.

One patient had been told about the immune system and other related concepts, but she had not understood that she is HIV positive and that she has Aids, apparently because the doctor had not explained this clearly to her. Her caregiver explained the situation to the researcher, as evidenced in the extract below. Although the patient indicated to the research assistant that she is unable to speak or understand English, several extracts from her interaction with the pharmacist (see *Extracts 098* (p. 284), *107* (p.299)) indicate that she is able to participate in interactions with the assistance of an ad hoc interpreter and she demonstrates good understanding of dosage instructions despite the presence of language barriers. Therefore, this

‘misunderstanding’ may have arisen because the doctor did not clearly explain the concept of HIV, rather than because of the existence of a language barrier.

Extract 082: Patient 9 interview (*caregiver*) (conducted in Setswana, translated into English)

When patients get their results, the counsellors put a lot of emphasis on explaining the immune system and the viral load, as opposed to the cause...this has caused misunderstanding...she is asking me why the doctor didn't tell me I have Aids, he just told me about my CD4 count and viral load... I wish counsellors, nurses, doctors and others working with HIV/Aids patients would explain clearly how the viral load is related to being positive...counsellors should be trained properly and patients should be taught the terminology and understand what they mean. She thought she had a disease called CD4 but did not relate it in any way to being HIV positive... we don't have words like that in Setswana.

These findings were mentioned by the researcher to the pharmacists during the feedback session. The researcher stressed, however, that she does not consider the patients' lack of understanding of terms and concepts to be the pharmacists' concern, but rather that this is a general issue which needs to be addressed by the Wellness clinic counsellors and staff as a team. Soon after the feedback session, Pharmacist A made posters, both in English and Setswana, to explain the concepts of CD4, viral load and ARV to patients. These posters were displayed prominently in the Wellness pharmacy (see *Appendix 11*).

When asked what they understood about the ARVs and the dosage instructions, most patients were able to relate basic instructions to the research assistant, such as the pills must be taken twice a day at the same time, the pills should not be taken with alcohol or fatty foods, as well as the importance of adherence. A few patients mentioned that ARVs do not cure HIV/Aids but that they boost the immune system and decrease the viral load. The following response is typical of what many patients related to the research assistant when asked what the pharmacist had told them.

Extract 083: Patient 6 interview (conducted in Setswana, translated into English)

My medicines are not going to cure this disease; they are just helping my immune system become stronger and making the virus smaller. When on this ARV regimen it's like a lifetime commitment and you have to drink them at the exact same time. I cannot drink alcohol, smoke or eat fatty foods whilst on this medication.

Several patients also mentioned the importance of safe sexual practices, not drinking herbal medicines and eating a healthy diet, as evidenced in the extract below. However, these issues were not discussed during interactions with the pharmacist, which implies that patients have recalled what they were told by the counsellors or nurses and have merged this information with the pharmacist's explanations.

Extract 084: Patient 7 interview (conducted in Setswana, translated into English)

This medication I will drink for the rest of my life. I have to drink it at the same time and not skip any dose. I am not supposed to drink alcohol or take herbal medicines with these medicines. I always have to use a condom when having sexual intercourse.

Interestingly, even those patients who indicated that they struggled to understand English or Afrikaans did appear to understand basic principles about how to take the ARVs. For example, Patient 2 experienced some degree of difficulty in speaking and understanding English during her consultation with the pharmacist (as evidenced in *Extract 011* p. 176), yet she related the following information in the interview with the research assistant.

Extract 085: Patient 2 interview (conducted in Setswana, translated into English)

- P: *The first time I came I did not receive ARVs, I just got the other medication. The second time when I came...I was given my medication. She told me to take them at exactly the same time and I should not skip any dose and that if I decide to drink the pills at 9 am and at 9 pm it should be the same time everyday for the rest of your life.*
- RA: *And what are the things you're not supposed to take whilst taking this medication?*
- P: *Alcohol and no smoking. I am also not supposed to drink herbal medication from the traditional doctors... She said my body is still adjusting itself to get used to the*

medication and that with time I will be fine...she said that I must drink a lot of water.

In addition, some patients who appeared particularly ill during their consultations were able to recall instructions and information correctly. For example, Patient 18 appeared to be fatigued and regularly lost concentration during his consultation with the pharmacist (see *Extract 062* (p. 241)). However, when prompted, he was able to relate the following information to the research assistant:

Extract 086: Patient 18 interview (conducted in Setswana, translated into English)

P: *When I drink them at eight in the morning I also drink them at eight in the evening... I was told to avoid fatty foods.*

RA: *And what about alcohol and smoking? Did she tell you?*

P: *Yes, I know.*

Therefore, based on the responses provided by patients during the semi-structured interviews, it would appear that many of the basic concepts associated with ART are successfully conveyed to patients by both the pharmacists and other professionals working in the Clinic. In addition, it would appear that the patients in this Clinic have a better understanding of HIV/Aids-related concepts when compared to patient groups at other sites. For example, Evans' (2007) project, conducted with 45 caregivers of children with HIV/Aids in the Western Cape, showed that patients did not understand concepts such as how the ARVs work or the importance of adherence. This implies site-specific differences which appear to be mediated by various interactional, institutional and contextual factors.

7.4.3 Summary of section

This section described various strategies which are utilised by pharmacists in order to verify patients' understanding of dosage instructions. This verification formed an important part of each interaction. Strategies include:

- Open-ended requests such as “tell me” or “show me” which elicit a demonstration of patients’ understanding rather than a mere assertion of understanding. This method is a particularly useful way of identifying misunderstandings and this allows the pharmacists to provide immediate clarification. Patients are often prompted by pharmacists while they explain dosage instructions.
- Specific questions to verify understanding of specific content items.
- Yes/no questions such as “do you understand” – however, these questions may elicit positive but not necessarily honest responses from patients.
- Response solicitations in the form of tag questions which provide patients with an opportunity to request clarification and allow the pharmacist to ascertain whether the patient is following the discussion. Pharmacists usually wait for a response from a patient before continuing with an explanation.

Analysis of evidence of patients’ understanding revealed reliance by some patients on the overall gist of the pharmacists’ discussion rather than understanding of specific details, especially in interactions where a language barrier is present. Patients also tend to rely on information that they have received previously from counsellors and this is often integrated with the pharmacists’ discussions. A lack of understanding of basic HIV-related concepts by patients is evident, but patients generally display good understanding of basic ARV-related concepts, dosage instructions and the importance of adherence.

The following section will provide a discussion of strategies utilised by both pharmacists and patients in cases of communication breakdown, as well as various repair sequences.

7.5 Repair sequences and strategies

Analysis reveals that both pharmacists and patients appear able to initiate successful repair sequences when a breakdown in communication or a misunderstanding occurs. Repair involves an organised way of resolving some kind of trouble in the process of an interaction (ten Have, 2000). Repair may involve *initiation* of a repair sequence and resolution of a breakdown in communication with a successful *outcome*, or it may involve abandonment of the trouble spot (Schegloff, 2000).

A strong feature of the pharmacist-patient interactions in this study is the apparent sensitivity of the pharmacists to breakdowns in communication with patients and caregivers. Breakdowns in understanding are often revealed through verbal, non-verbal and prosodic responses from patients. Several patients in the data corpus are not fluent speakers of English and the pharmacists appear sensitive to the existence of language barriers and the potentially negative impact which these barriers may have on the outcomes of communication.

This section will discuss various successful repair sequences and strategies present across the data corpus, as well as what occurs during a failed repair sequence and an awkward moment.

7.5.1 Patient-initiated repairs

The most common form of repair strategy present across the data corpus is an other-initiated repair, in which a patient requests clarification or further explanation of information not understood and the pharmacist performs the repair through the provision of clarification (ten Have, 2000). Patients are usually able to identify when they do not understand information and request clarification or ask a question, thereby initiating a repair sequence.

During the interviews with the research assistant, most patients indicated that they felt comfortable to ask questions and request clarification from the pharmacist. Analysis of the data corpus reveals that some patients appear to be more assertive during interactions and may request clarification on numerous occasions. A few patients do not initiate any repair sequences or request clarification on only a few occasions.

The use of an other-initiated repair is evident in the extract below. In line 109, the pharmacist begins her first explanation of how the patient should take the ARVs. She states the instructions for all three drugs, using the boxes as props (lines 109-114). The patient immediately requests clarification in line 115 (indicated in bold) and she uses the appropriate drug box to clarify her request non-verbally. The pharmacist responds to this patient-initiated repair strategy by providing the requested clarification. She also takes the opportunity to repeat this clarification in line 118. However, the patient rather hesitantly repeats the pharmacist's clarification (line 117), which appears to alert the pharmacist to the fact that the patient is not fully understanding the ARV instructions and requires further explanation. Therefore, she initiates a second explanation of the dosage instructions and she prefaces this by telling the patient that she will attempt to "explain differently" (line 118).

Extract 087: Patient 11 (Ph B, 1st visit)

		<i>puts hands on 3TC and d4T boxes</i> v	
109	B:	----- These two are a bit easier than this one, for the first fifteen days. You going to <i>taps box with pen</i> <i>points index finger left</i> <i>points index finger right</i> v v v	
110		----- take one ↑tablet eight o'clock in the ↑morning one tablet eight o'clock at night. <i>taps NVP box with pen</i> <i>points to label with pen</i> v v	
111		----- Exactly the same as these two. Then <u>this</u> one, ↑mommy I wrote the label there <i>moves hand up and down</i> v	
112		----- for you. One ↑tablet eight o'clock in the morning. For the first fifteen days.	

113		Until the fourth of July. Then you going to start taking it together with these
114		two. One tablet eight o'clock in the ↑morning one tablet eight o'clock at night.
115	P:	I'm going to start to drink this one?

		^
		<i>puts hand over 3TC and d4T boxes</i>
		<i>holds hand out towards boxes</i>
		v

116	B:	Ev- all of ↑this
117	P:	(all [of this]).
118	B:	[all of this. Ja. Let me try and explain differently.]
		<i>Yes</i>

7.5.2 Pharmacist-initiated repairs

Pharmacists repeat instructions, clarify information in a different way, or use different methods of explanation when a patient seems unsure of the information presented. When patients appear to have difficulty with understanding English or do not respond to a question presented in English, the pharmacists regularly repeat questions in Setswana or ask them in a different way until they receive a response from the patient.

On many occasions across the data corpus, pharmacists use an extended version of a self-initiated other-repair strategy to request clarification or further information from patients. In a self-initiated other-repair sequence, the pharmacist asks for clarification of information and the patient provides this clarification, i.e. the pharmacist requests assistance from the patient to repair the breakdown in understanding (ten Have, 2000). The following extract is a typical example of this practice. The pharmacist asks a question about who is giving the patient the ARVs (lines 4-5) and the caregiver responds non-verbally that she is giving the tablets (line 6). The pharmacist is unsure of the caregiver's answer and requires clarification, so she initiates a repair and asks for clarification (line 7), which the caregiver provides (line 8). This repetition of a clarification request (often a repetition of the same question) is a common practice across the data corpus.

and how important it is for both parties to work towards repair and understanding of information. A number of repair sequences exist which deviate from the general trends of repair noted in the interactions; these will now be discussed.

There are a few instances in the data corpus in which a subtle misunderstanding occurs, sometimes on the part of both pharmacist and patient. However, these are generally repaired successfully. The extract presented below demonstrates how the pharmacists are required to be alert to patients' verbal and non-verbal responses, as well as any demonstrations of understanding, in order to identify any misunderstandings or confusions which require clarification.

In the extract below, the patient has been given a new medication to replace one of the medicines he has been taking previously. The pharmacist gives the dosage instruction for this drug (line 53) and then asks the patient if he understands (line 56). The patient nods gratuitously (line 56), but does not seem to completely understand because he continues to stare at the pot and then reaches out to pick it up (line 57). The pharmacist appears to sense that the patient is not satisfied, so she indirectly offers him an opportunity to raise a concern (line 58). His verbal and non-verbal response (line 59) seems to indicate that he is still confused, but he does not request clarification from the pharmacist. Again, the pharmacist senses the confusion and this time explicitly asks him if he understands (line 60). The patient answers that he does understand and he adds a statement which provides a demonstration of his misunderstanding – he thinks the old medicine and the new medicine are the same thing (line 61).

The pharmacist initially agrees with the patient's answer without considering it carefully (line 62) but she quickly realises that he has not misunderstood and that she needs to clarify her explanation (line 64). She then clarifies that the old and the medicines are not the same thing (lines 64-66). In response, the patient provides only minimal acknowledgements (lines 67, 68), so the pharmacist uses a response solicitation (line 69) to offer him the opportunity to request clarification. However, he indicates that he is satisfied with the explanation (line 70) and his response appears more confident (compared, for instance, to his response in line

59). The pharmacist provides some additional instructions (lines 71-73) and asks the patient if he understands (line 73). Again, he indicates verbally and non-verbally that he is satisfied with the answer. Therefore, this subtle misunderstanding appears to have been identified and repaired successfully.

Extract 090: Patient 15 (*Ph B, exp pt*)

		<i>picks up pot</i>	<i>puts pot down on desk</i>	<i>taps pot with pen</i>
		v	v	v
		-----	-----	-----
53	B:	And <u>this</u> one, Stocrin six hundred, still eight o'clock at night. One eight		

				^
				<i>nods</i>
54		o'clock at night.		
55	P:	Ok.		

		^		
		<i>nods</i>		
56	B:	You understand, °G*****°?		

		^		
		<i>nods</i>		
		<i>crumples up label backing</i>		
		v		

57		(2.0)		

		^		
		<i>puts hand out towards pot</i>		
			<i>holds out splayed hands over pot</i>	
			v	

58	B:	So it mustn't make you confused, ↑nè		

				^
				<i>nods</i>
59	P:	Okhh.		

		^		
		<i>picks up pot</i>		
60	B:	You understand?		
61	P:	Ja I understand. Ja it's the same thing.		
		<i>Yes</i>	<i>Yes</i>	
		-----	-----	
		^	^	
		<i>nods</i>	<i>puts pot down on top of box</i>	

Extract 091 provides a rare illustration of a failed repair in the data corpus. Both participants appear to have different agendas in this interaction and these agendas do not necessarily correlate with each other²² (Note that in this instance, the term ‘agenda’ refers to the patient’s and health professional’s goals for the interaction as a whole). The pharmacist and caregiver seem impatient with one another and are not attentive to each other’s communication needs. Despite numerous attempts from the caregiver to request clarification from the pharmacist, this is never provided.

The extract is prefaced with an explanation of dosage instructions by the pharmacist. She begins to give an instruction (line 164) and the caregiver overlaps the pharmacist’s turn with a request for more information, presumably regarding the time at which the medicine should be given (line 165). The pharmacist responds rather impatiently and her response, which refers to taking the medicine after food, is not directly related to the caregiver’s question about time (lines 166-167). The pharmacist uses a response solicitation to provide an opportunity for the caregiver to request clarification (line 167), but she does not pause to allow the caregiver to respond. The caregiver does try to respond (line 168) but the pharmacist has already begun with her next instruction (line 169). An overlap occurs and the caregiver’s request for clarification is cut off (line 168).

The pharmacist provides information about the pill packets being the same (line 169). This time, the caregiver interrupts the pharmacist. In line 171, she repeats what she started to say in line 168 – possibly a request for clarification or an attempt to verify the dosage time. This is cut off by the pharmacist, who provides a pre-emptive response without knowing what the caregiver is trying to say (line 172). She continues to discuss the pill packets.

The caregiver’s non-verbal response is of interest: she appears to give up on trying to obtain clarification and starts packing away her consent form, almost as if she is preparing to leave the consultation (line 172). She tries to pick up the pill

²² For further discussion of this case, refer to *Chapter 9, Section 9.2*.

packets (perhaps to pack them away) while the pharmacist is pointing to the labels on the packets and providing reassurance (line 173). The caregiver then stops trying to pick up the packets and looks intently at the label (line 174). She interrupts the pharmacist with another request for information about another pill packet (line 175). Instead of supplying the requested information, the pharmacist responds with an attempt at humour (line 176) which is not shared by the caregiver. She reassures the caregiver that the instructions are available on the labels (lines 176-177). The pharmacist moves on to a discussion of the ARV instructions and does not answer the caregiver's question in line 175.

Extract 091: Patient 10 (Ph B, 3rd visit)

- 164 B: [(This one)
- 165 C: [(Anytime) which I I mention to the doctor (by eight o'clock)?
- 166 B: Ja ja it's fine. As long as he (.) he's had his ↑breakfast and he takes his
Yes yes
- 167 ↑tablets then it's fine. Ok?
- 168 C: [(So it's)-
flips through vitamin packets
v
- 169 B: [And this is three packets, nè? But it's everything is the same in here.
^
touches pill packets
- 170 B: [(Everything)-
- 171 C: [So that's every-
- 172 B: Morning. So the one is ↑finished you going to the ↑next you going to the
^
puts rolled up consent form in handbag
points to label on pill packet
v
- 173 next. It's written there for you, ↑mommy (.) it's written there. Two
^
tries to pick up pill packet while B is touching it
- 174 tablets [in the morning.
^
leans forward, tries to read label

175	C:	[Ee (.) °(what about) this one? ° Yes. ----- ^ leans forward, looks at another packet
176	B:	°Ja you don't have your spectacles.° ((chuckles while talking)) But it's Yes
177		written there so if you ↑forget (.) you can read. Ok? ----- ^ picks up pill packets, stares at them
178	C:	Ok ok. (That's helpful).

Extract 092 provides an interesting example of an awkward moment that arises from discussion around a potentially embarrassing topic. Epstein, Frarey and Beckman (1999) note that awkward moments frequently arise in discussions around HIV/Aids because it is often an emotionally charged topic. These moments are usually characterised by uneasiness, embarrassment, nervousness or distraction which may disrupt the flow of communication, as well as fractured language including hesitations, reformulations, vague answers, abandonment of a topic, use of euphemisms, inappropriate humour, ambivalent statements, abrupt transitions between topics, uncomfortable silences, avoidance of certain topics, or a lack of pursuit of patients' cues or stated concerns (Epstein et al., 1998).

As will be demonstrated, some of these characteristics are evident in the extract, especially on the part of the pharmacist. The extract also demonstrates the level of assertiveness which is sometimes required by patients, who must identify their need for clarification or further information and persist in requesting it from the pharmacist in order to understand the dosage instructions fully. (Note that the written transcription does not fully capture the sense of embarrassment on the part of the pharmacist, which is more evident in the original video through features such as intonation and facial expression. On the video, there is a sense that the pharmacist is desperately trying to move away from the topic of the vaginal tablet towards the 'safe' topic of ARVs. She appears somewhat irritated by the patient's questions.)

The pharmacist begins her explanation of a vaginal tablet that the patient needs to take. She appears to be embarrassed while discussing this topic and rather hurriedly provides a brief instruction that the patient should “put [it] in” (line 60). It would appear that she assumes a certain level of education or understanding on the part of the patient, because she uses terms such as “vaginal” and later, “applicator”. She also assumes that the patient will know where to insert this tablet – although she clarifies that the patient must not drink the tablet (line 61), she does not explicitly mention that it needs to be inserted into the vagina.

The patient responds with a minimal acknowledgement (line 62) and does not request clarification at this stage, presumably because she assumes that further explanation and instruction will follow. The pharmacist proceeds to show the patient the applicator and tablet contained inside the box (line 63) and she demonstrates how to remove the packaging from the tablet (line 65). At this stage, the patient becomes more interested in the applicator and she picks it up (line 65). It seems that she is either unfamiliar with such a tablet and its insertion, or that she requires more information about it. She asks directly for clarification, but it is not clear whether she is asking about where she should insert the tablet or where she should put the tablet in relation to the applicator (line 66).

The pharmacist acknowledges this request and begins to provide more instruction about the tablet, with a demonstration of how to insert the tablet into the applicator and then into the vagina (lines 67-71). The patient initiates another request for clarification (line 72), which is overlapped with the pharmacist’s question regarding whether she understands (line 73). The patient repeats her request, using the applicator to clarify her question (line 74). The pharmacist provides clarification (line 75) and the patient seems to understand. She sits backwards (line 76) and nods (line 77), apparently satisfied. As the pharmacist continues to explain how the tablet will be inserted into the vagina, the patient demonstrates her understanding of this notion both verbally and non-verbally (line 79).

The pharmacist then proceeds to pack the tablet and applicator into the box (line 80). She ends the conversation rather embarrassedly and places the box next to the patient, who picks up the box to read the label (line 81). The pharmacist prepares to begin discussing the ARVs, but the patient has another question about the vaginal tablet (line 82). The pharmacist replies while continuing with her preparations with the ARVs (line 83). She reassures the patient, but her somewhat irritated tone of voice seems to imply that she is finished discussing the vaginal tablet, she wants to move on from this embarrassing topic and that the patient should not ask any further questions on the topic because it is not a difficult concept to understand (line 85) (again, this is evident on the video but is difficult to convey through transcription). She quickly moves on to begin her discussion of the ARVs (line 87), but the patient has yet another question regarding the vaginal tablet (line 88). The pharmacist replies rather hurriedly and starts discussing the ARVs (line 89).

Extract 092: Patient 7 (Ph B, 3rd visit)

		<i>puts box on desk in front of P</i> v	<i>points to label with pen</i> v
59	B:	And this is a vaginal tablet. You're	----- ^ nods
		<i>moves hand up and down for emphasis</i> v	<i>opens box</i> v
60		going to put in tonight before you go to bed. Don't be confused (.) ja. It's	----- yes
		<i>shakes head slightly</i> v	<i>(gestures to indicate a tablet)</i> ^
61		a tablet. You're not going to drink it.	----- ^ nods
62	P:	Ok.	----- ^ nods
		<i>pulls out applicator from box</i> v	<i>pulls out tablet from box</i> v
63	B:	Ok? There's a ↑applicator with a little small °tablet° ↑nè	-----

64	P:	°Oh. ° <i>pretends to tear tablet packaging</i> v
65	B:	You put it (.) you tear the tablet out of here ↑nè ^ <i>leans forward, picks up applicator</i>
66	P:	Yes and I put it where? <i>points to tip of appl.</i> <i>takes appl. out P's hand</i> <i>looks at it</i> <i>moves applicator around in hand</i> <i>points to part of appl.</i> v v v v v
67	B:	You put it in there. (You're going to) see. You take that thingy out there ↑nè
68	P:	°Oh. ° <i>demonstrates how to open appl.</i> <i>points to tip of appl.</i> v v
69	B:	((unintelligible)) that thing ↑back put the tablet in ↑there (.) and then you ^ <i>holds splayed hand over applicator</i> <i>nods</i> v
70		can lubricate it with some Vaseline or ↑something and put it inside the ^ <i>nods</i> <i>tries to put applicator back into box</i> v
71		vagina before you °go to bed tonight. °
72	P:	[Then- ^ <i>sits backwards, puts hand in lap</i> <i>tries to put applicator back into box</i> v
73	B:	[You understand?= 74 P: =You put the tablet [here? ^ <i>leans forward, reaches out and points to tip of applicator</i> <i>holds applicator, demonstrates how to open it</i> v
75	B:	[Ja. Then you push this= <i>Yes.</i>

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		<i>writes in P's file</i>	
		v	

86		(1.5)	
87	B:	Then hh your ARVs.	
88	P:	Tonight?	

		^	
		<i>taps vaginal tablet box</i>	
		<i>nods</i>	<i>arranges ARV pots on desk</i>
		v	v
		-----	-----
89	B:	°Ja. ° ARVs ↑nè (.) these three are the- your ARVs.	
		<i>Yes</i>	

If this patient was not assertive in her requests for clarification, then it is highly likely that she would not have been able to take the tablet correctly, because the pharmacist did not provide all the required information such as the time of dosage and where and how to insert the tablet. Interestingly, during the interview with the research assistant, this patient indicated that she needed more information about side effects from the ARVs. The research assistant returned with the patient to the pharmacist and the patient was able to ask this question to the pharmacist. Therefore, despite displaying moments of assertion during the interaction, as evident in the extract below, there were times when the patient did not feel able to ask questions and obtain clarification from the pharmacist.

7.5.4 Summary of section

This section described various strategies implemented by both patients and pharmacists when a breakdown in communication occurs. Evidence suggests sensitivity on the part of pharmacists to subtle misunderstandings, based on careful scrutiny and awareness of patients' verbal and non-verbal responses. Patients are often able to identify when they do not understand and feel comfortable to request clarification from pharmacists and initiate repair sequences. Some patients appear to be more assertive than others in this regard. Pharmacists also initiate repairs such as providing clarification or repeating

instructions in different ways. When patients do not answer questions, pharmacists persist in repeating questions or prompting patients for a response. This section also provided evidence of a failed repair and a case of a so-called awkward moment.

The following section will present evidence of the phenomenon of code switching, another important strategy used by pharmacists to promote understanding of information.

7.6 Code switching

7.6.1 Code switching by pharmacists and patients

The terms ‘code switching’, ‘code mixing’ and ‘lexical borrowing’ are used inconsistently and differently by researchers. For the sake of clarity, the term ‘code switching’ will be used in this study as an ‘umbrella term’ to indicate the alternation of languages within an interactional episode or conversation (Wei, 2005). It is acknowledged that the terms used to denote language alternation are particularly confusing and that other authors may use alternative terms to describe more precisely the different types of alternations across and within sentences. This alternation of languages within a speech exchange typically takes places across sentence boundaries (i.e. in two subsequent sentences) (Gumperz, 1982). However, as will be discussed, code switching generally occurs within sentences in the pharmacist-patient interactions in this study.

Within our diverse multilingual and multicultural South African society, code switching is an important interactional resource. This increasingly common and often complex phenomenon stems from increased contact between speakers of different languages, often as a result of urbanisation, the development of townships and the subsequent blurring of traditional language lines (Ncoko, Osman, & Cockcroft, 2000; Slabbert & Finlayson, 2002).

In the medical context, code switching plays a potentially vital role for several reasons. The widespread existence of language barriers between patients and health professionals in South Africa poses a major barrier to care (Levin, 2006b), frequently leads to misunderstandings and interferes with work efficiency, quality of care and satisfaction of care (Schlemmer & Mash, 2006). Although interpreters may be available to assist with interactions, errors in translation are a common occurrence (e.g. Penn, 2007; Levin, 2006c). In addition, many African cultures use metaphors, allusions or euphemisms when describing illnesses (Ellis, 2004). Terminology in either the patient's or health professional's language may not be able to be translated into the other language (Levin, 2006a). Therefore, it becomes necessary for health professionals either to learn the patient's language or to become familiar with certain key words or phrases in order to promote successful communication and consultation.

The reasons for code switching vary according to the specific interactional situation. However, Grosjean (1982, as cited in Ncoko et al., 2000) notes that code switching is often an unconsciously motivated behaviour. A speaker's primary concern is to communicate a message successfully and ensure that the listener understands them. Therefore, in conversations in which a language barrier is present, the speakers may shift languages in order to obtain a shared code (Blommaert, Collins, & Slembrouck, 2005). If the speakers are strangers, they may 'explore' each other's language preferences, i.e. start speaking in one language and switch to another language depending on how the conversational partner responds (Ncoko et al., 2000).

In the majority of the interactions in the data corpus, some kind of code switching behaviour occurs. The pharmacists do not appear to have a conscious approach to their use of code switching. However, when asked how she communicates across language barriers, Pharmacist B related that she utilises code switching especially with patients who have limited knowledge of English:

Extract 093: Pharmacist B interview

But if they're educated or they understand English or just a little bit of English and Tswana, then you can throw in a few Tswana words there, then it's fine.

Analysis of the data corpus revealed that Pharmacists A and B often draw from a similar stock of Setswana words, phrases and questions to explain dosage instructions to patients or to check patients' understanding of information. These include the following:

Bosigo = night (direct translation); in the night (translation in context)

Bosigo fela = night only / only at night

E lenngwe gabedi ka letsatsi = one twice a day

E lenngwe mosong = one in the morning

Fedile = finished

Gabedi ka letsatsi = two times / twice a day

Ga raro ka letsatsi = three times / thrice a day

Ka nako mang? = at what time?

Ka ura ja (eight) = at the hour of (eight)

Mosong = morning (direct translation); in the morning (translation in context)

Phakela fela = only in the morning

Siame = fine/okay/well

Tse pedi mosong fela = two in the morning only

Code switching performs several functions in the interactions. Chiefly, it is used to enhance patients' understanding of instructions given in English or Afrikaans – sometimes patients demonstrate understanding after a Setswana word or phrase is used, as in the extract below.

The pharmacist is providing a second explanation on how to take the ARVs. She has just asked the patient to explain what she understands about how to take the drugs and she realises that the patient is confused. She begins the explanation again, this time using the appropriate Setswana phrase and pointing to the relevant

pill boxes (line 147). The pharmacist then asks the patient if she understands this information (line 151). In line 152, the patient clearly indicates that she understands that the drug must be taken two times a day, by using the word ‘twice’ – note that the pharmacist has not used this English word in her explanation. Thereafter, the patient is able to demonstrate understanding of the instructions.

Extract 094: Patient 11 (*Ph B, 1st visit*)

		<i>smiles, shakes head slowly, leans back</i> v	<i>puts NVP box on side of desk</i> v
146	B:	Let's try again ↑mommy (.) leave this one alone, ↑nè (.) <u>this</u> <i>holds hands out towards d4T and 3TC boxes</i> v	
147		<u>one</u> (.) is gabedi ka letsatse, [↑nè <i>twice a day</i>	
148	P:	[ok.	
149	B:	No matter what. Eight o'clock in the morning, eight o'clock at night. Ok?	
150	P:	°Yes.°= <i>lifts 3TC and d4T boxes</i> v	
151	B:	=Do you understand that?	
152	P:	↑Yes twice? ^ <i>holds up flat hand</i>	
153	B:	Ja. <i>Yes.</i>	

Code switching is also used when pharmacists give complex or important information. According to Gumperz (1982), code switching can be used to reinforce, emphasise, amplify or even clarify a message which may not have been understood. For example, when explaining the somewhat complex dosage instructions for Nevirapine (NVP), pharmacists sometimes use the phrase *gabedi ka letsatsi* to emphasise the fact that the dosage will change after fourteen days. In

the extract below, the pharmacist gives all the instructions in English, but she code switches when giving the NVP instruction (indicated in bold in line 92):

Extract 095: Patient 6 (Ph B, 3rd visit)

- 88 B:From tomorrow morning when you're going to start
 89 taking the tablets. You're going to start taking one eight o'clock in
 90 the morning. Until the [fourth of July.
 91 P: [Only in the morning?
 92 B: Ja. Until the fourth of ↑July then it's going to be °**gabedi ka letsatsi**.° Ok?
Yes. twice a day

When explaining dosage instructions for Stocrin (which differ to the instructions for Stavudine and Lamivudine), a Setswana phrase is sometimes used to emphasise that the drug must only be taken at night (indicated in bold in line 96) and not morning and night:

Extract 096: Patient 7 (Ph B, 3rd visit)

- 95 B: Then (.) when you see Stocrin six hundred, the man holding the
 96 ball, ↑nè (.) it's so strong, you only take it eight o'clock, **bosigo fela**.
at night only

Pharmacists sometimes repeat questions originally given in English in Setswana. This practice provides reinforcement and repetition of the question, as well as enhancing patients' understanding of the question. The patient in the extract below reports that she is not fluent in English. The pharmacist asks a question in English followed quickly by repetition of the question in Setswana and a second repetition in English (line 14). The patient then replies confidently with the correct answer (line 15) (interestingly, the patient chooses to respond in English despite not being a fluent speaker of the language). The combination of the strategies of code switching, repetition of questions and the use of visual cues in the form of props appears to enhance and facilitate speedy understanding of the question by the patient. The patient responds immediately to the question and does not request assistance from an ad hoc interpreter (as is evident in other segments of the

interaction when the pharmacist does not make use of props and code switching to supplement her speech, or when the pharmacist discusses content which cannot be supplemented in this manner).

Extract 097: Patient 2 (Ph A, 2nd visit)

opens pill box, takes out pill sheet, shows it to patient

v

14 A:This one? Ka nako mang? When do you take this one?

At what time?

15 P: °<Eight o'clock in the morning and eight o'clock at night.>°

Interestingly, the pharmacists' use of Setswana encourages patients to use it too. In several interactions, patients reply in Setswana or in a mixture of Setswana and English. This creates a relaxed language environment, in which patients who struggle to speak English are able to volunteer information, demonstrate their understanding or give a response without feeling under pressure to speak in English only.

For example, in the extract below, the patient does not speak English. The pharmacist wishes to check her understanding of the dosage instructions (note that this extract is prefaced by a code-switched discussion between patient and pharmacist about the dosage instructions, as seen in *Extract 107* (p. 299)). Despite the presence of a caregiver and the research assistant who could be called upon to interpret, the patient decides to speak directly to the pharmacist using a mixture of Setswana and English (e.g. line 201). The pharmacist continues to speak in English, checking what she has understood from the patient (e.g. line 202) and prompting the patient (line 204). Again, this patient relies on the use of props to supplement her explanation (e.g. line 202). She tells the pharmacist rather indignantly that she does understand (line 207 – *Bona*) and the pharmacist appears satisfied with her explanation. Interestingly, the pharmacist replies to the patient in Setswana (line 208). Therefore, despite the presence of a language barrier, both parties are able to negotiate the verification of understanding successfully.

Extract 098: Patient 9 (Ph B, 4th visit)

- 201 P: Ke a ke a night eh eh.
This one is for is for night yes yes.

 ^
points to pill pot
- 202 B: At night?
- 203 P: Ee.
Yes.
smiles
 v

- 204 B: And at morning?
- 205 RA: Ya goseng ka?
And in the morning?
- 206 (4.5)

 ^
picks up pill packet, puts it back on desk

nods
 v

- 207 P: °Bona. (.) ke tseo.°
You see (.) there they are.

 ^
puts packets together
raises eyebrows
 v

- 208 B: Ee.
Yes.

The following extract also illustrates how both the pharmacist and the patient code switch effectively between English and Setswana. The pharmacist is able to verify the patient's understanding of the dosage instructions successfully using this mixture of the two languages. Interestingly, neither party chooses to make use of the ad hoc interpreter (the research assistant) who is present in the room.

The pharmacist asks the patient to explain when she is taking her pills. She gives the instruction in English and immediately repeats it in Setswana (line 26). The patient replies in English (line 27). A short while later, the pharmacist checks the

time that the patient is taking the pills by prompting the patient using a mixed phrase (line 31). The patient replies with a mixed sentence (line 32) and the pharmacist responds by repeating the phrase used by the patient (line 34). The patient continues to explain how she takes her pills, using a mixture of English and Setswana (line 35). The pharmacist confirms what the patient has said by summarising the patient's report in a mixture of English and Setswana (line 36).

Extract 099: Patient 3 (Ph A, 3rd visit)

- picks up pill pot, shows it to P points to label with pen*
v v
----- -----
- 26 A: ... Now tell ↑me when do you take this ↑one ka nako mang?
at what time
- 27 P: Seven ts mm ts mm eight o'clock.
----- -----
^ ^
holds up index finger moves finger for emphasis
- 28 A: Seven or eight o'clock?
- 29 P: Eight (.) eight [o'clock.
- 30 A: [eight o'clock.
sticks out thumb towards side
v

- 31 A: Eight o'clock ↑mosong and?
in the morning
points to pill box, moves hand backwards, puts hand over P's hand
v v v
----- ----- -----
- 32 P: (I take) two mm (.) I take two [mosong ka seven. Ka ↑eight
in the morning at seven. At eight
----- ----- -----
^ ^ ^
points to pot reaches out puts hand over pill box
- 33 A: [Yes↑
nods
v

- 34 A: Ka ↑eight (.) ↑ja
At yes

35	P:	And (ti boaga) three. One one one. Ka eight.
		<i>at night I drink</i> <i>At</i>

		^ ^ ^ ^
		<i>picks up bangs it puts hand taps each pot with finger</i>
		<i>pill pot down on over pot</i>
		<i>desk</i>
		<i>nods</i> <i>picks up box and pot</i> <i>puts them down,</i> <i>moves hands to</i>
		<i>keeps hand on them</i> <i>indicate all three</i>
		v v v v

36	A:	Ok. That's fine. So <u>these two</u> you take ↑mosong and bosigo you take these.
		<i>in the morning and at night</i>
37	P:	Ee.
		<i>Yes.</i>

		^
		<i>nods</i>

Sometimes, the use of a non-English word may be more culturally applicable to convey a particular meaning. For example, pharmacists often use the word 'phuza' to advise patients not to drink alcohol with their pills (refer to *Extract 021* p. 195 and *Extract 042* p. 216). This isiZulu word literally means 'to drink' (Illman, 1999), but it holds implications of drinking alcohol. The slang term 'phuza face' is used when a person has a hangover or is visibly suffering from the effects of excessive drinking (Urban Dictionary, 2006). The pharmacists' use of code switching may represent an attempt at cultural appropriateness by not talking about alcohol overtly.

However, most patients react with laughter or embarrassment when pharmacists use the word 'phuza'. Interestingly, Gorer (1935, as cited in Kirsch, 1979) notes that whereas in western cultures laughter generally means amusement on the part of the speaker, in African cultures laughter frequently indicates surprise, wonder, embarrassment or even discomfort. Several cultural informants indicated to the researcher that the word 'phuza' and the rather imperative manner in which the pharmacists use it might cause patients to feel embarrassed or ashamed, especially if they do drink alcohol (M. Tshule, personal communication, 2007). One informant felt that patients might take the pharmacists' comments about alcohol

as a personal criticism or judgment, rather than as a general statement. Therefore, the patients' laughter may indicate embarrassment or discomfort (M. Kota, personal communication, 2007).

Code switching is not used in several interactions – interestingly, all of these interactions include patients who later indicated to the researcher that they felt competent to speak and understand English. However, in other interactions, the pharmacists use code switching at regular intervals throughout the session, more so than in other interactions. The pharmacists rarely question patients about their language preference and do not appear to ascertain patients' language proficiency levels other than in an implicit manner during the introductory phase of the interactions. Therefore, it would appear that in some instances, the pharmacists are aware of the patients' level of proficiency and they make some sort of judgement regarding whether the patients require the additional linguistic support provided by code switching as well as how much code switching is required.

At times, a complete switch in language occurs, for example, from English to Afrikaans. One such interaction is conducted in English (e.g. lines 124-125), but towards the end of the interaction, the patient raises a concern in Afrikaans (line 126). The pharmacist answers the patient and continues the interaction in Afrikaans (lines 127-129). This incident is illustrated in the extract below:

Extract 100: Patient 5 (*Ph A, exp pt*)

- 124 A: There we go. And you fine? There's nothing else you were worried
 125 ↑about you wanted to ↑know
 126 P: Uh (.) (daar by die) OPD (.) daar's baie mense.
 there at the *there're lots of people.*
 127 A: Daar is baie mense, maar kyk ons praat lang tyd ↑nè want ons weet dis
 There are many people, but look we talk for a long time nè because we know
 128 die mense wat nog nie die medisyne goed ken nie. By OPD se kant is die
 it's the people who still don't know the medicines well. At OPD side are the
 129 mense wat vinnig gaan. Hulle praat nie so baie soos wat ek praat nie.
 people who go quickly. They don't talk as much as what I talk.

In addition, when discussions or asides between pharmacists take place during an interaction, a switch sometimes occurs from English (usually the language of the interaction) to Afrikaans (the language of the pharmacists). The pharmacists then switch back to English when they return to the interaction with the patient. This practice appears to facilitate quick communication between the pharmacists to enable them to resolve dispensing or managerial problems, but it also excludes patients from these discussions. This may be done so as not to impinge too greatly on the patients' consultations with the pharmacist, or it may serve to keep the content of the pharmacists' discussions relatively private.

For example, in one interaction, the pharmacist experiences a problem with a prescription for a child (she is confused as to why the doctor has changed the child's medicine to another drug – refer to *Extract 139* (p. 362)). She engages the assistance of the senior pharmacist and they begin a rather tense discussion in Afrikaans to try to resolve the issue. The mother of the child sits patiently and attempts to make sense of the discussion, but she later relates to the research assistant that she could not understand Afrikaans, as is evident below:

Extract 101: Patient 21 interview (conducted in Setswana, translated into English)

RA: *How many languages do you understand?*

M: *Setswana and English.*

RA: *Afrikaans?*

M: *Not at all.*

The mother looks back and forth between the pharmacists and at times appears concerned and seems to want to know what is being said, perhaps because she thinks she may be in trouble or may have done something wrong. The tension is finally broken when the senior pharmacist realises the misunderstanding about the drugs and uses an expletive. The patient laughs, as if with relief.

The extract shown below is taken from this interaction. It begins at the point at which Pharmacist A realises the problem (line 71). Pharmacist B continues to speak in Afrikaans (line 72) to Pharmacist A. At this point, A turns to the

caregiver and starts speaking in Afrikaans. She then realises that the patient looks confused and proceeds to determine the caregiver's language preference (lines 73-76). Pharmacist A then switches to English but B continues to talk to A in Afrikaans (line 79). Since B knows that the patient speaks English (line 75), the reason for her switch into Afrikaans when talking to Pharmacist A is perhaps to exclude the patient from her argument with A.

Extract 102: Patient 21 (Ph B, ? visit)

- 71 A: *puts hands to head* *writes in file*
v v
Oh °sh*t(.) skuus skuus skuus [skuus skuus.°
sorry sorry sorry sorry sorry
^
C smiles
- 72 B: *holds drug box, drops box into packet on desk*
v v
[Sien jy? Retrovir.
Do you see?
- 73 A: *writing in file* *looks at C*
v v
<°(Retrovir)°> Ok kan ek dan vir jou sê hoekom m moet ek moet
can I then say to you why m must I must
- 74 Afrikaans praat?
speak Afrikaans?
- 75 B: Eng[lish.
- 76 M: [English. Ee.
Yes.
^
smiles
- 77 A: Do you know why your child's medicine was ↑changed has your child
pats chest with flat hand
v
- 78 got an infection [like TB?
- 79 B: [Hy's nog nie ↑gechange [hy's gedrip [op al die (drugs).
It's not yet changed he's on all the drugs via a drip.
- 80 M: [Ee. Ja.

<i>Yes.</i> ----- ^ <i>nods</i>

In the interviews with the research assistant, several patients indicated their appreciation of pharmacists' attempts to converse in Setswana and their use of Setswana phrases. Patient 2 reported that she had understood most of the information and did not consider there to be communication failures within the interaction, because "luckily I saw a pharmacist who speaks Setswana". Patient 11 reported that it was easy for her to understand because the pharmacist "was communicating in the language I understand". Therefore, it would appear that patients benefit from clarification of questions and instructions in their own language and that they feel reassured by the pharmacists' regular use of a few basic Setswana phrases.

7.6.2 Summary of section

This section presented evidence of code switching behaviours by both pharmacists and patients. Because of the diverse context of South Africa, code switching is a potentially vital communication strategy, especially in medical contexts. The pharmacists draw from a set of Setswana words and phrases which they utilise to fulfil various functions such as enhancing patients' understanding of instructions, reinforcing complex or important information and repeating questions. Patients sometimes show better understanding of instructions when Setswana phrases are used. Patients also make use of code switching behaviours, perhaps to enable them to converse with the pharmacist even when they are not fluent in English. Patients appreciated the pharmacists' use of code switching and they felt more confident about understanding information as a result.

The following section will present details of the use of interpreters in interactions, focusing on the initiation of their involvement in interactions as well as their role and participation within interactions.

7.7 Interpreters

7.7.1 The use of interpreters by pharmacists and patients

Trained interpreters or appointed ad hoc interpreters are not employed at RPH or the Wellness Clinic. Both Afrikaans-speaking pharmacists indicated that despite experiencing frustrations due to language barriers with patients, they did not feel that a trained interpreter was required in the Pharmacy. However, the Setswana-speaking pharmacist said that she did feel there is a need for an interpreter to assist the other pharmacists who cannot speak Setswana fluently. As discussed in *Chapter 2*, patients at this hospital report feeling reassured by the presence of an interpreter who can act as a cultural broker.

During several interactions, the research assistant for this study was present in the consulting room or in the vicinity of the Pharmacy. Although not a trained interpreter, she is fluent in Setswana and confident in English. On several occasions, she was called upon by the pharmacist or a patient to act as an ad hoc interpreter and a cultural mediator. It became clear that if a dedicated interpreter were available, the pharmacists would make use of their assistance on a regular basis rather than struggling to talk to patients across language barriers.

Both Afrikaans-speaking pharmacists reported that when language barriers arise, they try to explain dosage instructions to patients using Setswana phrases together with a visual demonstration of the dosage instructions. If the patient still does not appear to understand, they will attempt to find someone in the vicinity of the Pharmacy who can assist them with interpreting:

Extract 103: Pharmacist B interview

No most of the time I don't give up, if I if the patient and I can't understand each other, and the the method of the tablet showing is not working, I tell them 'byt vas' (*hold on*) and I go and look for any possible somebody that can help me ((laughs)). Anybody, anybody in sight that's willing to help, even if it's another patient. I don't care...if it's

another patient. I mean, the patient needs to understand me. So now I try my best to find anybody I can get hold of.
--

An ad hoc interpreter in this setting may be a pharmacy assistant (Pharmacist E), a Wellness Clinic staff member (e.g. a counsellor or nurse) or even another patient. Although other patients may not always interpret accurately, the pharmacists felt that they might be sympathetic and supportive when interpreting, which holds potential benefit for patients.

However, the literature reveals that the use of other patients as interpreters may have serious implications in terms of confidentiality and that some patients may not wish to divulge intimate or emotional information to a health professional through another patient (Wiener & Rivera, 2004). This practice also poses practical and ethical difficulties, especially when non-medical personnel must interpret medical terminology (Dysart-Gale, 2007).

Because Rustenburg is a mining town, it attracts people from various neighbouring areas. Generally, an ad hoc interpreter who speaks the patient's language can be found in the Clinic. However, Mozambican patients who speak only Portuguese and/or Xitsonga are at a particular disadvantage because an interpreter is not available. During the week of data collection, a Mozambican patient came to the Pharmacy to collect his ARVs. After trying in vain to find a common language, the pharmacist spent much time demonstrating patiently how to take the pills using the day and night pictures on the yellow diary card.

When the researcher worked at the hospital, she conducted numerous hearing tests on patients who came from Mozambique or Lesotho. They usually did know a few Setswana words or phrases and generally relied on previous experiences of a hearing test. Often minimal instructions were necessary and through demonstration, patients quickly understood what was required of them. When attempting to find a common language, or a language for which the researcher could find an interpreter, patients often suggested Fanakalo, a South African

pidgin language of uncertain origin, traditionally used in mining or work contexts (Adendorff, 1995).

However, the pharmacists are not able to speak this pidgin language. The language has negative implications and its use in the pharmacy or hospital context may further divide black and white by strengthening the power already held by health professionals. According to Adendorff (1995, p. 177), Fanakalo “is used in interactions where there is an asymmetric role and power relationship between the participants, usually that of master-servant”.

Various ad hoc interpreters are used in a number of the recorded interactions. The use of these interpreters is of particular interest, in terms of the initial engagement of the interpreter, how and when the interpreter is used during the interaction, how the role of the interpreter is negotiated, how the pharmacist participates and facilitates the interpretation, as well as what the patient says to the interpreter.

The negotiation of the role of the interpreter by both pharmacists and patients is of particular interest in the data corpus. In several instances, the patient initiates interaction with the interpreter and enlists their assistance when needed. On other occasions, the pharmacist asks the interpreter (usually the research assistant) to interpret.

In the extract below, the pharmacist begins talking to the patient in English (line 7). The patient does not respond to her question (line 8), so the pharmacist repeats the question again in English (line 9). However, the patient does not understand what the pharmacist is saying. She leans across towards the research assistant, who is present in the room, and asks her what the pharmacist is saying, thereby initiating interaction with the ad hoc interpreter (line 10). The pharmacist jokingly responds that the patient now has a translator and she implicitly invites the interpreter’s assistance (line 11). The research assistant immediately takes on the role of ad hoc interpreter (line 13). However, instead of responding to the interpreter, the patient turns towards the pharmacist and answers the question in Setswana (line 14). The pharmacist appears to understand, probably through the

patient's use of gesture, that she does have some leftover pills at home, and the pharmacist encourages the patient to bring these to the consultations (line 15). The patient again engages the interpreter in the discussion (line 16).

Extract 104: Patient 3 (Ph A, 3rd visit)

- 7 A: Have you still got some medicine at home?

 ^
P looks at A
- 8 (1.5)
taps 3 pill pots, one after the other
 v

- 9 A: Have you still got ↑this is it fedile or have you got some at home?
finished

 ^
P looks at A
- 10 P: Areng batho?
What is she saying?
 ...-----
 ^
turns to look at RA
- 11 A: Wo you see here (.) now you have got a ↑translator ((laughs))
 12 ((P, RA laugh))
- 13 RA: Are o santsane o nale ditlhare ko gae or di fedile?
She said do you still have some medication at home or is it finished?
 ----- ·····
 ^ ^
looks at RA turns to look at A
- 14 P: Ha. E gad i a fela, di santse di le tengnyana.
No. It is not finished, there is still a little bit of them.

 ^ ^
gestures to indicate a small amount (looks at A while talking)
gesture: pulls hand towards her; eyebrows up
 v

- 15 A: You must bring them.
- 16 P: Akere ga di a tshwanela go fella ruri.
It's because it is not supposed to be finished completely.
 ...-----
 ^ ^
turns away from A, looks at RA

		<i>leans forward, hunches shoulders</i> v
28	A:	Seven or eight o'clock?
29	P:	<u>Eight</u> (.) eight [o'clock]. ^
		<i>leans forward, holds up index finger, moves it back and forth for emphasis</i>
...		
31-37:		<i>refer to Extract 099 (p. 285)</i>
...		
		<i>holds up yellow diary card</i> v
39	A:	Sharp. ↑Eight and eight. That's what I want to know. Have you got a card
		"" ^ ^ ^
		<i>turns away from A, looks at RA, then back at A</i>
40		like this?
41	P:	Ee, (tse kene). <i>Yes I do.</i> ----- ^
		<i>nods</i> <i>moves hand towards her</i> v
42	A:	Did you ↑not <u>bring</u> it? I want to ↑ <u>see</u> ... ^
		<i>turns to look at RA</i>
43	RA:	O e tshwere card? <i>Have you got the card?</i>
44	P:	Ga ke a e tswara mare tsone ke a di raeta. <i>I don't have it here but I do write them [the pills].</i> ----- ^
		<i>moves hand up and down for emphasis</i>
45	RA:	O:k.
46	P:	Ee ke a di (.) ke a (.) di raeta (.) kea (.) ke gore (.) fa ke kwala date (.) ke
47		b (.) akere ke date, wa raeta, wa raeta gore ke di nole phakela le ----- ^
		<i>holds up a piece of paper, moves hand back and forth to indicate ticking off</i>
48		maitseboa (.) ee. Ke fela gore ga ke a itse gore ke tshwanetse ke tle ka
49		yone, e nngwe e setse e tletse. <i>Yes I do (.) I do wri (.) when I write the date (.) I (.) b (.) you see it's the</i>

		<i>date, I write, I write that I had them in the morning and in the evening (.)</i> <i>yes, it is just that I did not know that I was supposed to bring it, the other</i> <i>one is full already.</i>
50	RA:	Ga o tla gape, o tshw-= <i>When you come again, you sh-</i>
51	P:	=Ga ke <u>sa</u> tla, ke refeke, ke a tsamaya (.) ke tsamaela ruri. <i>I'm not coming back, it's a referral, I'm going (.) I'm going for good.</i> ----- ^ <i>moves hand for emphasis</i>

Therefore, it would appear that some patients do not necessarily require an interpreter to assist for the entire duration of a consultation with a pharmacist, but that they would benefit from the support of the interpreter if they require interpretation during a consultation. Using code switching behaviours as well as the presence of the props (pill containers), patients are often able to communicate successfully with the pharmacist across language barriers.

In some interactions, the caregiver acts as an interpreter. In the following extract, the patient has poor proficiency in English. The pharmacist decides to speak mainly to the caregiver and not to speak to the patient with the assistance of an interpreter. However, the patient indicates her frustration at not being included in the conversation and her desire to know what is being said. The patient anxiously starts asking the caregiver what the pharmacist is saying, thereby 'appointing' the caregiver as an interpreter.

Extract 106: Patient 9 (Ph B, 4th visit)²³

58	P:	<i>What is she saying?</i>
59	C:	Are re ye go di tsaya kwa tlase kwa. <i>She says we must go get them down there²⁴.</i>
60	P:	<i>What else?</i>
61	C:	<i>Just be quiet, I will tell you later.</i>

²³ Note that the first translator provided the English translation only and not the original Setswana. The second translator could not decipher what the patient and caregiver were saying. Therefore, the original Setswana dialogue is omitted from lines 58, 60, 61.

²⁴ The caregiver is referring to the OPD pharmacy.

Interestingly, soon after this discussion between the caregiver and patient, the caregiver does involve the patient by interpreting the pharmacist's instructions, reminding the patient of the instructions and checking the patient's understanding of the dosage. She is not asked by the pharmacist to interpret but she initiates this spontaneously.

Later in this interaction, the pharmacist wants to verify the patient's understanding of the dosage instructions. In the extract below, the pharmacist explicitly (but rather hesitantly) asks the research assistant to act as an interpreter (lines 170-174). What is interesting, however, is that the patient has already enlisted the interpreting assistance of the caregiver on numerous occasions during the interaction. Several previous episodes occur in which the patient demands that the caregiver interpret what the pharmacist is saying. These episodes often result in an instance of shared humour, from which the pharmacist is excluded. Therefore, the pharmacist's decision to ask the research assistant, and not the caregiver, to help her may be based in a lack of trust in the caregiver and/or the caregiver's ability to translate accurately. Given the option of two ad hoc interpreters and based on her indication to the researcher that she distrusts the accuracy of other patients who act as interpreters, this pharmacist may feel that the research assistant is more reliable in this instance.

Despite the pharmacist explicitly indicating that she would like the research assistant to interpret, she changes her mind, looks at the caregiver and asks her to ask the patient to explain the dosage instructions (line 174). The research assistant joins in and indicates to the patient that both she and the caregiver ("we") will work together to interpret the patient's explanations of the dosage instructions (line 179). The patient decides that she does not need or want the assistance of either ad hoc interpreter. Instead, she indicates that she would prefer to talk directly to the pharmacist in Setswana and that the pharmacist will have to try to understand her (lines 176, 178, 181). She goes on to demonstrate her comprehension of the dosage instructions using a mixture of Setswana and English (lines 182-183).

Extract 107: Patient 9 (Ph B, 4th visit)

((Note that the RA is out of the view of the camera))

raises eyebrows while looking at RA

v

170 B: L***²⁵? You can? (.) ok.

sticks label on pill box

v

171 (2.5)

looks at RA

v

172 B: You can ask her if she

sticks label on pill box

v

173 (1.5)

looks at boxes

v

*looks at C,
pushes boxes towards C*

v

*looks at boxes,
sticks labels on boxes*

v

174 B: can she tell us quickly how she takes her tablets or doesn't she- can she?

^

C nods

175 C: Are o mmolelle gore o ja dipilisi tse yang (.) le fa o ka bua ka Sesotho.

She says you should tell her how you take these pills (.) you can speak in Sotho.

^

^

C pushes boxes towards P, pats boxes

176 P: O tla nkutlwa.

She will hear me.

^

shifts in chair

177 C: Ee.

Yes.

178 P: O tla nkutlwa.

She will hear me.

179 RA: Re tla mo tthalosetsa.

We will explain to her.

²⁵ The name of the research assistant.

180	C:	((coughs))
181	P:	°O tla nkutlwa. ° <i>She will hear me.</i> ----- ^ <i>P pushes pill pots together</i>
182	RA:	((°unintelligible°)) ----- ^ <i>P picks up pill pot, shakes it</i>
183	P:	Mo (.) ke nwa (.) morning= <i>This one I take in the morning</i> ----- ^ <i>P holds up two boxes</i> <i>nods</i> v -----
184	B:	=mm-hm=
185	P:	=autlwa? <i>you hear?</i> <i>nods, raises eyebrows</i> v -----
186	B:	mm.
187	P:	Morning, wankutlwa?= <i>can you hear me?</i>
188	B:	=What time?= -----
189	P:	=Morning. ----- ^ <i>puts boxes down on desk</i>
190	C:	Are ka [nako mang? <i>She says what time?</i>
191	B:	[What ti[me? <i>nods, raises eyebrows</i> v -----
192	P:	[Nine o'[clock.
193	B:	[Nine o'clock.

Some of the examples presented above provide insight into models of interpreting in relation to the needs of both patients and health professionals. Dysart-Gale

(2007) explains that traditionally, as outlined in codes of ethics for interpreters in the USA, a conduit model of interpreting has been the model of preference. In this model, the interpreter remains neutral and merely transfers information verbatim from sender to receiver. Interpreters are trained to avoid any emotional, physical or verbal interactions with patients, leaving all interactional control to the health professional and patient (Hsieh, 2007).

However, as the extracts demonstrate, a conduit model is inappropriate in this context. Patients and pharmacists display a need for assertion and control in interactions and this is manifested in the way in which they manage the involvement of the interpreter in the interactions. Because pharmacists use a combination of code switching behaviours and visual demonstration when explaining dosage instructions, they do not necessarily require interpretation of all verbal information. Likewise, most patients are able to use a combination of English and Setswana in order to communicate information to the pharmacist even if they are not fluent in English and some patients may choose this option rather than use an interpreter.

Therefore, an alternative model of interpreting is necessary, one in which interpreters play an active role in assuming the health professional's and patient's communication goals and implement communication strategies in order to achieve these goals and working together with the patient and health professional to achieve successful communication of information (Hsieh, 2007). The success of an interpreted interaction is perhaps better measured by the extent to which the speakers' goals are achieved, rather than the accuracy of the interpretation (Lotriet, 2008). In this research context, interpreters must assume the roles of clarifier, cultural broker and patient advocate in order to facilitate mutual understanding and ensure that patients receive quality care (Dysart-Gale, 2007). In the socially, linguistically and historically complex context of South Africa, Lotriet (2008) adds that a level of 'intuitive mediation' is required in addition to cultural mediation. This is because interpreting must take place across different

levels of education and literacy, as well as across a cultural interface and within a context which extends beyond the immediate communication arena.

When the pharmacists do engage the assistance of an ad hoc interpreter, it is interesting to observe what they do while the interpreter talks to the patient. In some interactions (e.g. *Extract 108* below), Pharmacist B tries to follow what the interpreter and patient are saying and provides comments or information when necessary. Again, this may be linked to Pharmacist B's revelation that she distrusts the accuracy of interpreting by ad hoc interpreters, hence her apparent need to 'monitor' interactions between patient and interpreter.

In the following extract, the pharmacist provides a dosage instruction for vitamins. When she is finished, she folds her arms as if to indicate that it is now the interpreter's turn to explain the instructions to the patient (line 59). However, instead of moving on to another task, she continues to take an interest in the interaction and watches while the patient and interpreter discuss the instructions in Setswana (lines 60-61). She adds a comment and clarifies to the interpreter that it does not matter what time the patient takes the vitamins (line 62).

Extract 108: Patient 16 (*Ph B, 2nd visit*)

- | | | | | |
|----|-----|--|-------------------------------------|-------------------|
| | | <i>touches pill packet with pen</i> | <i>touches pill packet with pen</i> | <i>folds arms</i> |
| | | v | v | v |
| | | ----- | ----- | ----- |
| 59 | B: | And this is <u>two</u> pillies in the morning, two pillies in the morning. | | |
| | | <i>looks at P</i> | | |
| | | v | | |
| 60 | P: | <u>Tsone, tsone ke di bereka jang kana?</u> | | |
| | | <i>How do I take these ones?</i> | | |
| | | <i>looks at RA</i> | | |
| | | v | | |
| 61 | RA: | <u>[Tse o dinwa phakela.</u> | | |
| | | <i>These ones you take them in the morning.</i> | | |
| | | <i>looks at pill containers</i> | | |
| | | v | | |
| | | ----- | | |
| 62 | B: | [°It doesn't matter what time. ° | | |

		<i>RA points to ARV pots</i>
		v

63	RA:	Phakela ga o nwa tse tse pedi tse, phakela <i>In the morning when you take these two, in the morning</i>
64	P:	Ee. Yes. <i>RA picks up ARV pots</i>
		v

65	RA:	O tla be o nwa le tse tse pedi. <i>You will be taking these two together.</i>

At other times, as in the extract below, Pharmacist A asks the research assistant to interpret an instruction for the patient (lines 56-58) and she continues with a dispensing task while the research assistant (interpreter) talks. However, the pharmacist listens and follows the conversation between the patient and the interpreter and when the patient requests clarification about which pills she should take (line 62), the pharmacist replies with an affirmative nod (line 63).

Extract 109: Patient 24 (Ph A, 3rd visit)

((Note that the RA is out of the view of the camera))

		<i>looks at RA</i>
		v
		
56	A:	°Ok. ° Maybe you can just tell her that if she goes on holiday or comes to <i>looks at pill boxes</i>
		v

57		sleep in the hospital, anything that she <u>brings</u> these three tablets and her -----
58		card along °please. ° <i>A sticks labels on pots while RA talks</i>
		v

59	RA:	Ok. Doctor a re ke go bolelle gore ko gongwe le ko gongwe mo tsamaya
60		teng, gongwe ga o etile, o tsamaye ka tosi tseo tse tharo tseo, a seka wa
61		ba wa di tlogela. <i>The doctor says wherever you go visiting, take them with you.</i>

62	P:	(These?) ----- ^ <i>touches ARV pots</i> <i>A nods</i> v -----	
63	RA:	Ee. Yes.	
64	P:	Ee. Yes. <i>A sticks labels on pots while RA talks</i> v -----	
65	RA:	Eh o seke wa ba wa di tlogela, gape le ga o tsamaya ore o le mo	
66		taxing, ga o ile go na lata, o tsamaye ka tsone gore ga eight ichaya e be -----	
		^	^
		<i>nods</i>	<i>nods continuously</i>
67		e le gore o di tswere. ----- ^ <i>nods continuously</i> <i>Even when you are travelling in a taxi make sure you always have them with you.</i>	

7.7.2 Summary of section

This section discussed the inclusion of interpreters in the pharmacist-patient dyad. Although trained interpreters are not available at the Pharmacy, various ad hoc interpreters are sometimes used, including other patients, pharmacy assistants, clinic staff, caregivers, or, in this data, the research assistant. The data provided insights into how the interpreter is engaged by the pharmacist and/or patient and the role they play in interactions. Interestingly, it is often the patient who spontaneously ‘appoints’ an ad hoc interpreter to assist them. Although an interpreter may be asked to assist in discussions by either the pharmacist or the patient, their services are not required at all times during an interaction. Patients may decide when to engage the assistance of the interpreter and at other times, they may choose to speak directly to the pharmacist using code switching. These

results suggest that conduit models of interpreting are not necessarily appropriate and that interpreters may need to assume a more assertive role in interactions, through acting as a clarifier, advocate and cultural broker.

7.8 Facilitators and barriers to communication

In this section, a discussion of potential facilitative and inhibitive communication strategies and processes in the interactions will be presented, using appropriate examples from the data. The manner in which these phenomena have been identified by the researcher will also be considered.

Before presenting facilitative and inhibitive communication phenomena identified in the data corpus, it is important to attempt to define these concepts. Subjectively, it is relatively easy to identify certain strategies which *might* influence interactions either positively or negatively. However, it is more difficult to identify objectively those processes and strategies which have either a facilitative or an inhibitive effect on the interaction as a whole or on specific moments of the interaction.

Several of the identified processes and strategies were seen to effect an immediate change in the interaction, in terms of either the patients' understanding of explanations or their level of participation and collaboration in the interaction. However, other strategies identified by the researcher may not have had an immediate or obvious effect on the interaction *per se*, but they may well have had a long-term impact on the patient's understanding beyond the boundaries of the interaction. For example, if the pharmacist gives incorrect information to a patient about the ARVs, the effects of this error may not be apparent immediately in the interaction, but when the patient leaves the pharmacy and goes home, s/he may not be able to adhere correctly to the treatment regimen. Therefore, such an error could be deemed a *potential* barrier. The researcher has decided to include those communication processes and strategies which she has identified as potential barriers or facilitators.

A facilitative strategy is therefore defined as a communication strategy or process used by the pharmacist which:

- occurs across the data corpus in multiple interactions and preferably in more than half of the interactions; and
- has demonstrated a facilitating influence on a patient's understanding of an explanation, on collaboration and interaction between pharmacist and patient, and/or on a patient's level of participation in a consultation.

In a similar way, a barrier or inhibitive strategy is defined as a communication strategy or process used by the pharmacist which:

- occurs across the data corpus in multiple interactions and preferably in more than half of the interactions (although some of the strategies and processes included in *Table 9* occur infrequently across the data corpus); and
- has demonstrated an inhibiting influence on a patient's understanding of an explanation, on collaboration and interaction between pharmacist and patient, on a patient's level of participation in a consultation, and/or the need for repair of communication breakdown.

As a result of linguistic analysis, specific patterns, trends and variations in the communication styles of the pharmacists across the interactions became apparent, as well as communication processes and strategies which serve to facilitate or inhibit collaboration and communication between pharmacists and patients. The pharmacists appear to use some strategies on a regular basis, while others are used more infrequently according to their appropriateness in the particular communication situation with a specific patient. As will be illustrated, pharmacists appear to draw from a combination of experience, skill and intuition to decide if and when to use these strategies.

The researcher decided to group the identified strategies and processes into categories and present these in a table format. However, it is acknowledged that

presenting the results in this rather ‘taxonomic’ format does deviate from the philosophy of CA and the usual CA manner of presenting results using extracts from transcripts.

7.8.1 Facilitative strategies

As discussed in previous sections of this chapter, facilitative strategies include careful explanations of instructions and information, demarcation of drugs, the use of visual demonstrations and props, use of gesture, verification of patient understanding, initiation of repair sequences, repetition and reinforcement of information and code switching, among others. As demonstrated in various examples in this chapter, these strategies appear to promote understanding of information and instructions and encourage patients to become empowered through gaining knowledge about ARV treatment. Patients respond by participating in interactions, collaborating with the pharmacists and using some of the pharmacist’s and their own communication strategies.

Various facilitative processes and strategies used by the pharmacists are detailed in *Table 8* below. Where columns are left blank in the table, this indicates that those phenomena were not observed in the two interactions with Pharmacist E which are included in the data corpus.

Table 8: Potential Facilitators of Communication

Strategy	Pharmacist A	Pharmacist B	Pharmacist E
Agenda-setting statement / approach	• specifies intended actions for session or for a particular task • gives running commentary while completing tasks	• specifies intended actions for session or for a particular task	
Explanation of drugs and dosage instructions	• gives explanations of HIV-related concepts e.g. virus, generics, CD4, viral load • explains purpose of pills • gives dosage instructions while sticking label onto each pill pot • relates information to pts' knowledge e.g. "do your pills at home look like this?" • reminds pt of information given during last visit • acknowledges pt knowledge e.g. asks if she has discussed the topic of vomiting a previous visit	• slow, deliberate, detailed explanations using short phrases • makes instructions simple and specific • standard format for introducing drugs: name of drug, purpose, dosage instructions • deliberate, thorough demonstration/ explanation of yellow diary card • varies explanations, uses different explanation methods each time • clarifies/expands upon information • relates information to pt's knowledge	
Communication strategies	• uses pts' names to get their attention or to focus pts on a task • reinforces and summarises information in different ways • repeats drug names • for important information: uses firm/serious tone of voice, emphasis, slowed speech	• uses referents (e.g. 'mommy' / 'papa') to get pts' attention, especially when giving important information • repeats closed-end questions until she receives response from pts • expands on questions or rephrases information when pts do not understand	• actively steers pt back to topic, especially when pt changes topic • reinforces concept of adherence • repeats drug names • reinforces, repeats important information • encourages joint attention using pills

	• uses pictures & analogies to enhance explanations • asks questions in different ways • returns to question if not answered by pt • uses discourse markers to signal new topic, end of topic, end of session (e.g. “Ok so...”, “Ok there we go...”) (Lenk, 1998)	• reinforces, repeats and summarises information • repeats drug names • for important information: uses stress, soft/conspiratory tone of voice, slowed speech • uses own & pts’ analogies to enhance explanations	
Checks understanding of instructions or information	• sometimes checks pts’ language preference or reading ability • requests demonstration of understanding: “tell me / show me how to take the pills” • prompts pts (usually verbally) while they demonstrate comprehension • asks general questions about understanding e.g. “do you understand?”(and offers clarification opportunities) • checks understanding using direct, specific content-related questions • sometimes checks pt understanding of each drug, one by one (not all at once) • uses response solicitations to offer opportunities for clarification requests: ok? nè?	• stops frequently during explanations to check pts’ understanding of information • requests demonstration of understanding: “tell me / show me how to take the pills” • prompts (verbally and non-verbally), guides, encourages pts while they demonstrate comprehension • asks general questions about understanding e.g. “do you understand?” (and offers clarification opportunities) • checks whether pts know drug names • uses clarification opportunities to reinforce & repeat information • uses response solicitations to offer opportunities for clarification requests: ok? nè?	• requests demonstration of understanding: “tell me / show me how to take the pills”

Non-verbal behaviours	• gesture reinforces verbal explanations • uses pills and containers as props • provides demonstrations e.g. how to open child-proof pill pot • uses visual cues & props to clarify misunderstandings • emphasises pill aesthetics • uses yellow diary card to reinforce dosage instructions • uses gesture and body language to emphasise important information • uses increased eye contact when giving important information	• gesture reinforces verbal explanations • uses pills and containers as props • provides demonstrations of pills, yellow diary card • separates non-ARV drugs from ARVs • encourages joint attention using props • emphasises pill aesthetics • uses pictures on yellow diary card to explain dosage instructions to an illiterate pt • uses body language to signal end of session or pt's turn to explain • eye gaze: monitors pts' understanding	• uses props to explain dosage instructions • uses firm body language to emphasise important information • draws attention to labels
Code switching	• repeats questions in Setswana • repeats information in Setswana • uses Setswana greetings on pt entry and exit • when pt switches to Afr, ph does too	• gives NVP or Stocrin instructions in Setswana (especially for complex instructions)	

Rapport	• greets pts • reassures and encourages pts verbally and non-verbally (touches pts, smiles, gives 'thumbs up' sign) • uses calm, gentle, soothing tone of voice when discussing emotional issues • invites pts to discuss problems, health concerns by using open-ended questions • tries to relieve pt stress/anxiety/tension during consultations by using humour • affirms and responds to pts' concerns, emotions, anxieties • corrects pt errors with humorous tone • shows personal interest in pts: e.g. pt's child, birthday, pt's name • initiates personal moments²⁶ • encourages pts that ARVs will make them better • uses empathetic responses: e.g. "hope you feel better soon"	• uses humour to relieve pressure on pts to understand dosage instructions • reassures and encourages pts verbally • uses animated tone, encouragement when pt understands • invites pts to discuss problems, health concerns by using open-ended questions • asks general, then specific questions about pts' health • acknowledges pts' viewpoint and affirms pt concerns • suggests solutions to pts' concerns/problems • shows personal interest in pts: e.g. children, pregnancy • appears sympathetic to pts' illness-related frustrations	• initiates some successful humour attempts • shows care and concern for pts – this defuses tension in interactions • shows personal interest in pts: e.g. discusses husbands • invites pts to discuss problems, health concerns by using open-ended questions
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²⁶ A 'personal moment' is a term coined by researchers at the Wits Health Communication Project and has been noted in a number of data sets (e.g. Smith, 2008). It describes an instance of laughter, humour, social exchange or comments of a non-medical nature, initiated by either the health professional or the patient. These moments indicate a relaxation of formal roles, reveal the informal 'human' self of the participants and may serve to create rapport. Roter, Lipkin and Korsgaard (1991) distinguish between 'positive talk' (laughter, agreements, approval) and 'social talk' (social, non-medical exchange) and they note that female health professionals are more likely to make use of these moments in interactions with patients. Personal moments are discussed in more detail in *Chapter 8*.

Subtle breakdowns in understanding	• appears attuned to subtle communication breakdowns, lack of pt response and need for repair: initiates repair sequences, repeats explanation or invites clarification request from pt • uses self-initiated repair of errors • perceptive to pts' difficulties with remembering details e.g. encourages them to write down instructions	• appears attuned to subtle communication breakdowns, lack of pt response and need for repair: repeats explanation or invites clarification request from pt • acknowledges communication breakdown e.g. "I'm losing you now" • uses self-initiated repair of errors • perceptive to pts' difficulties with remembering details e.g. encourages them to write down instructions	
Collaboration	• offers opportunity for pts to ask questions • invites pt collaboration • negotiates with pts e.g. amount of left-over medicines • gives pts tasks to do while she writes in files	• offers opportunity for pts to ask questions • invites pt collaboration • allows pts to interact with pills e.g. pt touches boxes, syringe, wants to learn/curious	

Extracts 022 (p. 196), *028* (p. 206) and *047* (p. 219), taken from the interaction with Patient 11, demonstrate some of these facilitative communication strategies, as will be elucidated below. The pharmacist begins her explanation of the drugs with an agenda-setting statement (*Extract 028* (p. 206) line 83): she will explain the drugs to the patient and start with the non-ARV drugs. She places a pile of pill packets (the non-ARV drugs) in front of the patient (line 84) and keeps the ARV drugs at the side of the desk. By doing this, she not only specifies her intended actions, but also prepares the patient for the information which will follow and indicates visually which drug she will be discussing. She also clearly separates the ARV drugs from the non-ARV drugs and shows the patient each packet as she talks about the drug.

It is interesting to note how the pharmacist methodically introduces the drugs to the patient. First, she states the name of each drug, followed by an explanation of what the drug will do (e.g. line 85). Next, she provides the dosage instruction for each drug (e.g. line 87) and she points to the specific packet and sometimes to the label, so that it is clear which drug she is talking about.

The pharmacist waits for some kind of response or acknowledgement from the patient after providing each instruction, to determine whether the patient is following the explanation or demonstration. In *Extract 022* (p. 196) line 87, she gives an instruction, but receives no reply from the patient. She repeats the instruction and attaches a response solicitation, 'nè', to prompt a response (line 89). In line 90, the patient provides the response and the pharmacist continues with her explanation.

Further on in the interaction, the pharmacist provides a list of rather complicated dosage instructions. In *Extract 047* (p. 219) line 115, the patient feels able to request clarification of the instructions. What ensues is a series of turns in which both pharmacist and patient work towards a common understanding of the information. The presence of overlaps between the speakers (e.g. line 122) indicates the patient's concentration and efforts to understand the instructions.

The pharmacist seems aware of the patient's desire to collaborate and gain understanding and she responds to this by continuing to offer a simpler explanation supplemented by the use of the pill packets and boxes as props (lines 129-131). She also summarises the instructions for the patient (lines 132, 135, 137).

Therefore, in the interaction described above, the pharmacist uses various facilitative strategies which promote comprehension of the dosage instructions and encourage collaboration towards the common goal of understanding.

7.8.2 Potential barriers to communication

At certain points during some of the interactions, communication does not appear to be successful or collaborative, for various reasons. Sometimes this may be due to a potentially inhibitive strategy or process initiated by the pharmacist. Potential barriers to communication may arise because a pharmacist fails to implement a facilitative strategy or because of an external interruption to the interaction, such as a telephone call (e.g. *Extract 134* (p. 353)).

Some potential inhibitive processes or barriers to successful communication and collaboration are presented in *Table 9* below. Again, where columns are left blank in the table, this indicates that those phenomena were not observed in the two interactions with Pharmacist E which are included in the data corpus.

Table 9: Potential Barriers to Communication

Strategy	Pharmacist A	Pharmacist B	Pharmacist E
Incorrect information given to pt	- consistently uses a Setswana word (siame) incorrectly (confuses definitions of 'okay' and 'same') - gives incorrect information about vomiting (on one occasion)	- repeatedly pronounces drug name incorrectly as 'Stavidudine' - poor repairs: incorrect information occasionally given to pt	- gives incorrect dosage instructions about pills (on one occasion) - shows pt incorrect pill pot (on one occasion)
Interruptions	- cell phone rings often – ph tries to minimise interruption, waits for pts to stop speaking before she answers phone - B interrupts personal moment - B, A have conversation during some consultations - interrupts pts while they are speaking	- Pharmacy telephone rings often – ph must answer calls which disrupts interactions - high levels of environmental noise– carpet cleaners, radio in waiting room - makes comments to researcher during consultations - administrative / down referral tasks interrupt interactions	- B speaks on phone / speaks to R - phone rings, B speaks on phone in background
Communication processes which may inhibit understanding	- closed-ended questions lead to yes/no answers from pts, which requires further probing to get an answer - uses jargon terms (e.g. CD4) - asks series of questions without pausing or waiting for pts to answer - gives irrelevant information to pts - takes lengthy turns with a lot of information given at once - uses increased speech rate - does not always check pts' understanding of instructions	- closed-ended questions lead to yes/no answers from pts, which requires further probing to get an answer - uses some jargon terms (e.g. antibiotic) - moves too quickly to new topic, no opportunity for clarification - does not always use code switching - repeats questions or information persistently - drug names not always used	

Failed rapport / collaboration	• distracted by dispensing tasks and does not give pts her full attention • uses rather business-like communication style • humour/ rapport/ personal moments fail	• distracted by dispensing tasks and does not give pts her full attention • delayed response to pt's request for medicine • interrupts/cuts off pt • failed humour/personal moments • stands at desk for duration of session • rather insistent that pts must know how to take pills – pts sometimes respond indignantly	• bossy towards defaulting pt, talks down to him • failed humour attempts
Non-verbal behaviours	• misses pt non-verbal behaviours e.g. pt unsure of how to open child-proof pill pot • uses rather imperative tone of voice	• sighs a lot (irritated, tired)	
Failed repair	• not attuned to pts' lack of understanding and misses need for repair • failed repairs	• pt requests clarification but no response from ph	• pt looks puzzled – ph doesn't realise that pt is confused • does not notice pts' body language which indicates confusion
Other	• tries to mitigate side effects • yellow diary card not given to pts	• lengthy silences • no information given about adherence • no yellow diary card given to pts	

The following extract provides an illustration of potentially inhibitive communication processes and strategies. This interaction took place between Pharmacist A, a particularly ill male patient who struggled to concentrate during the session and his father who accompanied him to the consultation.

Pharmacist A shows the patient a booklet about Stocrin and she begins an explanation about how he might use the book (lines 213-216). However, she rapidly moves from this explanation to another topic, namely the concept of viral load (line 216), without pausing to check whether the patient is satisfied with the explanation about the booklet or whether he requires further explanation or clarification. She continues with her lengthy turn and the patient loses concentration, choosing instead to stare out of the window (line 217).

Both father and patient sometimes nod gratuitously, but there is no indication that they are following and understanding what the pharmacist is saying, or that they understand her lengthy explanation. In line 221, the pharmacist uses an 'ok?' to check whether the patient is following and perhaps to offer him an opportunity to request clarification, but she does not pause to allow him to respond to this. Again, she changes the topic to the concept of CD4 and this time asks the patient whether he understands this (line 222). His hesitant response indicates that he does not fully understand what CD4 is, and this is confirmed by his explanation of CD4 as being a number (line 224). The pharmacist appears to realise that he does not understand and she begins an explanation of the concept; however, she uses jargon terms such as 'infection' (line 227) in her explanation, which may merely confuse the patient further.

The pharmacist continues the interaction by repeating instructions for two of the ARV drugs (lines 235-236). However, she gives these in quick succession and does not offer an opportunity for clarification, nor does she verify whether the patient has understood the instructions. Again, she quickly moves to another topic without pausing, this time a demonstration of how to open the pill pot (line 237). The patient initiates a request for clarification (line 239), presumably of the

dosage instructions. What follows is an instance of failed repair, where the pharmacist does not appear to be attuned to the subtle breakdown in understanding and the patient's need for clarification. Her response in line 240 does not align with the patient's clarification request and a failed attempt at humour ensues. The patient does not pursue his request for clarification and remains silent (line 241).

Extract 110: Patient 18 (*Ph A, 1st visit*)

- 213 A: >°Ok° < I've got a special little ↑book (.) which is about your ↑medicine
 214 it tells you on- about ARV's and HIV and why you must carry on with
 215 the ↑medicine and here at the back there's a page that you can tear ↑off,
 216 where you write in the date, and the viral load is the blood test where
 217 they've taken the blood, to look how much virus is in the blood. Then in
 ----->>>>>
 ^ ^
P nods, then turns away and looks out the window
 218 the beginning it will be high, >nè< and as the medicine makes the virus
 219 smaller, it's going down, down down. Then we know the virus in your
 220 body is always a little bit, but remember it never goes away completely,

 ^
P, F nod
 221 ↑nè (.) always use condoms, always be careful with the blood. Ok? And

 ^
F nods
 222 the other one, the ↑CD4 do you know what your CD4 is?
 223 (3 secs)
 224 P: Ja I er [I understand it was, twenty four.
Yes

 ^
P turns towards A
 225 A: [CD4
 226 A: °Twenty four.° >Ok<. <The CD4 is the soldiers in your body who can
 227 fight against any infection, ↑nè> and the CD4 must be thousand or

 ^
P, F nod
 228 something and yours has gone down, down down °because of AIDS.°

... ((A continues explaining the concept of a CD4 count))	
235	A: So I can say this one is e lenngwe ka ura ya ↑eight and we said this one <i>one at eight o'clock</i>
236	↑was bosigo fela. Remember it's the big strong ↑one so it's <u>only</u> at <i>at night only</i> <i>demonstrates how to open pill pot</i> v
237	night. °↑Ok >let me show you<° to open ↑it you've got to push it ↑in ----- ^ ^ <i>P nods</i> <i>F nods</i>
238	and turn it.
239	P: And then? =
240	A: =You'll be <u>strong</u> . ((laughs)) <Ok?> There we ↑go
241	P: (3.0)

7.8.3 Summary of section

This section provided a description of various potential facilitators and barriers to communication which have been identified in the data corpus. Some of these were seen to cause an immediate facilitative or inhibitory effect in an interaction, while others hold the potential to impact on the patient's understanding of dosage instructions. Facilitative and inhibitive communication strategies were presented for each pharmacist and explained using illustrations from extracts.

7.8 Summary of Chapter

This chapter was based largely on the results of linguistically-based analysis of the data. It provided a description of the structure and content of the pharmacist-patient interaction in the context of HIV/Aids and ARV treatment, as well as various communicative and interactive verbal and non-verbal processes and strategies present in the interactions.

The work expanded on Pilnick's (2001) template for pharmacist-patient interactions. Based on the data corpus, a new template for interactions in the

HIV/Aids context was proposed and this includes several different structures, strategies and sequences. These differences appear to be influenced by context and disease-related factors and this has implications for pharmacy practice.

A description was given of the manner in which the pharmacists explain the ARV dosage instructions to patients. The pharmacists appear to draw from a selection of both verbal and non-verbal communication strategies when interacting with patients. Some of these strategies are evidenced across the data corpus while others are used with a few patients only. Non-verbal behaviours appear to hold particular importance in the interactions, in terms of providing clear, visually reinforced explanations and verifying patients' understanding.

One strategy that is used continually in the interactions is the elicitation of a demonstration of comprehension of instructions and information, rather than a reliance on mere assertion of understanding from patients. In conjunction with sensitivity to misunderstandings or potential breakdowns in communication, this strategy allows the pharmacists to identify misunderstandings and initiate repair sequences or provide further clarification of instructions when necessary. In addition, patients appear to be competent in initiating repair sequences through requests for clarification.

The use of Setswana in the interactions in the form of code switching behaviours is also of interest. Interpreting practices in this pharmacy were examined in this chapter. The negotiation of the interpreter's role within interactions, as well as the use of ad hoc interpreters, was discussed.

Finally, facilitative and inhibitive communication processes and strategies within the pharmacist-patient interactions were suggested based on a comprehensive analysis which compared and contrasted the interactions across the data corpus and across pharmacists.

CHAPTER 8

TOWARDS A MODEL OF CONCORDANCE IN THE PHARMACY

In addition to the numerous micro or linguistic themes present in the pharmacist-patient interactions, several recurrent macro, contextual themes also emerged during analysis. As discussed in *Chapter 5*, ‘macro’ themes refer to contextual factors such as the impact of the institution and broader socio-political and disease-related factors. Some of these factors are disease-related, while others are cultural, psychosocial, socioeconomic and linguistic influences, to name a few. These macro themes were derived using adapted methods of Discourse Analysis and Thematic Analysis.

The macro context has significant influence on the interactions and the manner in which the pharmacists interact and communicate with the patients. As Balshem (1993, p. 54) reminds us, disease is often “a master issue to which other issues are linked and through which discourse on other issues may be expressed. Talking about [disease] is often a code for talking about other things”.

Indeed, the field of sociology asserts that there is a framework of society above the level of the individual that provides the social setting within which individuals interact. It is important to recognise that micro and macro factors are intertwined within each interaction. One cannot and should not consider micro or macro factors separately, because the macro influences the micro and vice versa. In line with the sociological field of symbolic interactionism, the examination of micro-level, every day interactions will enable us to understand society and its structure (Newman, 2004).

Each patient brings his/her own set of expectations, background, experience and interactive style to the consultation with the pharmacist. S/he may be experiencing

fear of stigma, difficulty in disclosing HIV status, side effects from the ARVs or symptoms of HIV/Aids, and these circumstances may overshadow interactions with health professionals.

In order to achieve genuine patient-centred care and concordance, pharmacists need to become critically aware of the presence of such contextual factors. As discussed in *Chapter 3*, merely dispensing medicines to patients cannot be the only role of the pharmacist in the context of HIV/Aids and ART. Indeed, if a pharmacist is to succeed in empowering a patient to adhere to an ARV regimen, s/he needs to be aware of each patient's situation, potential circumstantial factors and the impact of disease-related factors on the patient's ability to comprehend dosage instructions.

With these views in mind, this chapter will focus on several themes which emerged from the data. These include how patients experience the illness of HIV/Aids and the impact of this on the interaction with the pharmacist; how pressures experienced by both patients and pharmacists manifest in interactions; how rapport and collaboration are created and encouraged within interactions; and how Mishler's theory of the lifeworld can be applied to the data.

The notion of 'concordance' (as described in *Chapter 2*) relates directly to the relationship between health professional and patient. However, the literature rarely discusses *how* this relationship is to be created or fostered. When taking a model of concordance into account, it is necessary to consider what is needed to produce a strong therapeutic relationship between pharmacist and patient. The evidence presented in this chapter will demonstrate that rapport and an appropriate sensitivity to the patient's lifeworld are essential ingredients for collaboration within interactions. Collaboration in turn embodies the ideas of negotiation and shared responsibility which are included in the model of concordance as described in the literature.

8.1 Side Effects and the Experience of Being Ill

Adapting to a chronic illness involves a series of transitions, not only in terms of new ways of living, working and relating to others but also in terms of self-concept and identity. This adaptation must be negotiated as the disease progresses and symptoms emerge. A chronic disease brings disruption and unpredictability to life plans and routines (Taylor & Field, 2003).

The advent of symptoms of HIV or side effects from ARV treatment may also bring uncertainty, since a typical symptom course cannot be predicted and patients may develop a variety of opportunistic infections. Whether the symptoms result from the treatment or the illness, the patient must interpret each as an illness event. They may feel anxious about the cause of the symptoms, as well as whether the symptoms will exacerbate or go into remission. During periods of health, patients may wonder when they will get sick again (Brashers, Neidig, Reynolds, & Haas, 1998).

Johnson and Neilands (2007) report that the way in which people manage the adverse effects of medicines is poorly understood. However, side effects are known to be strongly associated with patients' quality of life and the intrusiveness of the disease in terms of both physical and social functioning. The presence of side effects is also heavily linked to non-adherence to ART.

The physical and emotional experience of being ill with HIV/Aids and/or living with side effects from taking ARVs is a pervasive theme throughout the pharmacist-patient interactions and interviews with the research assistant. The fact that a patient feels unwell or is unable to concentrate for even a short period of time holds the potential to adversely affect their ability to comprehend dosage instructions and ultimately to adhere to an ARV regimen. Illness symptoms or side effects are often a source of great anxiety or discomfort to both patients and caregivers. Indeed, some patients in this study are particularly anxious because

they do not understand why they are experiencing illness symptoms and how these symptoms are related to the diagnosis of HIV.

In many instances, patients relate their physical and emotional experiences of being ill with HIV/Aids. They volunteer information about how they discovered their HIV positive status and how they feel about this diagnosis. Others talk about the consequences of their illness, such as being unable to work or feeling anxious about their socio-economic circumstances. The pharmacists regularly ask patients whether they have experienced side effects from the ARVs and this often prompts patients to relate their symptoms to the pharmacists.

8.1.1 Discovering the status of ‘HIV positive’

For many patients, learning that they are HIV positive brings uncertainty or confusion. Patients may be unsure about the source and duration of the infection, or confused about their diagnosis because of the public controversy surrounding the etiology of Aids (Fassin & Schneider, 2003). They may also be uncertain about the future and the course of the illness (Brashers et al., 1998). Although this topic was not probed by the researcher, several patients voluntarily related their stories of how they discovered that they were HIV positive.

Some patients suspected that they had the virus and they wanted to be sure of their status (indicated in bold in the extracts below):

Extract 111: Patient 7 interview (conducted in Setswana, translated into English)

*I was admitted in hospital earlier this year and that's how I found out that I'm HIV positive... **I was already suspecting that I have the symptoms**; that is the reason why I wanted to know my HIV status whilst I was in hospital.*

Extract 112: Patient 10 interview (caregiver) (conducted in Setswana, translated into English)

*When we brought him to Wellness we just wanted to confirm the previous results we got from the private doctor. **My sisters already suspected he was HIV positive** last year...but did not want to say much thinking he might just be hurt.*

Extract 113: Patient 22 interview (conducted in Setswana, translated into English)

*Initially I didn't even know I was sick, **I just decided to have an HIV test when I was losing a lot of weight without any trace of sickness.** I got my results and then decided to get my medication.*

Other patients were simply told by a health professional that the cause of their illness was HIV/Aids:

Extract 114: Patient 25 interview (conducted in Setswana, translated into English)

*I started getting sick last year when I was in Potchefstroom²⁷. I had fever and **I was then told that I am HIV positive.***

One patient was told of her status by her neighbours, not by the health professionals at the hospital. This caused her much emotional distress:

Extract 115: Patient 9 interview (conducted in Setswana, translated into English)

C: She is asking me why the doctor didn't tell me I have Aids, he just told me about my CD4 count and viral load.

P: I was not told by you, other people were telling me that I've got Aids.

*C: There were rumours all around the neighbourhood. **People were gossiping about her HIV/Aids status when she did not know.***

The way in which a patient learns of their diagnosis holds the potential to affect how they cope with living with the disease. A poor experience of the health care system, as evidenced in Patient 9's story above, may detrimentally affect a patient's future interactions with and trust in that health care system. This in turn may affect acceptance of treatment recommendations and patient adherence to the ARV regimen. In the case of Patient 9, her caregiver indicated that the patient does not understand why she must take the ARV drugs every day because she has not been told by the doctor that she is HIV positive. Therefore, she does not have

²⁷ A town approximately 100 km south of Rustenburg.

confidence in the health care system or in the doctor's treatment recommendation and she has not yet made a commitment to adhere to the regimen.

Patients experience different emotional reactions to their diagnosis. Some are upset or become anxious:

Extract 116: Patient 10 interview (caregiver) (conducted in Setswana, translated into English)

I was really heartbroken when I found out he was HIV positive, you know, it is not easy.

Extract 117: Patient 26 interview (conducted in Setswana, translated into English)

The pharmacist gave me anti-depressants to help me relax.

Others have accepted their status and are determined to have an optimistic attitude towards living with the disease:

Extract 118: Patient 22 interview (conducted in Setswana, translated into English)

I also encourage other patients that I meet here to be optimistic in life, having HIV is not the end of the world. I hate HIV. It's an enemy that we need to fight. I never thought at my age I would be HIV positive, but (pause) God allowed it to happen, what can I say?

Extract 119: Patient 9 interview (conducted in Setswana, translated into English)

I have accepted any problem that I have and am willing to take medication to get better.

Patient 9's comment is especially pertinent, as it demonstrates the link between acceptance of the diagnosis of HIV and commitment to adhere to the ARV treatment regimen. Learning of the diagnosis of HIV/Aids can be a particularly frightening experience which may send a patient into a state of turmoil or depression, or even lead them towards substance abuse. Patients may find different methods of coping as they adjust to their diagnosis and to life with the illness (Taylor & Field, 2003; Moskowitz & Wrubel, 2005). For many patients, acceptance of their diagnosis is a process, which may be linked to issues of stigma and disclosure. Ultimately, acceptance is essential to ensure good treatment outcomes.

Interestingly, all of these comments emerged during the interviews with the research assistant and not during the interactions with the pharmacists, possibly because patients felt comfortable to share this sensitive information with an ‘outsider’ who was not part of the health care system but who was culturally matched to the patients. Another reason for the emergence of these comments may be that patients may not have considered it relevant or appropriate to disclose this information during their consultation with the pharmacist. Nonetheless, it is important that pharmacists are aware that a patient’s previous experiences of the health care system, especially negative experiences of learning the diagnosis, may impact on the patient’s trust in the health care system and hence on future health and treatment decisions.

8.1.2 Side effects from ARVs

Side effects resulting from ARVs can be as profoundly disruptive to the daily life of a patient with HIV/Aids as the symptoms of the disease. In fact, Brashers et al. (1998) report that patients may find the side effects from ART more debilitating or devastating than the symptoms of the illness. As evidenced in the pharmacist-patient interactions, many patients experience side effects in the initial stages after commencing ART. These range from mild symptoms to debilitating nausea or dizziness (refer to *Chapter 6 Section 6.3.9* for a comprehensive discussion of side effects). Pharmacists appear to take extra care in warning patients of side effects of ARVs. They regularly ask patients how they are feeling while taking the drugs in order to invite them to discuss any side effects (e.g. *Extract 017* (p. 189)).

The following extract provides evidence of the negative impact of such side effects on daily activity and functioning. The patient indicates that he is experiencing cramps or pains in his legs (lines 20-27). The pharmacist emphasises that he should not stop taking the pills but must consult the doctor (lines 28-37). The patient seems satisfied (line 38) but later reopens the topic by asking whether the doctor can change his prescription (line 103). The pain is obviously quite severe and of great concern to him and the pharmacist senses the patient’s discomfort and

anxiety. She asks whether he would like to see the doctor immediately (line 108) and the patient indicates that he is willing to return to the clinic the following day if necessary (line 110). He adds that it is difficult for him to walk even a short distance because of the pain (lines 110-112). The pharmacist concludes by stressing again that the patient should not stop taking the ARVs (lines 116-117) and she also suggests possible methods the doctor might choose to ease the pains (lines 119-120).

Extract 120: Patient 12 (Ph A, exp pt)

- 20 P: Uh the thing that uh the difference that I always uh have seen=
 21 A: =↑mm=
 22 P: =in three weeks back=

 ^
puts hand out
 23 A: =↑mm=
 24 P: =my feet (go like this), legs go like this.
 ----- -----
 ^ ^
touches foot opens and closes fist
 25 P: [((unintelligible))
 26 A: [Ok pains in the legs.=
 27 P: =Ja ja in the legs.=
Yes yes

 ^
touches leg

lifts hands splayed towards body touches legs
 v v

 28 A: =It can be either from HIV, the virus itself can give you these pains in the
puts hand out towards ARV boxes picks up pot then box puts them down

 v v v

 29 legs, but sometimes it's the medicine. It could be one of these, but I don't

 ^
nods

			<i>gestures</i> v	
107	A:	=and if the doctor says wait, let- sometimes they just give you something		
108		extra to help for the pain. Is it very bad? [Do want to see the doctor today?		
			----- ^	
109	P:		<i>nods</i>	[I (haven't)-
				----- ^
				<i>opens hand</i>
110	P:	I can even come tomorrow. But uh if I can walk a distance, maybe from here		
				----- ^
				<i>points downwards</i>
111		[to to to the municipality, [er then I I feel that I'm I'm tired [af- then for a		
			----- ^	----- ^ ^
			<i>points outside</i>	<i>makes fists, releases them</i>
112		minute, then I go.		
113	A:	[↑mm	[↑mm	[↑ja
			<i>touches legs</i>	<i>yes</i>
			v	
114	A:	↑Ja (.) ok so it's not paining the whole time?		
		<i>Yes</i>		
115	P:	No.		
		----- ^		
		<i>shakes head quickly</i>		
		<i>moves head emphatically</i>		
		v		
116	A:	Ok. If it gets <u>any</u> worse then I want you to come and see the doctor first		
117		next time.		
		----- ^		
		<i>nods</i>		
118	P:	°Ok. °		
		<i>moves hand in circular motion</i>	<i>puts hand over medicines</i>	
		<i>over medicines</i>		
		v	v	
119	A:	Ok sometimes they change these three medicines or otherwise they can		

<i>holds hand over medicines, fingers together</i>		
v		
120		give you Thiamine or something else to help to take those pains away.
121	P:	°Ok. °

		^
		<i>nods</i>
122	A:	Alright? °But then speak to the doctor.°

Some patients appear reticent to reveal that they are suffering from side effects. However, it seems that the manner in which the pharmacist introduces the topic is significant in terms of how much information the patient shares. In those interactions in which a direct question regarding side effects is asked, such as “did the pills make you feel sick?” the answer is often minimal. However, as in *Extract 121* below, a narrative-type approach tends to yield more information about side effects, as in the extract below.

The pharmacist asks an open-ended question, seemingly to invite the patient to talk about how the pills are making her feel or how she is coping with the ARV regimen (line 56). Initially, the patient replies positively and says that everything is “alright” (line 57), but then volunteers that one of the ARVs made her feel dizzy (lines 57-58). After some clarification, the pharmacist responds by reassuring the patient that she will begin to feel better (line 69) and she emphasises that the patient should not stop taking the tablets (lines 61, 71). Pharmacists stress this information with all patients who raise concerns about side effects.

Extract 121: Patient 8 (Ph B, 2nd visit)

56	B:	So? Further (.) everything going well?	
57	P:	Mm everything's going alright. These ones at ↑night just (.) make me feel	

		^	^
		<i>picks up Stocrin pot, puts it down</i>	<i>gestures up and down</i>
			<i>towards stomach;</i>
			<i>shakes head</i>
58		(.) [dizzy.	

		^	
		<i>gestures up and down towards head</i>	

59	B:	[What? Dizzy?
60	P:	<u>Mmm.</u> ----- ^ <i>nods</i>
61	B:	Just keep on with it=
62	P:	=mm. <i>looks in P's file, moves pen across page</i> v -----
63	B:	You've only been on it now for a few week- for two weeks nè?
64	P:	Yes. ----- ^ <i>nods</i>
65	B:	For two weeks.
66	P:	°Ee.° <i>Yes.</i> ----- ^ <i>nods</i>
67	B:	From <u>now</u> on it will start feeling (more).
68	P:	↑Ok <i>opens brown paper bag</i> v -----
69	B:	°It will° start feeling better.
70	P:	mm.
71	B:	Just <u>don't</u> stop taking the tablets=
72	P:	=mm.=
73	B:	=even though.

Interestingly, the pharmacist's use of an open-ended narrative-style question (line 56) elicits much information from the patient about how she is feeling and how she is coping with taking the ARVs, perhaps more so than if the pharmacist had asked a closed-ended question. The cultural narrative, as described by Penn (2002), is linked to the field of narrative medicine. This style of interviewing is less structured and invites the patient to narrate the story of their illness. Previous studies have found that using a cultural narrative is often a more time-effective method for eliciting information from patients (Evans, 2001; Sishi, 2001).

Kemppainen et al. (2003) report that anxiety is a universal symptom among people living with HIV/Aids. In addition, chronic illness is associated with increased psychological distress. Anxiety may be linked to various factors, including testing and diagnosis of HIV, symptoms of illness, adjustment to HIV, greater sources of stress and socioeconomic factors. However, anxiety and fear are frequently underreported by patients, who tend to utilise self-help strategies rather than seek assistance from health professionals. It is important for health professionals to be alert to signs of anxiety and fear and to be aware that patient's anxiety levels may fluctuate at various stages of the disease and treatment process.

One patient spoke of her fear and anticipation of side effects from the ARVs (see the extract below). She had watched her granddaughter suffer from side effects (lines 168-171) and expected to go through the same experience (lines 163-164). The pharmacist reassures her that her body is now accustomed to the drugs and she should not experience side effects (line 177), but the patient remains apprehensive (lines 179-181).

Extract 122: Patient 13 (Ph A, 2nd visit)

- 163 P: Jy weet ek het ek het geskrik dat hulle [miskien gaan my naar maak of
You know I was I was frightened that they will maybe make me sick or

^ ^
- 164 so, eh-eh. [((unintelligible)) *extends hand outwards, then touches chest*
something, eh-eh.

^
- 165 A: *shakes head*
[mm ↑hmm
gestures towards stomach
v
- 166 A: [Jy's gelukkig. Party mense hulle is bietjie naar in die begin
You're lucky. Some people are a little sick in the beginning
shakes head
v
- 167 *maar dis so vir two weeks en dan sal dit (clear).*
but it's like this for two weeks and then it will (clear).

168	P:	(Dit was die kleindogtertjie) ((unintelligible)) <i>It was the granddaughter</i> ----- ^ <i>puts index finger on desk</i>
169	A:	Was jou kleindogter ‘n bietjie siek [in die begin]? <i>Was your granddaughter a little sick in the beginning?</i>
170	P:	[Ja. Sy was,] [sy het opgegooi en [alles, <i>Yes. She was, she threw up and</i> ----- ^ <i>gestures to indicate vomiting</i>
171		daai dinge. <i>everything, those things.</i>
172	A:	[↑uh [↑uh ... ((unintelligible speech)) <i>points to chest holds open palms outwards</i> v v -----
177	A:	En nou, jou lyf <u>ken</u> hierdie medisyne so jy sal nie (nog siek) word nie. <i>And now, your body knows these medicines so you won't get (sick again).</i>
178		Ok? Vertel net vir ons hoe gaan dit. <i>Just explain to us, how are you doing.</i>
179	P:	Ek het nie ‘n pyn of niks, regtig ek wil nie niks praat wat nie- <i>I don't have a pain or nothing, really I don't want to talk about nothing that-</i> ----- ^ ^ ^ <i>runs thumbs along holds up puts hands in lap</i> <i>ribcage palms</i> <i>smiles</i> v -----
180	A:	Jy wil nie te gou praat nie. ((laughs)) <i>You don't want to talk too soon.</i>
181	P:	((laughs))

As discussed in *Chapter 7*, there are several cases in the data corpus in which patients appear ill or fatigued, or are unable to concentrate. This may well have an impact upon their understanding of the ARV dosage instructions. Pharmacists take extra care with these patients by using agenda-setting statements, giving running commentaries and providing scaffolding or prompting to support and

promote understanding of dosage instructions. It is particularly important for pharmacists to be attuned to patients' needs in this regard. One pharmacist actually commented that she has found it necessary to take extra care with these patients to ensure that they understand the instructions completely:

Extract 123: Pharmacist E interview

... last year there was a patient you know she was so sick, very sick and when I counsel her, yoo, she was just looking outside the window there, couldn't listen, couldn't understand what I'm saying but I tried hard I've tried hard. And if you can see her this time you will like it. Mm. She did understand.

8.1.3 Consequences of being ill

For many patients, a chronic illness may bring a loss of self and identity, as well as a role change. Patients become dependent on other people and often lead restricted lives as a result of the illness (Charmaz, 1983). In South Africa, incidences of unemployment and HIV/Aids have reached high levels. Many patients with HIV either lose their jobs or can no longer work because of illness (Maloon, Crous, & Crafford, 2004).

Two patients, both males, spoke of their distress at not being able to work because of their illness (highlighted in bold). Both wanted to work and were frustrated that they could not do so:

Extract 124: Patient 5 interview (conducted in Setswana, translated into English)

*I have not been able to work since February because I was sick...**this hurts me, because I'm a man, I need to work... my goal is to get stronger first.***

Extract 125: Patient 17 interview (conducted in Setswana, translated into English)

*I'm very sick. Even right now I'm still wondering what happened to me, I have lost a lot of weight and I don't know the cause. **It's been a long time staying at home. I don't work. I don't do anything.***

The loss of productive function, financial crises, strain on family members and/or caregivers, stigma and social isolation all contribute to loss of self (Charmaz, 1983). In the case of Patient 5, this is further exacerbated: he equates his inability to work with an inability to prove himself as a man and by not being able to work, his ‘manhood’ and his role as a breadwinner are threatened.

The value of work in maintaining a sense of wellbeing and self-esteem is well documented in the literature. Financial deprivation linked to unemployment has been shown to have a greater negative effect on self-esteem in men than in women (Waters & Moore, 2002). Among patients living with HIV/Aids, work related anxieties are extensive and cannot be separated from a number of other concerns, including financial concerns related to socioeconomic status, relationship difficulties, fear of disclosure, coming to terms with HIV status, job-related barriers and coping with HIV/Aids (Maloon et al., 2004).

8.1.4 Summary of section

Through extracts and patient perceptions, this section presented evidence of how the process of disease and illness may influence the pharmacist-patient interaction, from the diagnosis of HIV onwards. The manner in which patients learn of their status may affect the patient’s trust in the health care system as well as his/her acceptance of the disease. Symptoms of the disease and side effects from ARVs may be debilitating and cause concern to patients. Pharmacists focus on discussions of side effects in interactions because of the importance of maintaining adherence to ARVs. The manner in which this topic is introduced is important in terms of how much information patients reveal about side effects.

8.2 Pressures and anxieties

One of the recurring themes in the data corpus is the pressure and anxiety experienced by both patients and pharmacists which is manifested in the pharmacist-patient interactions. Patients appear anxious about understanding

dosage instructions and daunted by the task of learning the regimen. Both of these are also linked to their ability to adhere to the regimen and experience the resultant improvement in health. Caregivers seem apprehensive about taking responsibility for giving the drugs to their child or the patient under their care. Pharmacists appear under pressure to ensure that the patients understand the instructions and the importance of adherence. They also experience additional demands because of the institutional environment in which they work. This section will attempt to provide the reader with some insight into these pressures, using appropriate illustrative extracts.

8.2.1 Pressures experienced by patients

Extract 027 (p. 206) presented in *Chapter 7* is a poignant example of how overwhelming the consultation with the pharmacist may be for a patient, especially during a first visit when patients are presented with several drugs in different boxes and containers, each with its own dosage instructions. This extract echoes other instances found in the data corpus in which patients appear to be intimidated by the range of ARV medications, or in which they display anxiety about understanding the dosage instructions.

In *Extract 027* (p. 206), the pharmacist gives the patient a number of medicine containers: two large boxes of Lamivudine, four large boxes of Kaletra, two large boxes of Nevirapine, two small bottles of an unidentified medicine and one packet of pills. The mother's non-verbal responses provide some indication of her apprehension at being presented with the reality of the ARV treatment and the responsibility of caring for her child. After staring at the medicine boxes for some time, she reaches out tentatively to pick up a box. Curious, she opens it, looks inside (line 66) and slowly takes out the medicine bottle. Perhaps she is wondering whether the pharmacist is going to explain the drugs to her – the pharmacist senses her anxiety and reassures her (line 67).

instructions. She takes the bottle out of the pharmacist's hand (line 174) and starts to write on the label (line 176). The pharmacist respects the patient's need for this aide memoir and waits while the patient writes on the label (line 177), before checking that the patient is satisfied (lines 178, 180) and resuming the discussion.

Extract 127: Patient 14 (Ph B, ? visit)

		<i>moves bottles together</i> v	<i>reaches for another bottle</i> v
172	B:	°Ok. Let me go (onto) the next one.°	
			<i>grabs a pen off the desk</i>
173		(2.0)	
			<i>starts to write on a piece of paper</i>
		<i>holds out bottle for P to see</i> v	<i>points to label on bottle</i> v
174	B:	(Hierso), it's <u>on</u> the bottle, ↑nè, there it's <u>on</u> the bottle. See? You don't Here	
			<i>takes bottle out of B's hand</i>
175		even have to write anything. It's <u>on</u> the bottle.	
			<i>holds bottle with pen poised, as if to write on the label</i>
176	M:	°Mm uh°	
			<i>starts writing on label</i>
			<i>leans head on her hand with elbow on the desk; smiles at R</i> v
177		(10.0)	
			<i>writes on label</i>
178	B:	Ok?	
			<i>hands bottle and pen to B</i>

		<i>takes bottle from P, puts it on desk</i>
		v

179		(4.0)
		<i>puts flat hand over boxes</i>
		v

180	B:	So you will remember?
181	M:	Yes.

In *Extract 128* below, the pharmacist has asked the patient to repeat the dosage instructions, which she begins to do (line 98). The pharmacist responds with reassurance and encouragement (line 99) and proceeds to give another dosage instruction for pain tablets (lines 99-100). The patient, however, appears unsure of herself and her understanding of the dosage instructions, so she asks the pharmacist if she has understood correctly (line 101). The pharmacist responds by verbally and non-verbally reassuring the patient that she has indeed understood correctly and she also offers the patient an opportunity to re-explain the instructions (line 102) – she seems to sense the patient's anxiety. The patient begins to re-explain (lines 103, 105) and then stops to offer an explanation for wanting to explain the instructions again (line 105): she feels anxious and insecure about her understanding. The pharmacist reassures her (line 106) and the patient continues her second explanation (line 107).

A little further in the interaction, the pharmacist again reassures the patient about her comprehension (line 114). The patient appears to be satisfied with the interaction and initiates a close implicature by requesting a paper bag (line 115). However, she then turns to the researcher to ask if she has understood correctly (line 117). The intention behind the patient's actions is ambiguous: perhaps she requires confirmation of her understanding from an outsider and therefore asks the researcher's opinion, or perhaps she does not trust the pharmacist's judgement of her understanding and therefore requests a second opinion. (The patient's questions are highlighted in bold.)

Extract 128: Patient 22 (Ph B, 3rd visit)

- 98 P: And these ↑two only in the morning, half past seven.

 ^ ^
moves 2 pill pots to the side puts flat hand on the pots
nods holds pill box
 v v

- 99 B: Daar's hy. Very good. This is for pain and ↑fever ↑nè for the pain in
There we go

 ^
nods
holds pill box gestures to indicate pain in the head puts box on desk
 v v v

- 100 your ↑legs and the pain in the ↑head two pillies three times a day.
- 101 P: **I'm right?** [Ok.

 ^ ^
gives a thumbs up puts lids back on pots
 v v

- 102 B: [↑Ja jy's sharp. You want to tell me again, it's fine.
Yes you're

 ^
puts lid back on pot; smiles
- 103 P: °Ok. ° This one.

 ^
picks up a pill pot
- 104 B: ↑Mm
- 105 P: It's for °((unintelligible))°. **I must be sure.**

 ^ ^
puts pot back on desk picks up a pot, opens it
- 106 B: Ja, no that's fine. [Um-
Yes

 ^ ^
puts pot down picks up another pot, opens it, puts it down
- 107 P: [This (.) this one (I take in the evening, half past seven).

 ^ ^
picks up a pill pot puts hand over pot
- 108 B: Ja. ↑Ja
Yes yes
 ... ((P continues to explain how she is taking the ARVs))

114	B:	Daars hy. Nee jy's sharp, ouma. <i>There we go. No you're sharp, grandmother.</i>
115	P:	°Ok. ° You've got the brown paper [for me to put these in?
116	B:	[Ja. <i>Yes.</i>
117	P:	[It's right? ----- ^ <i>turns to R, smiles</i> <i>hands brown paper bag to P</i> v -----
118	B:	[(Here's a) brown bag. ((laughs))
119	P:	°Thank ↑you°

The pharmacists use several opportunities to defuse tension or decrease the pressure on the patients, sometimes through instances of shared humour. For example, in the extract below, the pharmacist again asks the patient to repeat the dosage instruction for Nevirapine (lines 167-168). Despite a third clarification, the patient has still not understood the dosage instructions correctly. The patient does not know how to answer the pharmacist's question and she attempts a reply. The pharmacist laughs silently in response to the patient's humorous answer and the patient joins in the humour with a smile (line 169).

After reassurance from the pharmacist (lines 170, 172), the patient responds by initiating a personal moment in which she acknowledges that she is having difficulty understanding the information. She sighs and rubs her face with her hand; she is clearly frustrated and is perhaps fearful that she might never understand (line 173). The pharmacist responds to the patient's feelings by reassuring and encouraging her. She tells the patient that she will reach the point of understanding (line 174) and by saying this, she communicates her support and care and indicates that she is prepared to spend time ensuring that the patient fully understands. The fact that she re-explains the instructions on several occasions using different methods of explanation and regularly verifies the patient's understanding is indicative both of her desire for the patient to understand and the

pressure she feels while trying to assist the patient to grasp the information. (The pharmacist's reassurances are indicated in bold in the extract.)

Extract 129: Patient 11 (Ph B, 1st visit)

			<i>leans forward, dips head, smiles</i>
			v
167	B:	Ok? Until the fourth of July. And then? What then? What are you	

168		going to do then?	
			<i>leans back in chair, mouth open, laughs silently</i>
			v
169	P:	I come back. I'll come back tell you everything about this ((laughs)).	

			^
			<i>smiles</i>
			<i>leans forward</i>
			v

170	B:	M*****, <u>no</u> . ((laughs)) Wag, let me tell you.	
			<i>wait</i>
			<i>picks up pill pot, takes off seal</i>
			v

171		(2.06)	
172	B:	I'm going to show you, nè↑	
173	P:	Ei: (.) hhh.	

			^
			<i> rubs face with hand</i>
			<i>opens pill pot, tips out several pills</i>
			v

174	B:	You'll get it <u>now</u>, don't worry.	

The final extract in this section illustrates the pressure felt by patients to adhere correctly to the ARV regimen and the anxiety which may arise when patients become confused about dosage instructions. This patient was unsure of when to take Stocrin (line 1), but he had read the instruction on the medicine label and had in fact been taking the drug correctly (lines 5, 7, 9-10). There is a build up of tension in the interaction as he hesitantly explains his situation, culminating in

relief (lines 34, 36, 53, 58) when he is reassured that he has been taking the ARVs correctly (lines 33, 52).

Extract 130: Patient 16 (Ph B, ? 2nd visit)

- 1 P: *I've been taking my tablets the way I was instructed, however I am confused²⁸.*
- 2 RA: *Ee ga o nwa ka eight phakela o nwa ka eight bosigo.*
Yes when you drink them at eight in the morning, you take them again at eight at night.
- 3 P: *Ee.*
Yes
- 4 RA: *Ee.*
Yes.
- 5 P: *Gonale tse dingwe tsa motho o kukileng bolo so, wa utlwa.*
Yes, there are those other tablets with a picture of a person holding up a ball, you hear.
- 6 RA: *Ee.*
Yes
- 7 P: *Fo teng a be a kwala fela night wa bona.*
She wrote night on them, you see.
- 8 RA: *Ee.*
Yes
- 9 P: *So e rile ga a kwala night lena- (.) e rile ga ke nwa tse dingwe ka bosigo,*
10 *be ke ke nwa gongwe le tsona le tsona, e be e le gore-*
So, when she wrote night, I- (.) when I was taking other tablets for the
night I took them together with those ones, then-
 ... ((RA questions P to determine whether he is taking all of the ARVs at night))
- 25 P: *So, joanong ke ne ke botsa gore, ga e le tse tsa bosigo tse.*
Now I am asking about these night tablets.
- ... ((P explains that the pharmacist did not specify which tablets are to be taken at night))
- 33 RA: *Ee o tsanetse o di kopanye le tseo.*
Yes, you must take them all together.
- 34 P: *Oh ga gona bothata?*
there is no problem

²⁸ This line was translated by Translator 1, who did not provide the original Setswana text. Translator 2 was unable to hear what was uttered.

35	RA:	Ee. <i>Yes</i>
36	P:	Ok Jaanong lena ke ntse ke dira jalo. <i>Ok now I have been doing that.</i>
37	RA:	Ok.
38	P:	Ee. <i>Yes.</i>
39	RA:	No he did <u>not</u> understand. Because these ↑ones
40	B:	Mm
41	RA:	um ***** ²⁹ had said, [<night only>
42	B:	[↑mm
43	B:	↑mm
44	RA:	But now these ones, he's [supposed to drink them <u>in</u> the morning [and at night
45	B:	[is also at night [and at night.
46	RA:	[So he didn't ↑know] [<u>night when</u> ?
47	B:	[So together with that one.] [Ja. <i>Yes.</i>
48	P:	[eh. <i>yes</i>
49	B:	w- (.) at <u>eight</u> o'clock.
50	RA:	[Because (.) ja:. So he says he's been taking them all <i>yes</i>
51		together. [He wanted to know if that's the right-
52	B:	[Ja. So that's <u>sharp</u> . <i>Yes</i>
53	P:	Dankie. <i>Thank you</i>
54	B:	Ja sharp. <i>Yes</i>
55	RA:	Ja. (((laughs)) <i>Yes</i>
56	P:	[Oh: ok.
57	B:	Ok?
58	P:	Dankie. <i>Thank you</i>

²⁹ Pharmacist A.

... ((RA revises dosage instructions in Setswana))

81 P: Ke ntse de dira yane, fela yane kgaitsa diake.

I've been doing this, just this my sister.

82 RA: Oh:

83 P: Nna ga kere ne ke nagana [gore gab a kwalwa nako.

I have been thinking that there is no time written.

84 RA: [Nako fa

Time here

85 P: Ke ntse ke re ke nna ke dirang phoso.

I have been thinking that I am the one who is making the mistake.

8.2.2 Pressures experienced by pharmacists

The advent of ART has brought many positive benefits. Health professionals are able to offer life and hope to patients living with HIV/Aids, instead of palliative care only. Many health professionals have discovered a newfound enthusiasm and satisfaction in their work with these patients and some have been able to develop close therapeutic relationships with patients who are on ART regimens (Karasz, Dyche, & Selwyn, 2003).

However, ART has also brought negative consequences. Many health professionals find themselves faced with barriers to their ability to accomplish their goals, or even to fulfil their roles. These barriers include poor planning initiatives, inadequate health care facilities, lack of posts and resources and lack of emotional support. The strain on the under-resourced health system has meant that health professionals are overloaded and overworked and many of these professionals go beyond the call of duty in order to serve their local community (Stein et al., 2007).

Health professionals may experience intense frustration and anguish in caring for patients who do not have access to treatment, default on treatment or refuse treatment, or in situations in which ART is no longer effective in sustaining life. Health professionals caring for patients with HIV/Aids appear to be more susceptible to burnout syndrome than those who work with other diseases, because

of the more intense levels of care required by patients with HIV/Aids (Benevides-Pereira & Das Neves Alves, 2007).

Bodibe (2006) reports that pharmacists at Rustenburg Hospital are required to put in extra work hours in order to accommodate the numbers of patients who attend the Clinic. Pharmacists in this study feel that they work hard to ensure that patients understand how to take the ARVs, as this extract attests:

Extract 131: Pharmacist E interview

Because we work very hard, we work very hard, especially if it's for the first time taking their medication. But you know sometimes they come here very sick, then for the second time we still explain, we still explain.

Health professionals working with patients who have HIV/Aids have been required to modify their often biomedical approach to a more patient-centred one which focuses on broader psychosocial issues and even bereavement or end of life care (Selwyn & Arnold, 1998). As a doctor in one study stated, “You have to understand what’s going on in patients’ lives and the things that can affect their ability to take the medications” (Karasz et al., 2003, p. 1620). However, as confirmed by the interviews with pharmacists, counselling skills are not taught explicitly.

Many pressures and challenges are experienced by the pharmacists in their work environment because of the large numbers of patients and chronic staff shortages. During the week of data collection, a number of incidents occurred which demonstrated these pressures. The pharmacists are frequently distracted from their consultations with patients because of managerial crises, administrative tasks or dispensing errors that required their immediate attention. These events are often unpredictable and usually require immediate attention. The pharmacists made candid comments to the researcher about their frustrations and work difficulties and these provide interesting insights into the functioning of the Wellness Clinic.

It is important to highlight and discuss such pressures, because these variables may have an impact on the pharmacist-patient interaction, the time spent with patients, the quality of care received by patients and the working relationships between the pharmacists. They indicate how the pharmacy is short staffed, how ‘thinly spread’ the pharmacists are, and how the job of the pharmacist involves more than simply dispensing medications and consulting with patients. They also provide a powerful illustration of the need to expand existing health infrastructure, resources and staff when implementing ARV rollout programmes.

This is not a situation that is necessarily unique to this context: Crawford and Brown (2007) discuss how economic imperatives and the need for efficiency in health care have resulted in limited time being spent between health professionals and patients in many health care settings worldwide. These pressures often result in ‘brief communication’ with health professionals, which may be alienating, cold or rather inhumane for patients. Potter and McKinlay (2005) reveal how the doctor-patient relationship has changed over the past few decades from an intimate relationship between the health professional and patient to a crowded, impersonal relationship focused instead on productivity and heavily influenced by environmental pressures and constraints.

Smith, Golin and Reif (2004) conducted a survey of pharmacists’ counselling practices with patients living with HIV/Aids. Their results show that pharmacists working in the field of HIV are often only able to provide brief, basic counselling on ART to patients because of time and workload pressures. Counselling often includes a discussion of dosage instructions, but due to a lack of time, the pharmacist is not always able to suggest adherence strategies to patients.

Several of these stressors have been identified in the data corpus as recurring themes. They will now be presented and discussed using relevant illustrative extracts.

Administrative and managerial tasks

Computer software (Rx solution) has recently been installed to assist the pharmacists in keeping track of drug orders, patient collections, patient consumption levels, regimens, statistics and adherence levels. The implementation of this programme has added extra work and frustrations, as the pharmacists have had to learn how to operate the system and enter patient details as quickly as possible during each consultation. Pharmacist B reported to the researcher during one consultation that “this alone takes me a while...to get it into the computer”. The job of entering patient information and keeping track of patients falls on the pharmacists’ shoulders, yet they are neither computer technicians nor clerks.

The extract below is one of several similar exchanges between Pharmacists A and B which took place during a pharmacist-patient interaction. While A is talking to the patient, B works through a number of files and enters patient information onto the computer system. The computer program will not respond, so she interrupts A’s conversation with the patient (lines 296-297) to request assistance. A tries to offer advice (line 298) and gets up to look at the computer screen (line 302). She sits down again, but the computer problem persists so she stands up once more and moves across to look at the computer (line 306). B is clearly frustrated (line 309) but together they manage to sort out the problem (line 310). A then returns to her consultation with the patient.

Extract 132: Patient 13 (Ph A, 2nd visit)

- | | | |
|-----|----|---|
| 292 | A: | Maar jy’s nou <u>slim</u> , ek [kan sommer sien jy’s reg, ↑nè
<i>But you’re now clever, I can just see you’re ok, nè</i> |
| 293 | P: | [Alright. (eh). |
| 294 | P: | Dankie (ma).
<i>Thank you (mother).</i> |
| 295 | A: | Daars [hy.
<i>There we go.</i> |
| 296 | B: | [>(Hoer u, hoekom dat julle moenie) uit die posters (column) |
| 297 | | uitgaan nie?< |

		<i>Listen, why mustn't you go out of the posters column?</i>
298	A:	Ek weet nie, control alt and delete werk. Ek het dit gister ook gehad het. <i>I don't know, control alt and delete works. I also had it yesterday.</i>
299	B:	Maar dis serious. (Gaan nie my inligting werk) nie? <i>But it's serious. (Is my information not going to work)?</i>
300	A:	Ek hoop nie so nie. (.) Ek weet nie anders wat om te doen nie. <i>I hope not. I don't know what else to do.</i>
301	B:	En dan sê ek? Net- end task? <i>And then I say? Just- end task?</i>
		----- ^ <i>A stands up, goes to computer</i>
302	A:	Net end end ↑programme en ↑task <i>Just end end programme and task</i>
303	B:	↑Mm ----- ^ <i>A sits down again</i>
304	A:	En as jy wil gaan jy gaan check of jou data daar is °((unintelligible))°. <i>And if you want to go you go check if your data is there</i>
305	B:	What's that? The system cannot end this programme because it is
306		waiting for a response from <u>you</u> . ----- ^ <i>A stands up, goes to computer</i>
307	B:	Mag jy hom <u>gepost</u> ? <i>Should you have posted it?</i>
308	A:	(Try) ↑cancel ----- ^ <i>A sits down again</i>
309	B:	hhhhnnn.
310	A:	°Daars hy.° <i>There we go.</i>
311	B:	New ↑task ↑asseblief (.) ↑cancel (.) °↑cancel° <i>please</i>
312	A:	Daars hy ↑Maria <i>There we go Maria</i>
313	P:	°(Het jy nie 'n sakkie)°? <i>Don't you have a packet?</i>

314	B:	My [vrek- <i>Oh hell-</i>
315	A:	[Ek het 'n ou sakkie ↑here, (ons gaan) gou ↑gou (.) (dan sal) jy
316		sommer self insit. <i>I have an old packet here, we're going quickly (.) then you'll just put it inside yourself.</i>

Pharmacists are asked regularly to provide patient statistics, often at short notice. Statistics are required by both RPH management and the provincial health department. Interestingly, another study reports that clinic managers often appear to be more concerned about statistics than with the needs of patients and health professionals. This can lead to tensions between staff and management (Rohleder & Swartz, 2005), as is evident in an extract presented later in this chapter.

All patients who are put onto an ARV regimen at RPH are given a number by the pharmacy. In the extract below, Pharmacist A comments to the researcher about a mistake that has been made in the patient register. Someone had assigned an incorrect number to a patient (instead of a 3000 number, they had written a 7000 number) and the rest of the list was incorrect. This incident illustrates how a momentary lapse in concentration can have serious implications. It also highlights the pharmacist's irritation with her colleague (in line 21, she comments that this task is 'easy' and she implies that this kind of error should not be committed. She also sighs exasperatedly).

Extract 133: Patient 18 (Ph A, 1st visit)

15	A:	Jenny, this is how stats get messed up. Oy, oy oy oy oy. Look there.
16		Look at the ↑numbers
17		(4.0)
18	A:	[((laughs))
19	R:	[((laughs))
20	A:	And then you wonder how, where- what happened to the other four
21		thousand patients. This is easy because it's obvious. .hh aihh
... ((A and R commiserate))		
28	A:	Then they book one and there's a recovered one, something fishy's going
29		on here.

Down referrals to local clinics

RPH has recently introduced a ‘down referral’ system, whereby patients who have been receiving ARVs for several months can collect their medication from their local clinic instead of coming to the hospital (Bodibe, 2006). Although this system may reduce the pressure on the pharmacy in the long term, it has temporarily increased the pharmacists’ work load: each patient who is down referred must be entered into the computer system and RPH must ensure that his/her ARVs are ordered and sent to the relevant clinic on time. This data capturing must be completed in between assisting patients and dispensing medications. The pharmacists must take time to explain the down referral system to patients and determine the clinic closest to the patient’s home.

The pharmacists spend much time solving problems or mistakes in the distribution of ARVs to clinics, often during or between consultations with patients. On one occasion during the week of data collection, a driver arrived from a nearby clinic to sort out several problems with the clinic’s ARV stock. Five patients had arrived at that clinic to collect their ARVs, but the medicines had not been sent from RPH. It took Pharmacists B and A over an hour to enter each patient’s information into the computer, painstakingly count the ARV pills, package these into brown paper bags and carefully staple each patient’s name and details to the front of each bag. The driver returned to the Wellness Pharmacy the following day to collect ARVs for two more patients.

The following extract is an illustration of the time spent by the pharmacists in attending to clinic or down referral problems. In this instance, a phone call interrupts the pharmacist’s consultation with a mother of a child. Pharmacist B’s rather sarcastic comment to the researcher (line 27) reflects her frustration at the constant interruptions to her consultation. The caller has an urgent problem with medicines for a patient who has been down referred to a local clinic. Pharmacist B must phone the clinic and sort out the problem immediately (line 32). After completing the phone call, she sighs (line 59) and indirectly apologises to the

patient for the interruption (lines 63-64). This interruption lasted almost three and a half minutes.

Extract 134: Patient 14 (*Ph B, ? visit*)

pushes chair back; turns away from pt; looks at R; stands up, moves to phone
v
v
v
v

27 B: ((phone rings)) -----,,,,,,,,,-----
 And this is just (yet) another enquiry-
 28 ((sniggers)) Hello:? (.) ja *****³⁰. (.) Ja? (.) B30? Nineteen sixteen, one
yes
Yes
 29 nine one six. Ok ((sniff)) and then? (.) mm? (.) B40? (.) Baie dankie
thank you very much
 30 ↑*****: bye ↑bye
 31 (18.0) ((dials a telephone number))
 32 B: Hello, can I please speak to D*****³¹?
 33 (6.0)
 34 B: I hope (I) can actually help her now. ((comment to R))
 ... ((while B waits for the telephone to be answered, B and R discuss the RA's whereabouts))
 43 B: ↑Hello:
 44 (3.0)
 45 Hello D*****. Ok. Um: (.) M***** H*****³², ↑nè (.) he's ↑using
 46 Stavidudine forty ↑milligrams (.) ok. ((sniff))
 47 (3.0)
 48 Stavidudine forty ↑milligrams (.) ↑ja forty milligrams ↑nè ja, forty. And
yes
yes
 49 then hh ↑Lamivudine one fif- ↑ja, and then Nevirapine. (.) Ja-, then
yes
Yes
 50 three- then Nevirapine, ja. ↑Nevirapine two hundred milligrams. ((knock
yes
 51 on door, door opens)) So what is: um uh written in our file? ((sound of
 52 door closing)) Ja (.) but the that's what's written in our file. So I mean-
Yes
 53 ja, so that's what I can tell you. I mean, H*****²⁹ can tell you whether ok
yes

³⁰ Pharmacist E.

³¹ Pharmacist assistant at a nearby clinic.

³² Name of a male patient.

54	that's not the right box, nè? So please make sure, >if you not sure<. And
55	<u>then</u> , that that S**** L***** ³³ , ↑nè, <u>she's</u> ↑using um d4T ↑nè thirty?
56	(4.0)
57	It's one B three zero. One B three zero. She's on regimen one B three
58	zero. Ja? Lamivudine one ↑fifty and also Nevirapine two hundred. Ok:?
	<i>Yes</i>
	<i>stands up, moves back to other desk, sits down</i>
	<i>v</i>
59	Dankie D*****, bye bye: (.) Ok mommy. ----- hh
	<i>Thank you</i>
	... ((B comments to R that she can begin the interview now))
63	B: °uit- eindeli:k, kan ons nou- we can help you now, I'm finished with the
	<i>at last, we can now</i>
64	phone°

Interruptions

As evidenced in some of the extracts discussed above, interruptions to consultations with patients are frequent occurrences that appear to be largely out of the pharmacists' control. These interruptions range from telephone calls, cell phones ringing (both patients and pharmacists), messengers delivering files or documents, people knocking on the Pharmacy door, people opening and closing the door, discussions between pharmacists regarding a problem or urgent matter, doctors walking through to the back room in the pharmacy, the sound of vacuuming in the offices outside the pharmacy, or the sound of music being played in the reception area of the Clinic.

During one consultation (Patient 21), the pharmacists spend much time discussing whether they should close the Pharmacy during lunchtime. The reason for this is that they had been told that the MEC (Member of the Executive Committee) for Health in North West Province was coming to visit the Wellness Clinic. During the week, carpets had been cleaned in the Clinic and time was spent ensuring that the Clinic and Pharmacy were tidy and organised. The pharmacists are aware that

³³ Name of a female patient

they are interrupting the patient's consultation, but there is an urgency to this conversation. They are also aware that they are interrupting the researcher's recording of the interaction (lines 144-146) but their conversation is important so they continue the discussion regardless. The 'she' referred to in lines 134 and 142 is the MEC. This extract illustrates the anxiety experienced by the pharmacists and the desire to create a good impression with the visiting superior.

Extract 135: Patient 21 (Ph B; ? visit)

- 127 A: °((unintelligible))° >Ok ek gaan nou net eers huistoe, dan kom ek nou
I'm just first going home now, then I'll come back again now
- 128 nou weer ↑terug< ek hoef nie eers twee uur te kom, maar miskien sal ek
now, I don't have to be here until two o'clock, but maybe I'll
- 129 bietjie vroeër kom, alright?
come back a little bit earlier, alright?
- 130 B: Ek gaan van ek gaan van uh een tot twee op lunch. So as jy twee kom
I'm going from I'm going on lunch from uh one to two. So if you come at two
- 131 (2.0)
- 132 A: Ek gaan maar een tot twee. Ok so as ek twee kom dan's dit reg.
I'll just go one to two. if I come at two then it's right.
- 133 B: Ja.
Yes.
- 134 A: Ja. Want sy kom eers sit en (waft en °dan is dit anders)°.
Yes. Because she'll first come and sit and (waft and then it's different).
- 135 B: Tensy ek die- tensy ons die Wellness ook, as jy Wellness wil ooplos.
Unless I- unless we the Wellness also, if you want to leave Wellness open.
- 136 A: Miskien moet ons dit doen in the ↑light en dan sal ek moet dan een uur
 137 terug gekom.
Maybe we must do it in the light and then I must come back at one o'clock.
- 138 B: Dan kan jy hier kom (en 'n uur loop).
Then you can come here (and go after an hour).
- 139 A: Ok. Ek sal °(maak hom)°.
I will (do so)
- 140 B: [Ek weet nie, jy moet vir my sê, ek weet nie of [('n mens) Wellness
I don't know, you must tell me, I don't know if (a person) leaves Wellness

141		ooplos nie. <i>open.</i>	
142	A:	[Nee, °(kom dan) haar °. <i>No, then she comes.</i>	[Nee ek dink wag wag vir <i>No I think wait wait for</i>
143		my, ek sal (.) ek dink ons moet (daar kom), want jy weet I dunno, they'll <i>me, I will I think we must come there, because you know</i>	
144		probably be [late, but if they do come ear- oh sorry are we being-	
145	B:	[s sor-	
146	B:	Ja, s we're being recorded. <i>Yes</i>	
147	A:	↑Sorry (.) if they <u>do</u> come early for their visit then it's actually better that	
148		that the clinic [is open.	
149	R:	[ja. <i>yes</i>	
150	A:	Mm. so you, you can have five minutes tea t- ag lunch time, then we'll	<i>oh</i>
151		carry on.	

Despite the pharmacists' preparations for the MEC's visit and the disruptions to the Clinic routine, she arrived after 4pm when the pharmacy was closed. Such 'window dressing' is a frequent event in the public health care sector in view of the complex political issues around HIV in South Africa and the widespread criticism of the manner in which the epidemic has been addressed by government (cf. Nattrass, 2006a; Nattrass, 2006b; Simao, 2007).

Doctors

According to the pharmacists, there should be three doctors working in the Wellness Clinic, but this is not always the case. On one particular day during the week of data collection, no patients were seen by the pharmacists because only one doctor was on duty. Therefore, the doctor decided not to see any new patients that day. On most other days, the number of patients seen at the pharmacy depends on when the doctors start work. Doctors usually start seeing patients only after they have completed their ward rounds, sometimes as late as 10 am. This means that the

pharmacists spend much of their mornings doing administrative tasks, waiting for the flood of patients who usually arrive at around eleven o'clock each morning.

Although not explicitly probed by the researcher, an underlying doubt about doctors' competence appears to be felt by the pharmacists at the hospital. This was evident in several general asides and comments which were made to the researcher. These comments were perhaps made because the researcher was familiar with the particular hospital context and understood the pharmacists' frustrations with the work environment. Their comments were not aimed at specific doctors, but rather at doctors in general; it is therefore unclear whether the pharmacists were referring to new and inexperienced doctors, or to experienced doctors who had been working in the Clinic for some time.

This means that the pharmacists feel the need to check each prescription and sometimes recalculate dosages according to patients' body mass. The pharmacists need to be constantly alert for possible errors in prescription. On several occasions during data collection, Pharmacist A actually returned to a doctor with a patient's file to discuss an error. Ethical Rules stipulate that a pharmacist may not substitute or omit a medicine from a prescription without first obtaining the approval of the prescriber (South African Pharmacy Council, 1992). Therefore, a prescription signed by a doctor cannot be changed or modified in any way by a pharmacist except with permission from the doctor.

The comment below was made to the researcher by Pharmacist B. Her statement "and they just go" refers to the fact that doctors continue to prescribe iron tablets erroneously.

Extract 136: Pharmacist B

What frustrates me even more is the doctors. You can't give iron supplements to ARV patients. Ja ((Yes)). And they just go.

It is generally not advisable to prescribe iron supplementation for HIV positive patients, because some studies have shown that it may enhance the progression of HIV/Aids or worsen the severity of diseases such as TB. Therefore, it is risky to give high doses of iron to a patient who has HIV/Aids and TB. In addition, the interaction of iron with ARV regimens taken by patients with HIV/Aids who are progressively deteriorating is unknown (Bogden & Oleske, 2007).

Another frustrated comment was made by Pharmacist B during a consultation with a mother. The doctor had not specified exactly how many times per day the drug should be given to the child and the pharmacist had to make an assumption concerning the doctor's intention:

Extract 137: Pharmacist B

This bugs me. Nevirapine is usually given twice a day, nè. Now the doctor write- wrote it daily. Yusee, this stuff doesn't make sense ... why do they do that?

The following extract begins with Pharmacist A explaining the drugs and dosages to Patient 1. She states the name of the drug, Bactrim (line 64), and the patient soon realises that there has been a mistake in the prescription. She tells A that she used to take Bactrim but that the doctors stopped prescribing it for her (lines 70-74). A studies the patient's file (line 75) and realises that the doctor has made an error (line 80): the patient should not be given Bactrim, because it contains sulphur, to which the patient is allergic (line 89). Nothing has been written in the patient's file, so A annotates the front of the file to show that the patient is allergic to sulphur (line 91).

The patient explains the situation and rather indignantly states that she had tried to tell the doctor that she cannot take this medication (line 133), but the doctor does not appear to have understood her (lines 135-139). Interestingly, line 133 may indicate a deviation from Tswana cultural norms: it is generally disrespectful to show ill feeling towards a superior who has committed a misdemeanour (Kasanga

& Lwanga-Lumu, 2007), but this patient chooses to indicate her indignation both verbally and non-verbally.

Extract 138: Patient 1 (*Ph A, exp pt*)

- 64 A: That's the ↑Bactrim
- 65 P: Ja. [Bactrim?
Yes.
- 66 A: [when do-
nods head
v

- 67 (2.0)
- 68 P: this is Bactr[im?

^
leans forward, points at packet
- 69 A: [Bactrim ja.
yes
- 70 P: So I ↑used to take Bactrim ss so: afterwards ((unintelligible)) so they did

^
shows wrist to A
- 71 give me [this one.

^
looks in handbag
- 72 A: [Ja?
Yes
- 73 A: They stopped it?
- 74 P: mm.
looks at front of P's file
v

- 75 (3.0)
- 76 [°(they just give me this).°

^
takes pill pot out of bag, shows it to A
looks inside P's file
v

- 77 A: [Let's just ↑see (.) I'm very glad you said that.
- ...

		<i>holds up packet; fingers splayed</i> v
80		----- You're <u>not</u> supposed to get this one.=
81	P:	=Oh.=
82	A:	=>Ok.< We'll just speak to the ↑doctor (.) then you're not supposed to <i>crosses out drug name in P's file</i> v -----
83		get this ↑one and we'll change it ... ((P comments that the doctor wrote sulphur in the file))
		<i>looks at front of P's file</i> v -----
89	A:	=Sulphur is the one you're allergic to. Let's just ↑see
90	P:	mm. ----- ^ <i>nods</i>
		<i>writes on front of P's file</i> v -----
91	A:	there's nothing written here I'm gonna [write it quick ↓here alright?
92	P:	[Ok. <i>dips head down</i> v -----
93	A:	°↑Sulphur° (.) so so I'm glad <u>every time</u> when they say something about <i>shakes hand with fingers splayed</i> v -----
94		Bactrim you must tell them °you mustn't drink it, you're allergic to it.° ... ((P and A discuss where P can get a medic alert bracelet and why P returned early to the Clinic before her scheduled appointment date))
133	P:	So that is why I [say doctor why (.) you put me [<u>again</u> on this? ----- ^ <i>points down at pill packet with jabbing motion</i>
134	A:	[mm [↑mm
135	P:	He say afterward (.) (after it was) whatever (.) now I'm coming nearly
136		after five months= ----- ^ <i>gestures</i>
137	A:	=mm-mm=

138	P:	=I come and collect the medicine. So he say I must supposed to have

		^
		<i>points to pills</i>
		<i>moves hand up and down forcefully</i>
139		many (at home) I don't know what.

The above extract illustrates why the pharmacists feel they cannot rely on the accuracy of the doctors' prescriptions. In this case, if the pharmacist had not chosen to use the name of the drug which allowed her to indirectly verify whether the patient was familiar with the drug, and if the patient had not raised her concern, the patient may have taken the drug and experienced an allergic reaction to it. Although it is unclear whether this is a conscious strategy on the part of the pharmacist, this does enable her to detect the patient's error. If the pharmacist had omitted to use the drug name and had merely pointed to the Bactrim packet, or if she had called it 'the drug for chest infections', this error might have been missed. This extract demonstrates the important role of the pharmacist in detecting prescription errors and in ensuring that patients are familiar with prescribed drugs. Because of the doctor's error, the pharmacist must spend time solving the problem and return to the doctor with the patient and the file to discuss the error.

Following on from *Extract 135* (p. 355), the extract below is taken from the same interaction and provides another illustration of how concerned the pharmacists are with the accuracy of prescriptions. It also demonstrates the time required to solve prescription inaccuracies and the resulting tensions that sometimes arise between the pharmacists. In this instance, they are anxious not to give drugs that may interfere with each other and cause harm to a child.

Pharmacist B is confused by the prescription written in the child's file (he is a baby in the ward and his mother has come to collect his medications). B asks Pharmacist A for assistance (line 31) and a lengthy discussion ensues. During their discussion, the mother sits silently and watches the pharmacists' faces in an attempt to understand the problem and their topic of discussion. The mother has run out of Kaletra but she has surplus stock of the other medicines. B cannot

understand why this is so and does not want to give more Kaletra. It appears that the original prescription was changed because the child developed TB.

From the start of the pharmacists' conversation, tension appears to exist. B taps a pill bottle and implores A to listen to her (line 36). A seems to misunderstand and tries to tell B that she must explain to the mother how to give the medicine to the child (lines 44, 46). B becomes irritated and tells A that the mother knows how to give the medicine (lines 47-48).

A makes a rather disparaging remark in line 50 about an error made by the doctors in the wards; however, it is unknown to what she is referring. It would appear that B has previously specified in the child's file that Zerit should be given before the child is fed (lines 52-53), but this instruction has not been carried out.

The conversation continues as the two pharmacists attempt to solve the problem. Pharmacist B is still confused about the Kaletra, but her concern turns to the fact that the pharmacists cannot change the prescription without consulting the relevant doctor (line 66). Pharmacist A thinks she understands what the problem is (line 70), but B is still confused (line 71). Pharmacist A eventually identifies the mistake or confusion, breaking the tension with an expletive (line 72) and the mother responds with a relieved laugh (line 73). Pharmacist A then explains the problem to the mother and there is relief amongst all three parties. However, A is cautious not to change the prescription without consulting the doctor and she indicates that the doctor would not be happy if she changed it without permission (lines 90-91).

Extract 139: Patient 21 (Ph B, ? visit, paed case)

31 B: ↑*****³⁴

32 A: Yes.

^

A walks across room, stands next to B, looks at file

33 B: Sy was nou die dag hierso, ↑nè, haar babatjie's mos in die hospitaal ↑gewees

³⁴ Pharmacist A.

		<i>She was here the other day</i>	<i>her baby's been in the hospital</i>
34	A:	Dis ↑reg [nou gaan sy huis toe. <i>That's right now she's going home.</i> <i>points to file with pen</i> v	
35	B:	[Toe <i>Then</i> <i>taps pill bottle with pen</i> v	<i>points to other bottles with pen</i> v
36	B:	>Nee nee nee maar hoor nou. Toe het sy nog van <u>al</u> die medisyne oor gehad <i>No no no but listen now. She had more of all the medicines left over</i>	
37		behalwe haar Kaletra was klaar. En ek kon nie verstaan nie en ek kon nie <i>except her Kaletra was finished. And I could not understand and I could not</i>	
38		met haar argue nie want hierdie kind het nie Kaletra gehad nie. Toe't ek daai <i>argue with her because this child did not have Kaletra. Then that day I gave</i>	
39		dag van [nog= <i>her more</i>	
40	A:	[↑mm	<i>picks up bottle</i> v
41	B:	= <u>net</u> 'n botteltjie Kaletra gegee. So dis die botteltjie wat nou daar vergeet en <i>just a bottle of Kaletra. So it's the bottle that was forgotten there now and</i>	
42		dis hoeveel oor is. Waarvan sy net vier en viertig in alle geval in die mond <i>this is how much is left over. From which she used just forty four in the</i>	
43		gebruik.< <i>mouth in any case.</i>	
44	A:	[↑Gee haar die spuit] <i>Give her the syringe</i> <i>moves hand up and down emphatically</i> v	
45	B:	[So ek gaan nie] nou weer gee nie.= <i>So I'm not going to give again now.</i>	
46	A:	=Gee haar <u>eers</u> die spuit en [wys vir haar- <i>First give her the syringe and show her</i>	

			<i>points to page with finger</i> v -----
66	B:	[Maar (who) moet trek [(die) daai (dood)? <i>But who must cross that out?</i>	
67	A:	[(Maybe)-	
68	B:	Want <u>daar staan</u> Kaletra. Nou moet daar Kaletra wees [in haar <i>Because there it says Kaletra. Now there must be Kaletra in her</i> ----- ^ <i>A points to page with pen</i>	
69		((unintelligible: 1 syllable)) kamer weer wees. <i>room again.</i>	
70	A:		[(Ek) sien nou weer. <i>I see now again.</i>
		<i>picks up pill box</i> v -----	
71	B:	Maar kyk hier. <i>But look here.</i>	
72	A:	Oh °sh*t° ----- ^ <i>A holds head in hand</i>	
73	M:	((laughs))	
74	A:	°skuus skuus skuus [skuus skuus.° <i>sorry sorry sorry sorry sorry</i>	
75	B:	[Sien jy? Retrovir. <i>Do you see?</i>	
76	A:	<°(Retrovir)°> ----- ^ <i>A writes in P's file</i>	
...			
78	A:	Do you <u>know</u> why your child's medicine was ↑changed has your child got an	
79		infection [like TB? ((to C)) ----- ^ <i>A puts hand over chest</i>	
80	B:	[Hy's nog nie ↑gechange [hy's gedrip [op al die (drugs). <i>It's not yet changed he's on all the drugs via a drip.</i>	

81	M:	[Eh. Ja. Yes.	
		-----	-----
		^	^
		<i>C scrunches up face, looks unsure</i>	<i>nods head</i>
82	A:		[Nie? Not?
83	M:	Yes. I think (he's got) TB.	
84	A:	TB?	
85	B:	[So-oh dis nee maar dis maar hierso is in <u>Mei</u> maand.] <i>it's no but it's here it's in May month.</i>	
86	A:	[Nee, dit <u>is</u> gechange. Dit is, ja maar dit is <u>hierdie</u> .] Ek het nou nou vir <i>No, it is changed. It is, yes but it is this.</i>	<i>I said to her just</i>

			^
			<i>A taps page with finger</i>
87		haar gesê sy het Nevirapine gekry= <i>now that she received Nevirapine</i>	
88	B:	=oh.=	
89	A:	=and <u>then</u> they found out that your child had TB and ↑Nevirapine and the TB	
		-----	-----
		^	^
		<i>A puts hand over chest</i>	<i>puts 2 fingers together, moves then up and down</i>
90		medicines don't go well together. Ok? And that's ↑why this doctor will grab	

			^
			<i>C nods</i>
91		me if I change the script like this.	

			^
			<i>A writes in file</i>
92	M:	↑Mm	
93	A:	°(I'll write there ↑IV)°	

The extracts and comments presented in this section highlight some of the ethical issues experienced by pharmacists in this context, in particular the ethical distress caused by situations such as the ones illustrated above. Ethical (or moral) distress in the health care setting may occur when the health professional cannot act upon what s/he knows is right because of constraints – in this case, institutional and professional constraints – and where s/he feels unable to preserve the interests and values at stake. Such distress may also arise because of the presence of an ethical

dilemma, in which a choice needs to be made regarding a course of action (Sporrong, Hoglund, Hansson, Westerholm, & Arnetz, 2004, 2005).

In this case, pharmacists know that they must dispense the correct medications to patients, but they must contend with doctors' errors. This creates a dilemma: do they break institutional rules and dispense the correct medicine without permission from the doctor, or do they point out the error to the doctor and potentially produce animosity between the two professions in this Hospital? The long-standing dispute that exists between doctors and pharmacists regarding control over prescribing and dispensing, as discussed in *Chapter 3*, appears to fuel the distress. This dilemma creates stress and frustration both within and between the pharmacists, as the extracts attest.

Teamwork

The team at RPH Wellness Clinic essentially consists of the clinic manager, nurses, counsellors, doctors, pharmacists and administrative staff. Each person supposedly has an assigned job and it is expected that the staff support each other and work together in the best interests of the patients. However, as will be discussed, the staff does not always work well together and the pharmacists have indicated that they cannot necessarily rely on other staff members.

Because of the large numbers of patients attending the Clinic, pre-ARV counselling can no longer be offered on an individual basis. Instead, counsellors provide basic information about ARVs to groups of patients. Although many of the patients included in the study understood and remembered information provided at these sessions, the opinion of the pharmacists in general is that the group counselling is not as satisfactory as individual counselling.

The research assistant, who completed her own research project at the Wellness Clinic (Moa, 2005), commented to the researcher that she had noticed a deterioration in the level of understanding of HIV-related concepts compared to

her previous patient interviews. The difference, according to her, was that at the time of her study, patients were still receiving individual counselling. Indeed, several patients who participated in this study demonstrated poor understanding of concepts such as ‘virus’, ‘CD4’, ‘viral load’ and even ‘ARV’. Pharmacists are therefore faced with the added complexity of having to dispense ARVs and provide instructions to patients who do not necessarily have a good understanding of basic HIV-related concepts.

In line with the principles of action research (Meyer, 2000), this finding was reported to the pharmacists during the feedback session and shortly afterwards, the pharmacist contacted the researcher to inform her that the Pharmacy had developed posters for the Clinic, available in both English and Setswana, which explain these HIV-related concepts (see *Appendix 11*). This is a further illustration of the level of commitment displayed by the pharmacists.

This lack of teamwork is also evident in the apparent absence of support from doctors, nurses and counsellors in monitoring patients’ adherence to ARVs. There is no definite adherence monitoring programme in place at the Clinic and no specific allocation of this job to staff members (however, it inherently forms part of any ARV rollout programme). Again, this means that the job of adherence monitoring falls on the pharmacists’ shoulders.

In the following extract, Pharmacist B is talking on the telephone (lines 230-232) to a nurse who urgently requires some statistics. Patient 13’s consultation is interrupted while Pharmacist A tells B who to ask for the statistics (line 233). B goes in search of the administrative staff member who is responsible for compiling this data, but she returns and comments to the researcher that this person has gone home without completing the required statistics (lines 267-268). The pharmacists must now prepare these statistics.

Extract 140: Patient 13 (Ph A, 2nd visit)

- 230 B: Ja u:m (.) we did we did organise some and they were supposed to bring
Yes
- 231 them to you, they didn't. U:m. Ok dan no no no no, I'll go ask again.
then
- 232 Ok:?. Bye. ((puts phone down)) J*****³⁵ vra vir daai stats paper?
is asking for that stats paper?
- 233 A: Hhh um (.) S*****³⁶, wat's haar ander naam nou weer? What's S*****'s
what's her other name again?
- 234 other name?
- 235 B: J*****?
- 236 A: Nee ↑S***** er M*****¹⁶.
No
- 237 B: M*****. Waar kry ek haar?
Where can I find her?
- 238 A: Sy's ook gewoonlik hier langsaa, [of sy's by die dokters. °Ja.°
She's usually also here next door, or she's at the doctors. Yes.
- 239 B: [Oh ja. ((unintelligible mumbling))
yes
- ... ((A discusses dosage instructions for cough mixture and Bactrim. P indicates that she is familiar with both of these medications.))
- 267 B: No she's gone home. She didn't even do what *****³⁷ asked her to,
268 she's just gone home. ((comment to R))

It appeared to the researcher that pharmacists in this context seem to do tasks that extend beyond their job description, as illustrated in the extract presented above. On several occasions during the week of data collection, pharmacists completed tasks which were not part of their job description and which often detracted from their pharmacy work. For example, there are several administrative clerks and an administrative manager employed in the Wellness Clinic, yet the pharmacists spent time compiling patient statistics and reports for the Clinic – this job should have been completed by the clerks or the manager. The pharmacists appear to

³⁵ Senior nurse working in the Wellness Clinic.

³⁶ Administrative clerk working in the Wellness Clinic.

³⁷ Pharmacist A.

have noticed gaps in the services offered to patients and have made the decision to do the necessary work in order to improve their quality of service. They seem to feel the need to ensure a smooth and efficient process, even if it means taking on extra work.

Generic Medicines

Although most of the ARVs are supplied by one particular company through a government tender, RPH sometimes receives orders of generic medicines. These generics are usually packaged differently to the non-generic drugs and this causes much confusion for patients and pharmacists. The pharmacists are required to pre-empt confusions that may arise because of this and care must be taken to explain to patients that the pills are the same but the containers are different.

For example, in the extract below, Pharmacist A checks the patient's knowledge of the ARVs (using the repeat prescription ARV boxes and pots) (line 10). The patient indicates that she does not recognise one of the pots (line 11). After some discussion, the pharmacist realises that the patient is confused by the different generic boxes and she asks the patient to open the pot and look at the pills (18). She then shows the patient that the name of the drug, Stavudine, is the same (lines 22 and 24), explains that the two boxes come from a different factory (line 28) and reassures the patient that she does not need to be concerned because she is not getting the wrong medicine (line 31).

Extract 141: Patient 13 (Ph A, 2nd visit)

arranges pill pots on desk, puts two in front of P

v

10 A: Is dit die medisyne wat ons laas keer vir jou gegee het, M****?

Are these the medicines that we gave to you last time

11 P: °(Nee, dis nie dit.)° Dis ↑die

No, it's not this. It's this

^

^

reaches out hand, picks up pot and shakes it

12	A:	↑Ja Yes
13	P:	En ‘n ander botteltjie= <i>And another small bottle</i> ----- ^ lifts up a box pushes chair back, gets up and goes to cupboard v -----
14	A:	=‘n <u>Ander</u> botteltjie?= <i>Another small bottle?</i>
15	P:	=hy’s nie (.) nie hier. <i>it’s not not here.</i> ----- ^ picks up first pot again, studies label, puts pot down walks back to desk, holds pot out to P v -----
16	A:	Lyk hy s::? <i>Does it look like th::?</i>
17	P:	S:: die wit een. <i>the white one.</i> ----- ----- ^ ^ takes pot from A, studies label; shakes pot once sits down v -----
18	A:	Kyk maak hom (oop) en kyk binne in hoe lyk ↑hy <i>Look open it and look inside see how it looks</i> ----- ^ opens pot, looks inside
19	P:	Ja dis hy [maar hier’s amper niks. <i>Yes it’s this one but here’s almost nothing.</i> ----- ^ turns pot towards A to show what is inside
20	A:	[°Daars hy.° <i>There we go.</i>

			<i>shakes head, takes pot from P</i> v	<i>puts lid back on pot</i> v
21	A:	Ok. Ek gaan nie hierdie een vir jou gee. Ek wil gou vir jou wys hoe werk dit. <i>I'm not going to give you this one. I quickly want to show you how it works.</i> <i>holds pot, points to label with finger</i> v		
22		Jy sien sy naam is Stavudine forty milligram, ↑nè <i>You see, its name is</i>		
23	P:	mm. <i>puts pot next to box points between labels with finger</i> v v	<i>nods</i> v	
24	A:	Nou as jy mooi kyk hier ook, Stavudine forty milligram. Jy sien hulle is siame. <i>Now if you look here nicely too, Stavudine forty milligram. You see they are [the same].</i> <i>points between box and pot</i> v		
25		Dis net die ander maatskappy wat dit maak. Want die een maatskappy kan nie <i>It's just the other factory that makes it. Because the one factory cannot</i> <i>picks up pot, then box</i> v	<i>holds up two fingers, shakes hand</i> v	
26		vir ons <u>genoeg</u> gee nie. So ons kry dit van twee verskillende firms af. <i>give us enough. So we get it from two different firms.</i>		
27	P:	mm ----- ^ <i>nods</i> <i>points between box and pot with emphasis</i> v		
28	A:	Ok? So dis twee maatskappye wat dit maak. So dis <u>presies</u> die selfde medisyn <i>So it's two factories that make it. So it's exactly the same medicine</i> <i>opens box</i> v		
29		binnekant, al <u>lyk</u> die tablete bietjie anders. <i>inside, although the tablets look a little different.</i>		
30	P:	[mm. <i>takes out package insert, shakes head while talking</i> v		
31	A:	[So jy hoef nie te worry nie, ek <u>gee</u> nie vir jou die verkeerde ding nie. <i>So you don't have to worry, I'm not giving you the wrong thing.</i>		

8.2.3 Summary of section

This section described some of the emerging themes in the data corpus related to pressures experienced by both patients and pharmacists. These included patient anxieties about understanding the dosage instructions and pharmacist pressures to ensure that patients comprehend the instructions. Pharmacists work towards reassuring patients and defusing tension within interactions. However, pharmacists themselves work under pressure due to the nature of the institution. Often while consulting with patients, they must attend to administrative tasks, solve problems associated with the down referral system, contend with frequent interruptions and be vigilant for errors in prescriptions or confusions which patients may experience due to variations in generic medicines.

8.3 Creating Rapport and Encouraging Collaboration

The practice of medicine has become consumerized, crowded and productivity-based, despite the need for long-term treatment and the establishment of caring relationships between health professionals and patients who have chronic illnesses such as HIV/Aids. Some authors (e.g. Crawford & Brown, 2007) liken the modern health care system to a conveyor belt, where time and productivity are of the essence and warmth and humanity have all but disappeared.

Crawford and Brown (2007) conceptualise the ideal modern health care interaction by using an analogy taken from the television series *Dr Who*. Despite environmental constraints such as lack of time, these authors have applied the *Tardis effect* to brief interactions (named for the time machine and spacecraft in the television series; the interior of a Tardis is larger than its exterior). They suggest that short interactions can be bigger ‘inside’ than they may appear from the ‘outside’: even a brief time slot can be used effectively to create rapport with a patient and an emotionally supportive communication space.

As already described in various sections of this thesis, the pharmacists at the Wellness Clinic work under pressure and are required to serve large numbers of patients in short periods of time. However, as the following sections will attest, it would appear that they are able to make full use of the limited time with each patient and they make an effort to create positive rapport and to connect with each patient. The manner in which rapport, empathy and collaboration are created and maintained by the pharmacists will now be discussed.

8.3.1 Rapport

Fiksdal (1988, p. 3) defines rapport as “a harmonious relationship” created when there is common interest shared by two speakers. The establishment and maintenance of rapport is considered an important objective of any patient-health professional relationship. Rapport may improve patient satisfaction with health care services, patient assessments and achievement of treatment outcomes and may well increase treatment adherence.

Clinician behaviours which may encourage rapport include being warm, friendly, affirming and understanding, actively listening to the patient, maintaining confidentiality and trust, maintaining eye contact and an open posture (Leach, 2005), exploring the patient’s physical and emotional concerns, noting past therapeutic successes, facilitating expression of emotion and responding to the patient’s experiences (Ackerman & Hilsenroth, 2003).

Throughout the interactions, the pharmacists make use of opportunities to create what appears to be a positive rapport with the patients. They frequently provide reassurance and encouragement to patients, often in response to a patient’s anxiety and apprehension about the ARVs or to uncertainty about their understanding of dosage instructions. These reassurances are typically given in the form of phrases such as “I’ll explain to you” or “Don’t worry, you’ll get it now”.

163	P:	°Ja.° <i>Yes</i>
164	A:	↑Ok (and now)
165		(6.0)
166	P:	But I've got another first name, it's a traditional name.
167	A:	↑Ok I'd like that one also plea[↑se
168	P:	[Alright..... ... ((P spells out his name))
175	A:	K*****. What does it <u>mean</u> ?
176	P:	It was dur during ol old days eh they're using something like sticks when ----- ^ <i>makes a fist</i>
177		they're fighting=
178	A:	=↑mm=
179	P:	=during the old days of the (faqana).= ----- ^ <i>moves hand</i>
180	A:	=↑mm=
181	P:	=And my grandgrandfather is one of the people who were the leaders and
182		that that thing that he was [using, and after I was born I was named after that. ----- ^ <i>shakes fist up and down</i>
183	A:	[↑mm <i>nods</i> v -----
184	A:	After him. That's very nice, hey? It's special. Ok let's see. Then I also
185		need your cell phone ↑number

A strong feature of many interactions is the level of empathetic understanding and care shown by the pharmacists towards both patients and caregivers. Concern and sensitivity towards patients and their personal situations is seen in a number of instances. Pharmacists often reassure and encourage patients about their health, potential or actual improvement due to ARVs, good adherence practices and good knowledge of ARVs and dosage instructions. Pharmacists also respond emotionally to patients' fears, feelings and concerns and show interest in how the

patients are feeling physically while taking the ARVs, or if they are experiencing difficulties with taking the ARVs.

Extract 144 below provides two instances which illustrate empathetic responses by a pharmacist to a patient's expression of emotion. In the first section, the pharmacist has finished explaining dosage instructions to the patient. The patient makes a seemingly simple comment (line 142), but this comment is emotionally laden and conveys much about how she is feeling. The patient is clearly concerned about her ability to adhere to the regimen and understand the instructions correctly and she appears to doubt her own ability to do this without assistance. She also expresses indirectly how difficult this process is for her and how she needs support – perhaps both emotionally and physically – while taking the ARVs.

The pharmacist senses the patient's anxiety and she responds initially with a practical solution – i.e. that the patient can turn to her grandchild for support (line 143). The pharmacist then initiates an empathetic, kind response to the patient's expression of concern by reassuring her both verbally and non-verbally (line 144).

In the second part of the extract, which occurs towards the end of the interaction, the patient makes a comment about how long her day at the hospital has been (line 352). Again, this comment is emotionally laden: she is tired and wants to go home but she also appears to be seeking understanding from the pharmacist. She may also be complaining indirectly about lengthy waiting times at the hospital. The pharmacist senses the patient's need and she responds sympathetically to the patient's complaint (line 353). Encouraged by this comfort, the patient continues by volunteering another complaint – she is hungry – and she repeats this in a whining tone (line 354). This time Pharmacist B interrupts the patient's comment and suggests a practical solution: let us stop wasting time, finish here and go and eat (lines 355-356).

Extract 144: Patient 13 (Ph A, 2nd visit)

- 142 P: (Ek) moet skool toe gaan, [die kinders sal vir my help.
I must go to school, the children will help me.

 ^ ^
opens hand upwards picks up pill pot
nods
 v

- 143 A: [Ja, maar jou kind, jou kleinkind sal jou
Yes, but your child, your grandchild will
smiles while looking at file
 v

- 144 help. [Moenie worry nie. ((laughs))
help you. Don't worry.
- 145 P: [Ja.
Yes
 ... ((interaction continues with revision of dosage instructions and dispensing tasks))
- 352 P: Ek was van sewe hier afmaak.
I was here from seven until I finished.

 ^
points index finger towards the floor three times
closes file frowns sympathetically
 v v

- 353 A: Ag sies tog, dis (hoekom) jy so (((unintelligible))) is.
Oh shame, that's why you're so
- 354 P: [Ek is honger, ek is honger, [ek is honger.
I'm hungry, I'm hungry, I'm hungry.

 ^
waves hand downwards twice
- 355 B: [Ok ↑oumatjie
granny
- 356 kom ons gaan eet.
come we'll go eat.
writes in P's file
 v

- 357 A: Daars hy, oh [↑M**** laat ek net gou hier ↑merk
*There we go, oh M**** let me just mark here quickly*
- 358 P: [Baie dankie.
Thank you very much.

There are several instances in the data corpus where patients raise concerns about health-related issues. Pharmacists often return to these concerns later in the interaction. For example, in the extract below, the patient raises a concern about the health of his lungs (line 55). The pharmacist provides reassurance that she will give him medication for the chest complaint (line 58) and continues with the interaction. Later on, when it is time to provide the dosage instructions for the Bactrim, she specifically mentions to the patient that this is the medication for the chest (line 127). She repeats this comment (line 130), as if to allay his fears and put his mind at rest. She repeats the information a third time (line 133), this time explicitly linking the patient's complaint to the medicine.

Extract 145: Patient 17 (Ph B, 1st visit)

- 55 P: Kyk hierdie bors, (hulle) pla vir my so bai[e.
Look at this chest, (they) trouble me so much.
- 56 B: [Die bors?
The chest
- 57 P: Ja.
Yes.
- 58 B: >Ek gaan nou vir jou die pillies gee vir die bors wat vir jou gaan beter maak.<
I'm going to give you the pills now for the chest that will make you better.
- 59 P: Asseblief.
Please
- ... ((B establishes whether P will take the ARVs by himself or with assistance from C, then provides dosage instructions for vitamins.))
puts one hand on chest, other hand on pill packet
v
- 127 B: Dis vir die chest, ↑Papa
It's for the chest

^
P nods
- 128 P: [Dis reg.
That's right.

^
P nods deeply

129	C:	[Ja. Yes.
130	B:	Dis vir'ie chest. <i>It's for the chest.</i>
131	P:	mm.=
132	C:	=mm.=
133	B:	=Hy gaan die chest beter maak. <i>It's going to make the chest better.</i>
134	P:	Beter maak, ja. <i>Make better, yes</i> ----- ^ ^ <i>P nods nods</i>

The initiation of sensitivity and rapport by the pharmacists allows for the establishment of an environment of trust and care. It also sets the tone for the rest of the interaction to continue in an unthreatening, relaxed and light-hearted manner. One such instance is illustrated below. The pharmacist notices that the patient is restless and physically uncomfortable. She asks the patient in a gentle but direct manner whether she is pregnant. By doing this, she responds to and acknowledges the patient's discomfort and presents an opportunity for further discussion about this important event in the patient's life. In lines 17 and 19, the patient initially seems embarrassed, shy, and reluctant to discuss this personal matter. However, in lines 20 and 21, the pharmacist pursues the discussion by specifically asking whether this is the first pregnancy. Although she remains shy, the patient responds and provides more information about her children. The pharmacist's apparent sensitivity and care shows that she can be trusted and that she is supportive of the patient.

Extract 146: Patient 11 (Ph B, 1st visit)

14	B:	Mommy are you pregnant?
15	P:	↑mm ----- ^ <i>quick nod</i>
16	B:	↑Congratulations

17	P:	Yoo ----- ^ <i>ducks head downwards</i>
18	B:	How [far are you?
19	P:	[Whoo huh ((laughs)) seven months. ----- ^ <i>leans back</i>
20	B:	Seven months? You so small, ↑huh (.) you so small. °Ag shame, man.° ----- ^ ^ ^ <i>nods smiles rubs stomach</i> <i>Oh</i>
21		Is it the <u>first</u> baby? <u>Third</u> one? ----- ^ <i>holds up three fingers</i>
22	P:	↑mm ----- ^ <i>quick head nod</i>
23		(5.92)
24	B:	How old is your other children?
25	P:	The first one is is sixteen.
26	B:	[↑Ja <i>Yes</i>
27	P:	[The second is twelve.
28	B:	Twelve?
29	P:	mm.
30	B:	That's a <u>huge</u> difference, huh?
31	P:	mm. ----- ^ <i>smiles</i>
32	B:	Between the ages.

The pharmacists' use of non-verbal strategies also contributes towards the creation of an empathetic, warm, non-threatening and responsive environment. Smiling, leaning forward, head nodding and increased gaze behaviours are known to create perceptions of warmth (Duggan & Parrott, 2001), and in this case they serve to build a comfortable rapport between the pharmacists and patients.

Intonation is also an important feature: pharmacists often deliver reassurances in a soothing, gentle tone and encouragement in an animated, enthusiastic tone of voice. These behaviours, which are salient in the video recordings, are particularly difficult to capture in a written transcript.

Physical touch is another manifestation of empathy and reassurance which is used by Pharmacist A in a few instances. For example, the extract below is taken from an interaction in which the patient has trouble in following the pharmacist's discussion and is concerned about her transferral to a nearby hospital. After providing an instruction to the patient (lines 120-121), the pharmacist leans across the desk, smiles and touches the patient's shoulder in a reassuring gesture. The patient responds with a smile (line 123).

Extract 147: Patient 3 (Ph A, 3rd visit)

		<i>holds yellow diary card</i> v	<i>waves card around</i> v	<i>points card towards outside</i> v
120	A:	When you go to George Stegman ³⁸ you take <u>this</u> and you go show them.		
		<i>picks up pill pot</i> v	<i>puts pot down</i> v	
121		And you also take the pillies to show them at George Stegman. (.) Alright?		
122	P:	mm.		
		<i>smiles at P, touches P's shoulder</i> v		
123		(1.5) ^ <i>smiles</i>		
124	A:	Ok I'd better brush up my Tswana. ((laughs))		

Because rapport has been established successfully in many of the interactions, pharmacists are often able to ask rather sensitive questions of patients. For example, in the extract below, the pharmacist is able to ask a potentially insulting question about whether the mother is able to count (line 145). She is also able to repeat her question (line 147) and verify the mother's response, which is in itself a

³⁸ A nearby public hospital.

Extract 150: Pharmacist E interview

... last year there was a patient you know she was so sick, very sick and when I counsel her, yoo, she was just looking outside the window there, couldn't listen, couldn't understand what I'm saying but I tried hard I've tried hard. And if you can see her this time you will like it. Mm. She did understand. **I end up telling her that I'm also HIV positive and I'm not, just to make her feel you know, ja ((yes))**. Then I told her to look at me and next time when she comes she must just like look like myself.

8.3.2 Promoting Collaboration

Many of the strategies employed by the pharmacists to encourage rapport appear to foster collaboration between the pharmacist and patient. Rapport strategies build trust within the therapeutic relationship and this creates an environment in which patients feel able to collaborate with the pharmacist.

According to Leach (2005, p. 264), “a collaborative consultation style...is essential to building a therapeutic relationship”. Through encouraging collaboration with a health professional, patients may be empowered to participate in their own care. In order to promote collaboration, health professionals need to adopt a patient-centred approach to interactions and focus on developing mutually agreed goals together with the patient – in this study, that goal is principally to promote understanding of dosage instructions (which may directly impact upon adherence behaviours). A collaborative consultation style also involves effective communication skills such as listening and responding to a patient, using open-ended questions, reflecting on what the patient says, paraphrasing and summarising information and encouraging the development of trust between the health professional and the patient.

The fact that patients initiate clarification requests and participate actively in consultations with the pharmacists is particularly encouraging because, as noted by Ellis (2004, p. 44), “in the past many patients’ initiative was taken away from them by the apartheid regime which invaded communication in all aspects of

South African life, including the health care worker-patient relationship”. It would appear that the global move towards consumerism in health care, as well as the urgency presented by HIV/Aids, is promoting a change in these past influences of patient behaviours. Patients are now encouraged to be active participants in their own health situations.

Collaborative strategies and processes identified in the data include the following:

- pharmacists and patients engage in successful repair sequences, especially when patients initiate clarification requests (refer to *Chapter 7, Section 7.5.1*);
- patients volunteer information about themselves or voice concerns regarding their health;
- patients ask questions about the medicines;
- patients initiate or volunteer a demonstration of their understanding of the dosage instructions;
- patients contribute comment during the interactions;
- caregivers and patients collaborate or negotiate with each other and/or with the pharmacist;
- patients negotiate with pharmacists, e.g. to determine the number of surplus pills;
- patients alert pharmacists to errors in prescription or dispensing or to confusion over generic medicines; and
- patients initiate personal moments.

Several of these strategies will now be discussed using relevant extracts.

Extract 151 below provides an illustration of a patient initiating a clarification request and repair strategy in an effort to understand the dosage instructions (indicated in bold in the extract). Prior to the start of this extract, the pharmacist has asked the patient to describe how he is taking his tablets. He begins (lines 31, 33), but the pharmacist soon notices that there has been a misunderstanding (the patient should not be taking two of these pills in the morning, but rather one at

night) and she requests clarification from the patient (line 34). The patient then realises that he does not recognise one of the drugs. He reaches out to pick up the pill pot and simultaneously asks the pharmacist for the name of the drug (line 35). The pharmacist consults the patient's file to determine the cause of the misunderstanding (line 36). The patient then volunteers information about his regimen: he takes vitamins, not this 'unknown' drug (line 37) (his misunderstanding is linked to the fact that he has been given a generic drug which has different packaging to the drug he was given during a previous visit). The pharmacist corrects him and explains that this is the prescribed drug (line 38) and he hands across the pill pot for the pharmacist to scrutinise (line 39).

There is a definite sense of collaboration between the two parties as they work towards solving the problem. Interestingly, at times during this interaction, this patient is not particularly responsive to the pharmacist and a sense of rapport is not always present. Despite this, the patient plainly feels comfortable enough in the situation to initiate requests for clarification and other information.

Extract 151: Patient 15 (Ph B, exp pt)

- 31 P: This one I take two.

 ^
touches pill pot, turns it around
- 32 B: When?
- 33 P: In the morning.

 ^
moves hand back
- 34 B: Two in the morning?
- 35 P: **Uh what is this one?**

 ^
reaches across to touch pot
looks in P's file
 v

- 36 (3.0)

37	P:	I only (use vitamins).
38	B:	No we used this one. That's what the doctor gave you now.
39		(6.0)

		^
		<i>gives pills to B, she looks at them</i>

The next extract demonstrates the active participation of the caregiver in the interaction (the caregiver's questions are highlighted in bold in the extract). It shows how she effectively summarises the pharmacist's words and simultaneously checks her own understanding of the instructions. There is a sense of negotiation and of working together towards the common goal of understanding. The caregiver appears to be aware that in order to ensure that she understands, she must participate in the interaction and initiate strategies to verify her understanding of the instructions.

The extract begins with the pharmacist giving an instruction: the caregiver must bring all the remaining pills to the next visit (lines 40-43). The pharmacist uses a response solicitation (line 45) to provide an opportunity for the caregiver to request clarification. There is an overlap of their speech at this point and the caregiver provides a summary of the instruction in a question format (line 46). The pharmacist confirms that the caregiver has understood correctly (lines 47-48).

In the second part of this extract, the pharmacist provides several rather complex dosage instructions (lines 53-55). Again, the caregiver checks her understanding by repeating a summary of the instructions in a question format (line 58). Together, they are able to negotiate a mutual understanding and pre-empt any potential misunderstandings (lines 59-62). To conclude this instruction, the caregiver provides a demonstration of her understanding of the instructions and supplements this with non-verbal use of the props (line 63).

Extract 152: Patient 20 (Ph A, 1st visit)

- gestures towards her*
v

- 40 A: This medicine is enough for a whole month, so when she comes again
touches ARV box
v

- 41 she can bring it because they're going to be half, half, [half.
- 42 C: [Ok, yes.

^
nods
sweeps hand across desk
v

- 43 A: And I want to see if she's drinking them °correctly.°
- 44 C: Alright.=

^
nods
nods
v

- 45 A: =[Ok?
- 46 C: [Oh we just bring them, [for you to see if she's drinking them?
nods and sweeps hands across medicines
v

- 47 A: [Bring the half, yes.
- 48 A: °That's right.°=
- 49 C: =Ok.

^
moves lips in and out
- ... ((A says she will give C a diary card to help her to remember to give the ARVs to P))
turns 2 pill pots towards C *lifts both hands parallel to face*
moves them for emphasis
v v

- 53 A: >Ok<, what's very important is if it's at s eight o'clock it must be at eight

^
leans forward to look at box

		<i>lifts both hands parallel to face moves them for emphasis</i> v	<i>moves right hand out to the side for emphasis</i> v	<i>points to pot with pen</i> v	<i>turns head to side</i> v
54		----- ↑sharp, ↑mosong, and eight sharp bosigo. Cos this one is [e lenngwe <i>in the morning</i> <i>at night</i> <i>one</i> ----- ^ ^ <i>nods leans back</i> <i>keeps pointing to pot with pen</i> <i>points to next pot with pen</i> <i>points to 3rd pot with pen</i> v v v			
55		----- gabedi ka letsatsi, [e lenngwe gabedi ka letsatsi and e lenngwe bosigo fela. <i>twice a day</i> <i>one twice a day</i> <i>one at night only</i>			
56	C:				[Ee. Yes.
57	C:	[yes			
58	C:	Which means, she takes two in the morning? ----- ^ <i>points to pill boxes</i> <i>points to pot with pen</i> <i>holds up one finger</i> <i>points to pot with pen</i> <i>touches pot</i> v v v v v			
59	A:	No. E ↑lenngwe, ↑ <u>one</u> twice a day. E lenngwe ↑mosong- oh you mean <i>one</i> <i>one in the morning</i> ----- ^ <i>nods</i> <i>lifts box</i> <i>lifts pot</i> v v			
60		----- <u>this</u> one and <u>this</u> one in the [morning.			
61	C:				[Ee. Yes. <i>nods deeply</i> v
62	A:	Tha:t's right.			
63	C:	Two in the morning, [and three at night. ----- ^ ^ <i>points to a pill pot</i> <i>points to pill box</i> <i>puts pots down on desk</i> <i>nods</i> v v			
64	A:				[And at night one °too. °

On several occasions, patients initiate personal moments. These provide an indication of their level of understanding and assist the pharmacist in determining whether repetition or clarification is required. These moments also exquisitely illustrate the level of familiarity and comfort patients feel in the consultation by the degree to which they are able to initiate personal comments or indicate when they require more time or more explanatory support from the pharmacist.

In the next extract, the pharmacist begins the interaction by checking how the patient is taking the ARVs. She asks the patient to supply the name of each drug (e.g. lines 7-8) and the patient methodically names each one (e.g. lines 13, 15). The pharmacist provides scaffolding and reminds the patient of the ARVs which are in her handbag (line 18). The patient responds with a rather nervous admission that she does not know the names of the ARV drugs and turns this into a moment of shared humour (lines 19-20, indicated in bold).

Extract 153: Patient 8 (*Ph B*, 2nd visit)

- | | | |
|----|----|---|
| 7 | B: | ↑Ok and then ((unintelligible)). What's the name of the medication that |
| 8 | | you're using? |
| 9 | P: | Um (.)↑ (Escaltens) |
| 10 | B: | ↑Mm |
| 11 | P: | and mm the ↑Primasone |
| 12 | B: | ↑Ja= |
| | | <i>Yes</i> |
| 13 | P: | =Then that ↑vitamin |
| | | ----- |
| | | ^ |
| | | <i>ticks off finger</i> |
| | | <i>nods</i> |
| | | v |
| | | ----- |
| 14 | B: | ↑Ja |
| | | <i>Yes</i> |
| 15 | P: | [vitamin ↑beta |
| | | <i>nods</i> |
| | | v |
| | | ----- |
| 16 | B: | [vitamin ↑beta |

In several interactions, the patient spontaneously volunteers a health concern and actually asks for medication for the condition. In the extract below, the patient comments that she is having trouble sleeping and she asks whether the doctor has prescribed any medications for her problem (line 147 – highlighted in bold). The pharmacist reassures the patient that the doctor has indeed prescribed suitable medication (line 152).

		<i>to get this AIDS better.</i>	

		^	
		<i>nods</i>	
151	P:	[(Ons wil nie)- ja:.]	
		<i>We don't want to- yes:</i>	

		^	
		<i>holds out palms towards medicines</i>	
			<i>nods</i>
			v

152	A:	[>Ok<. Maar die dokter <u>het</u> vir jou iets gegee, so ek sal nou vir jou wys.	
		<i>But the doctor did give you something, so I will show you now.</i>	
153	P:	[mm.	
154	P:	°Ek verstaan.°	
		<i>I understand.</i>	

The following extract is another illustration of patient and caregiver collaborating towards the common goal of understanding the ARV instructions (the patient's and caregiver's contributions are highlighted in boldface). Pharmacist B asks the patient and caregiver to explain the dosage instructions (line 228) but the patient is unsure of the instructions so he requests clarification (line 232). The pharmacist clarifies the time at which he must take the tablets (line 233) and the patient checks his understanding by repeating this information in the form of a question (line 235).

The pharmacist again asks the patient to explain the instructions (line 241). The caregiver and patient begin whispering to each other, discussing the instructions in order to reach an agreement (lines 245-249). The pharmacist overhears their whispering and realises that they have misunderstood. She vehemently stops their discussion (line 250). The caregiver and patient then offer alternative instructions (lines 251-252) and collaborate to reach a consensus (line 253).

This extract is also another illustration of the pressure patients are under to understand the dosage instructions (refer to *Section 8.2* above). The pharmacist realises that the patients are becoming confused and agitated and she provides

reassurance (line 261). The moment becomes a humorous one and the tension in the interaction is defused (line 264-265).

Extract 155: Patient 17 (Ph B, 1st visit)

- pulls 3 ARV containers together with both hands folds arms, touches face*
v
v
- 228 B: Sê gou vir my hoe gaan jy die pillies drink, Papa? Vertel gou vir my.
Tell me quickly how you're going to drink the pills, Papa? Tell me quickly.
- 229 (3.0)
- 230 P: Kyk, uh
Look

^
^
C points to pill pots
points towards ARVs
v
v

- 231 B: ((unintelligible))
- 232 P: **Wat wat- watter een gaan ek eers begin om te drink, of-**
Which which- which one am I going to start drinking first, or

^
^
P reaches out, touches pill pot
picks up pill pot
extends index finger (arms still folded)
v
v

- 233 B: Jy [begin by mo- [morê ↑oggend <nine o'clock.>
You begin to- tomorrow morning
- 234 C: [uh- [oh oh oh

^
^
C reaches out his hand towards pill pot
- 235 P: **Nine o'clock, ee?=
yes**

^
^
P points index finger towards pill pot, nods deeply
- 236 B: =Jy begin.
You start
- 237 P: Ek begin.
I start

^
^
P moves index finger up and down

238	C:	[>Uh<- <i>nods, extends index finger</i> v -----
239	B:	[Morê oggend nine o'clock. <i>Tomorrow morning</i> ----- ^ <i>P points towards pills</i>
240	P:	Yes.= ----- ^ <i>nods</i> <i>nods, extends index finger</i> <i>picks up pot, opens seal with her teeth</i> v v -----
241	B:	=Vertel vir my hoe gaan jy hom drink? °>Kom ek maak dit vir jou maklik.<° <i>Tell me how are you going to drink it? Come I'll make it easy for you.</i> ----- ^ <i>C taps desk with hand</i> <i>takes seal off pot</i> v -----
242		(3.0) ----- ^ <i>C moves hands around</i> <i>opens pot, takes out foam</i> <i>pours pills into her hand</i> v v -----
243	B:	°Ons gaan nou ook hierso ook pull dit uit.° Dan jy sal maklik onthou. <i>Now we're going to also pull it out. Then you will remember easily.</i> ----- ^ <i>P stares intently at B</i> <i>puts pot down on desk, closes lid, puts two pills on top of lid</i> v -----
244		(5.0) <i>opens seal of next pot</i> <i>with her teeth</i> <i>throws plastic seal to the side</i> v v -----
245	P:	((unintelligible whispering in Setswana)) Eh ----- ^ <i>P leans towards C, nods slightly</i>

246	C:	↑Two ----- ^ <i>C holds up index finger</i> <i>puts pot down on desk</i> v
247	P:	Two= ----- ^ <i>P holds up two fingers</i>
248	C:	=Phakela.= <i>morning</i>
249	P:	=Phakela. <i>morning</i> <i>takes one pill out of pot</i> v
250	B:	>Nee nee nee nee nee <u>nee</u> nee nee [nee nee [nee nee nee nee.< <i>No no no no no no no no no no no no no no</i>
251	C:	[Or
252	P:	[(Maybe) <u>one.</u> ----- ^ <i>turns towards C, holds up one finger</i>
253	C:	One phakela. <i>in the morning</i> ----- ^ <i>leans forward, holds up one finger</i>
254	P:	One. ... ((P and C repeat the dosage instructions to each other)) <i>picks up 3rd ARV pot, unscrews lid</i> v
261	B:	Ek gaan nou vir julle wys, moenie praat nie= <i>I'm going to show you now, don't speak</i>
262	C:	=uh= ----- ^ <i>C moves index finger back and forth</i> <i>takes off lid, puts pot on desk</i> v
263	B:	=julle maak vir julle self dom. <i>you're making yourselves stupid.</i> ----- ^ <i>C nods</i>

264	C:	Alright, thanks. ----- ^ <i>smiles</i>
265		((RA, C, P laugh))

Collectively, the extracts presented in this section illustrate how the common goals of understanding and adherence, coupled with the urgency engendered by HIV/Aids, may lead patients and pharmacists to transcend cultural and linguistic barriers within the interaction in an attempt to create a collaborative relationship which will ensure understanding of ARV dosage instructions and ultimate treatment success. In *Extract 143* (p. 375), the pharmacist's interest in the patient's clan name enables her to enter his world and this action establishes a 'connection' between them which lays the foundation for a collaborative relationship. In *Extract 147* (p. 382), the pharmacist's use of touch is particularly powerful: without using any speech, she conveys to the patient that she cares about her concerns and that she is willing to invest her energy into ensuring that the patient receives the best care possible.

8.3.3 Summary of section

This section demonstrated how pharmacists make use of opportunities to create rapport and encourage collaboration with patients. Extracts illustrated how pharmacists show a personal interest in their patients' lives and experiences, provide reassurance and encouragement, respond emotionally to patients' concerns and anxieties and use non-verbal behaviours to create an empathetic environment. These strategies appear to encourage patients to collaborate with the pharmacist during interactions in order to achieve the common goal of understanding the dosage instructions. This collaboration was illustrated by the way that patients initiate clarification requests, participate actively in consultations, volunteer information or concerns and initiate personal moments.

8.4 Voices: medicine and the lifeworld

Continuing from the previous section, which describes strategies utilised by pharmacists to encourage rapport and collaboration, Mishler's theory can be used to extend this theme. As discussed in *Chapter 4*, he introduces the concept of the lifeworld of the patient and various ways in which the health professional may attend to this during interactions with patients.

Patients initiate lifeworld discussions on numerous occasions throughout the data corpus. Some patient behaviours related to the voice of the lifeworld which were identified in the interactions include the following:

- initiating discussion of health concerns (e.g. *Extract 120* (p. 328) line 20);
- volunteering information about disclosure (e.g. *Extract 156* (p. 400) line 26);
- volunteering information about the adherence strategies they use (e.g. *Extract 006* (p. 173) line 64);
- initiating personal moments – e.g. comments related to unfamiliarity with pills (e.g. *Extract 153* (p. 390) line 19);
- expressing frustration – e.g. frustration towards the doctors (e.g. *Extract 138* (p. 359) line 133) or the healthcare system (e.g. *Extract 100* (p. 287) line 126, *Extract 177* (p. 453) line 325);
- volunteering anxiety about the ARVs (e.g. *Extract 122* (p. 333) line 163); and
- revealing the pressure they feel to understand the dosage instructions (e.g. *Extract 129* (p. 343) line 173).

Although Mishler does not appear to include instances of shared humour in his definition of the voice of the lifeworld, he does include examples which affirm the participants' common humanity and decrease the social distance between them. The researcher is of the opinion that moments of humour, or even comments intended to show personal interest in the patient, do encourage a common

humanity and decrease separation between patient and health professional. Humour is definitely not part of the voice of medicine and, interestingly, it is not included in various definitions of rapport as presented in *Section 8.3.1*. Therefore, in this study, instances of humour will be considered as part of the voice of the lifeworld. It is acknowledged, however, that there is some degree of overlap between rapport-building strategies and lifeworld behaviours described in this thesis.

Across the data corpus, the researcher identified additional pharmacist behaviours which could be said to focus on the voice of the lifeworld. These include:

- Showing a personal interest in the patient by commenting on or enquiring about the patient's life experiences or circumstances, e.g. birthday, caregiver, pregnancy, names, grandchild, children, baby's health (e.g. *Extracts 142* (p. 375), *143* (p. 375), *146* (p. 380));
- Making comments about themselves or their work which display their humanity (personal moments) (e.g. *Extract 102* (p. 289) line 71);
- Responding to patients' concerns on either a practical level (e.g. suggesting solutions) or an emotional level (e.g. *Extract 144* (p. 378) lines 143-144);
- Providing reassurance to concerned patients, especially about health (e.g. *Extract 145* (p. 379));
- Returning to patient's concerns at various points during an interaction (e.g. *Extract 145* (p. 379));
- Providing verbal and non-verbal reassurance, e.g. physical touch (e.g. *Extract 147* (p. 382) line 123);
- Encouraging a patient to speak about life events or emotions (e.g. *Extract 156* (p. 400));
- Encouraging and reassuring patients who have disclosed their HIV status to their families (e.g. *Extract 156* (p. 400) lines 81-82);
- Using open-ended questions to ask patients about their health or how they are feeling while taking the ARVs, which invites patients to raise concerns (e.g. *Extract 017* (p. 189) line 4);

- Showing sensitivity to HIV-related issues, e.g. stigma or discrimination;
- Showing concern for patients' wellbeing (e.g. *Extract 011* (p. 176) line 6); and
- Showing concern for patient's life circumstances, e.g. concern over the cost of transport (e.g. *Extract 062* (p. 241) lines 172-173).

As described in *Chapter 4*, Barry et al. (2001) describe various patterns of communication which typify interactions, namely Mutual Lifeworld, Lifeworld Ignored or Blocked (by the health professional) and Strictly Medicine. The concept of the lifeworld and its resulting communication patterns will now be discussed with reference to this study.

8.4.1 Mutual Lifeworld

In this study, the majority of the interactions could be said to incorporate the pattern of Mutual Lifeworld - both pharmacist and patient use the voice of the lifeworld and the pharmacist attends to and responds to the patient's voicing of his/her lifeworld. Several extracts presented in the previous section detail how pharmacists create rapport and attend to the voice of the lifeworld. A demonstration of how the pharmacists attend to the lifeworld of the patients will now be presented.

Extract 156 below is taken from an interaction with a mother whose proficiency in English is limited. It begins with the pharmacist ending a discussion of the importance of adherence (line 25). However, the patient responds to this termination by volunteering information about how her child helps her to remember to take her pills. She begins tentatively and her non-verbal behaviours reveal that she feels emotional about this topic (line 26). However, she is interrupted by the sound of the pharmacist's cell phone. The patient stops talking, as if she expects the pharmacist to answer the phone immediately.

However, the pharmacist politely decides not to answer the phone. She appears to realise the emotional significance of what the patient is trying to say and she

ignores the ringing phone. She prompts the patient to continue speaking (line 27). The patient resumes, in broken English supplemented with gestures, and relates how her child comes to her and reminds her when it is time to take her ARVs (line 28). The pharmacist remains attentive and maintains eye contact with the patient; the phone continues to ring, but she prompts the patient to continue speaking (line 29). She also provides the word that the patient is struggling to find (line 31) and breaks into a relaxed, reassuring smile. The patient finishes her turn and contentedly places her hands in her lap (line 32). The pharmacist responds by praising the patient for including her child in her treatment and because the patient has finished speaking, she answers the ringing phone (line 33). Before she answers, however, she explains her need to answer the phone and apologises for the interruption (lines 33-34).

A little later in the interaction, the pharmacist returns to the topic of the child and prompts the mother to provide more information about how her child helps her (line 78). The mother gives a minimal, rather anxious response and does not volunteer any further information (line 79). The pharmacist takes the opportunity to praise the mother for including the child (line 80). Interestingly, she also acknowledges the unspoken, that this patient may well have experienced great anguish in disclosing her status to her child, as well as being concerned for the child's welfare should she die. The pharmacist alludes to the fact that the patient will be "fine" because she is taking the ARV drugs (line 82). She continues by emphasising the importance of the patient explaining HIV/Aids to her child and her family (line 84).

In closing off the interaction, the pharmacist returns to the topic of the child's involvement in the mother's illness and she praises and encourages the mother's actions (line 124).

Extract 156: Patient 2 (Ph A, 2nd visit)

- | | | |
|----|----|---|
| 25 | A: | No. You mustn't. Remember this this is your <u>life</u> ↑nè |
| 26 | P: | Ee. My ↑child ((cellphone starts ringing)) |

		Yes.
		----- ^ <i>holds both hands over heart</i>
27	A:	Mm?
28	P:	every (.) time said eight o'clock
		----- ^ ^ <i>opens hands and extends them; touches desk with finger for emphasis</i>
29	A:	↑mm
30	P:	hhh ↑mama=
		----- ^ ^ <i>nods touches desk with thumb</i>
		<i>smiles</i> v
31	A:	=remembers=
32	P:	=mm ee.
		<i>yes</i> ----- ^ <i>folds hands together in lap</i>
		<i>turns away to reach for phone</i> v
33	A:	So that's <u>good</u> if the °child° - >let me just answer here ↑quickly I'll <u>be</u>
34		with you ↑now< (.) sorry (A***) if it's not important I'll just switch it off.
		... ((A gives dosage instructions for ARVs))
78	A:	((working on computer)) So you say your <u>child helps you</u> every day to
79		remember?
80	P:	Mm.
		----- ^ <i>puts hand to mouth; smiles and nods rather anxiously</i>
81	A:	It's good that you speak to your child ↓also because your child knows
82		that it's important that mommy must be fine.
83	P:	Ok.
		----- ^ <i>nods, moves hand to cheek</i>
84	A:	↑Nè so they <u>understand AIDS</u> better also.
85	P:	Ee.
		Yes.

... ((A and P discuss new appointment date then A gives dosage instructions for Bactrim))

122 A: Ok? That's ↓it sharp and I'll see you in July?

123 P: ↑Ok=

124 A: =and you'll be ↑fine you'll never forget cos your child will help you nè?

125 P: E-ee.
yes

8.4.2 Lifeworld Ignored by Patients

No clear cases of Lifeworld Ignored or Blocked by pharmacists were evident in the data corpus. However, several interactions contain instances in which the patient does not respond to the pharmacist's attempts to use the voice of the lifeworld – specifically, in response to the pharmacists' use of humour or a personal moment. In terms of the study by Barry et al. (2001), this communication pattern could tentatively be labelled as Lifeworld Ignored by Patient (as opposed to lifeworld ignored by the health professional).

The following extract is taken from an interaction between the pharmacist and a male patient who is experiencing leg pains as a result of the ARVs. In the first instance of failed humour, the pharmacist jokes about the squashed pill box she has found in the medicine cupboard (lines 50-51). She laughs at her joke, but the humour attempt fails when the patient does not respond. Instead, his response seems rather indignant or irritated (line 52) (note that this is more apparent on the video and is conveyed by his tone of voice).

Extract 157: Patient 12 (Ph A, exp pt)

48 A: =This one that looks like this? Like that?

^
stares at box, looks puzzled

49 P: °Let me just see. °

50 A: I haven't got any. Come and look. Aha. I've got one that someone's sat
51 on or something. ((laughs))

52 P: °No, it's not that one. °

In the extract below, taken from the same interaction, the pharmacist attempts to create a moment of rapport by initiating a comment which shows her personal interest in the patient. While writing down his file number, she comments that he is one of their experienced patients (line 125) and adds that he is “doing very well” (line 126). However, in spite of her use of a response solicitation (“hey”), she receives no additional response from the patient, other than a perfunctory nod. The patient does not appear to be interested in engaging in this attempt at rapport. Aware that the patient is not going to respond more fully or more enthusiastically, the pharmacist returns to the task of writing down his file number (lines 126-127).

Extract 158: Patient 12 (*Ph A, exp pt*)

125	A:	°Now your file number is: ° (.) 199 you're one of our <u>old</u> patients and
126		you're doing very well hey ↑C***** I'm <u>glad</u> to see it. °One ninety
		----- ^
		<i>nods quickly</i>
127		↑nine°
128		(22.0) ((works on computer))

Although later in the interaction this patient does respond to the pharmacist's personal interest in his name (see *Extract 143* (p. 375)), analysis of this extract reveals that he merely replies to her questions and does not respond to her comment at the end of the extract (line 184). Again, the pharmacist seems to realise that the patient has ignored her attempt at including the lifeworld and she quickly returns to a dispensing task.

The extracts presented in this section typify patient behaviours which are evident in a few other interactions in the data corpus, in which patients seem to ignore the pharmacist's attempts either at humour or at personal moments. Obviously, this data and the conclusions drawn in this section are tentative and open to debate. It is necessary to note that some of the patient's behaviours seem more 'potent' on the original videos than when transcribed and this is linked to Langewitz (2007a, 2007b) concept of 'atmosphere' in an interaction (described in the following section). Ultimately, however, these examples are an indication of a mismatch

between the patient's preferred communication style or approach and the pharmacist's style. The pharmacist seems to have failed to interpret the patient's preferences.

8.4.3 Strictly Medicine

In several other interactions, the pharmacists do not initiate any attempts at humour or personal interest in the patient. Likewise, the patient does not volunteer information in accordance with the voice of the lifeworld. These interactions could therefore be categorised as Strictly Medicine (Barry et al., 2001) or Unremarkable Interview (Mishler, 1984). In line with the findings of Barry et al. (2001), these interactions are generally straight forward and are often with patients who are proficient in English and who do not experience difficulties in understanding dosage instructions.

Extract 159 below is taken from one such interaction. The patient reports that she struggles to understand English, but during the interaction, she appears to be able to understand and speak English fluently. From the start of the interaction, the patient seems rather shy and reserved and takes a passive role, answering questions when asked but not volunteering information or initiating requests. The pharmacist does not initiate 'small talk', humour attempts or personal interest in the patient during the interaction.

The interaction follows a simple, straightforward format. It begins with an explanation of the medicines – first the vitamins (line 2), then Bactrim (lines 4-5) and finally the ARVs (lines 5-6). The pharmacist uses her usual strategy and gives the name of each non-ARV medicine, its purpose and the dosage instructions. She then moves to the ARVs, stressing the importance of adherence (lines 11-14), giving the names of the medicines and then dosage instructions (lines 25-29). The patient does not request clarification or provide any indications of a lack of understanding, so the pharmacist moves straight onto a verification of understanding (line 31). With scaffolding and prompting from the pharmacist, the

patient rather shyly demonstrates that she understands the dosage instructions correctly (lines 32-36).

The pharmacist, however, is somewhat nonplussed that the patient has just demonstrated her understanding in such a straightforward manner with no apparent difficulties in understanding. This interaction does not follow the norm: the pharmacist does not receive any cues from the patient to indicate that further explanation is required, the patient has not indicated that she needs clarification and thus no further information needs to be given. The pharmacist is clearly looking for something more – perhaps reinforcement of the evidence of understanding from the patient. Although communication appears to be successful in this interaction, there is a sense that a crucial element is missing in the interaction: there is an absence of rapport building evident in other interactions, perhaps because neither the patient nor the pharmacist introduces the voice of the lifeworld into the interaction.

The pharmacist offers several opportunities for the patient to initiate a request for clarification (lines 45, 47, 49) but the patient responds only minimally. Having received little response from the patient, the pharmacist moves on to another instruction about fatty foods (lines 50-52). She receives no verbal response from the patient (line 53) so she uses a response solicitation (line 54) and a question (line 56) to try to elicit a more definite indication of understanding. Once again she receives minimal acknowledgement (line 57) so she repeats the instruction (line 58). The interaction ends without a close implicature or an exit greeting.

Extract 159: Patient 26 (Ph B, 1st visit)

			<i>puts pill packets on desk</i>
			v

2	B:	Ok, ↑A**** these are your vitamin tablets, three tablets in the morning, ↑nè	
3	P:	°Yes°.	
		<i>pats chest</i>	
		v	

4	B:	This is for the ↑chest, ↑Bactrim to protect the chest from ↑infections, two	

			^
			<i>nods</i>

		<i>pushes ARV pots near P</i> v -----	
5		tablets in the morning. And <u>these</u> three are your ARV's. These three	
6		tablets you're going to take <every day °for the rest of your life°. What	
			----- ^ <i>nods</i>
7		<u>time</u> are you going to take your [tablets?	
8	P:	[°Eight.°	
9	B:	<u>Eight</u> [o'clock?	
10	P:	[°(Ja).°	
		<i>Yes</i> ----- ^ <i>nods quickly</i>	
11	B:	So it's eight o'clock every morning, eight o'clock every night for the rest	
			----- ----- ^ ^ <i>nods</i> <i>nods</i>
12		of your life. You can't ever forget to take your tablets, you can't ever	
13		<u>skip</u> to take a tablet, if you go somewhere you must always make sure	
			----- ^ <i>nods</i> <i>gestures towards pills</i> v -----
14		that your tablets is with you.=	
15	P:	=°Yes.°	
		----- ^ <i>nods</i>	
... ((B revises names of drugs))			
		<i>puts 2 pots next</i> <i>to each other</i> v	<i>points to pot</i> v <i>points to pot</i> v
25	B:	These two tablets. Stavidudine ↑forty and Lamivudine, one fifty	
			<i>picks up pill pot, puts it down</i> v v
26		milligrams. It's <gabedi ka letsatsi>, ↑nè (.) <u>this</u> one, Stocrin six hundred,	
		<i>twice a day</i> ----- ^ --- <i>nods</i> <i>nods</i>	

		<i>moves pot up and down for emphasis</i> v	<i>picks up pill pot, puts it down</i> v v
27		it's <u>only</u> bosigo fela. In <u>other</u> words. One ↑pillie eight o'clock phakela.	
		<i>at night only</i>	<i>in the morning</i>
		<i>picks up a pill pot, puts it down</i> v v	<i>picks up a pill pot, puts it down</i> v v
28		One ↑pillie eight o'clock phakela. One pillie eight o'clock ↑bosigo one	
		<i>in the morning</i>	<i>at night</i>
		<i>picks up a pill pot, puts it down</i> v v	<i>picks up a pill pot, puts it down</i> <i>moves it up and down</i> v v
29		pillie eight o'clock bosigo. <u>One</u> pillie eight o'clock bosigo fela.	
		<i>at night</i>	<i>at night only</i>
		----- ^	----- ^
		<i>P nods</i>	<i>P nods</i> <i>P nods</i>
30	P:	[°Ok.°	
		<i>pushes pill pots towards P</i> v	<i>folds arms</i> v
31	B:	[Ok? So please tell <u>me</u> how you're going to take the tablets.	
32	P:	((sniff)) ((unintelligible: 2 syllables)) one, eight o'clock.	
		----- ^	----- ^
		<i>puts head to side, smiles coyly</i>	<i>points to pot</i>
33	B:	↑Mm (.) ↑one eight o'↑clock when?	
34	P:	°Morning.°=	
35	B:	=↑Morning, and?	
36	P:	°(at night).°	
		----- ^	
		<i>points to pill pot</i>	
		... ((B asks P what time she is going to take the ARVs))	
45	B:	Ok. So you <u>know</u> how to take them? You are <u>sure</u> ?	
			----- ^
			<i>nods</i>
46	P:	Yes.	
		----- ^	
		<i>nods</i>	

Langewitz (2007b) discusses how intuitions, impressions, perceptions and especially atmosphere form an important part of medical encounters. For example, when a patient walks into a doctor's consulting room, the doctor often makes a preparatory intuitive assessment of the patient. This is based on impressions, which may predict the nature of the interaction to follow or how worrisome the patient will be and how long they will require to convey their problem. According to Langewitz (2007a), communication between a patient and health professional is therefore a shared situation which is governed by a precise sense of appropriateness which functions between the two parties. Research has commonly explained this 'intuition' by examining verbal cues as well as non-verbal cues like facial expression and body language, but Langewitz suggests that researchers need to think further about the idea of 'atmosphere' and how health professionals sense atmosphere within an interaction.

This notion of attending to intuition or atmosphere may be extended to a discussion of inclusion of the lifeworld in the pharmacist-patient interactions. In the case presented above (*Extract 159*), which follows the pattern of Strictly Medicine, there is a lack of connection with the lifeworld of the patient. The pharmacist is alerted to the fact that this patient does not wish to engage in 'small talk' or the voice of the lifeworld. It would appear that early in the interaction the pharmacist assessed the situation and sensed that the patient did not desire to interact on a personal level. The patient does not introduce the lifeworld and the pharmacist responds to the patient's reticence by choosing not to introduce the voice of the lifeworld into the interaction.

8.4.5 Reasons for Lifeworld Ignored by Patient and Strictly Medicine

In both the Lifeworld Ignored by Patient and the Strictly Medicine interactions, patients generally appear to be passive recipients of information, rather than active participants in the interactions. Various reasons for this behaviour may exist.

The first and perhaps most obvious reason why patients do not respond to the pharmacist's inclusion of the voice of the lifeworld is that of language: patients may not understand the pharmacists' attempts to initiate humour or personal comments because of language barriers. Humour may be subtle and patients with limited English proficiency may miss the pharmacists' intention. Also, these 'asides' may be misinterpreted by patients who are expecting the standard frame of medical interaction or who have particular expectations of their interaction with the pharmacist. Patients may indeed expect the consultation and their role in the interaction to conform to the Strictly Medicine pattern and the inclusion of lifeworld issues may leave them unsure whether to respond or to ignore them.

For some patients, their consultation with the pharmacist is a mundane or routine event which forms part of their overall hospital visit. These patients may well have travelled far to the hospital and waited in long queues to collect their file and consult the doctor. Patients may also feel ill, weak or fatigued because of HIV/Aids. The pharmacist may be one of many health professionals they see during their hospital visit and, in the general sequence on any particular day, is often the last health professional seen by a patient. Therefore, patients may view their consultation with the pharmacist as simply another task that must be completed as quickly as possible, hence their apparent lack of willingness to engage in instances of shared humour or rapport with the pharmacist.

Another interesting factor is that most of the interactions in which the lifeworld is obviously ignored by the patient take place across both culture and gender lines, usually when a white female pharmacist interacts with an African male patient. The lifeworld may be ignored because of certain cultural norms which may prohibit interaction between the health professional and patient beyond the basic tasks of the consultation. For instance, the cultural norms of a black male patient may not permit him to interact on a personal level with a white female health professional. Ellis (2004) describes how there are certain conditions under which a Zulu or Xhosa woman may not speak to a senior male directly or may not disclose sensitive information about herself. Therefore, patients may find it

difficult to converse with a pharmacist across gender lines and any discussion of the lifeworld may be ignored in order to uphold these cultural norms.

In addition, the cooperative, reciprocal and coordinated verbal and non-verbal behaviours which are generally present in conversations between speakers from the same culture may be absent in interactions across cultural barriers (Chick, 1985). Instead, such interactions may contain awkward, asynchronous sequences because participants may struggle to establish and maintain cooperation within a conversation. According to Chick, the reason for this lack of coordination lies in the often unconscious sociocultural knowledge and communication conventions of each communicative partner. Therefore, in cases of Lifeworld Ignored by Patient and Strictly Medicine, an asynchrony or miscommunication between participants may arise due to cultural barriers and this may in turn cause the patient to avoid entering into discussion about the lifeworld, even if the pharmacist introduces it.

Issues of trust within the therapeutic relationship may also play a role in this regard. Especially with a chronic illness, a patient must put their trust in a health professional who is largely unknown to them. Both parties need to be honest, open, responsive and vulnerable within their interactions (Mechanic & Meyer, 2000). The notion of trust has cross-cultural relevance and is often based on a patient's previous experience of the health care system (Gilson, 2005). While some patients may develop personal relationships with health professionals as part of their support network, others may be cautious and show resistance to developing trust (Carr, 2001). A patient makes a decision to trust a health professional. This choice is informed by their experience with the health professional, through observing the health professional's actions, testing the health professional and evaluating treatment outcomes (Mechanic & Meyer, 2000).

The apparent reluctance and wariness of some of the patients in this study to engage in or respond to the voice of the lifeworld as introduced by the pharmacist may well be linked to the negotiation and development of trust between the two parties. As discussed in *Chapter 2*, the disease of HIV/Aids carries a great degree

of stigma, which may lead patients to be even more cautious about establishing trust with a health professional. When introducing personal interest comments, the pharmacists' intentions may be interpreted as threatening rather than caring.

Mishler (1984) believes that by attending to the voice of the lifeworld, doctors (and other health professionals) will be able to offer a more humane, caring practice. There is an assumption amongst researchers and health care professionals that adopting a patient-centred approach to health care is crucial to ensuring good health outcomes in patients. In general terms, it has been defined as understanding the patient's world, exploring the patient's illness experience, or enhancing the therapeutic relationship.

However, Mead and Bower (2002) question the validity of this assumption. They reviewed a number of empirical studies which investigate the relationship between patient-centred care and health outcome. The pattern of outcomes in these studies is ambiguous and specific evidence of the benefits of patient-centred health care is lacking. Specifically, patient satisfaction is not always associated with patient-centred care. Therefore, by implication, patients may not necessarily experience better health outcomes (e.g. improved adherence) or greater satisfaction in consultations with a patient-centred approach.

Swenson, Zettler and Lo (2006) investigated patients' preferences for a patient-centred versus a biomedical communication style. They note that although a majority of patients prefer a patient-centred style, a significant number of patients prefer a biomedical style. Patients who preferred the latter reported that they wanted clear recommendations and information from the doctor, they liked the doctor to assume a leadership role in the interaction, they valued the doctor's knowledge and a biomedical style inspired confidence in the doctor. Therefore, patients may have different communication preferences that affect satisfaction and clinical outcomes but these preferences are not necessarily easy to discern.

The results in this section present a paradox: so-called 'humane practice' or 'patient-centred practice' by health professionals does not necessarily depend on

the inclusion of the lifeworld or attention to patients' experiences. On the contrary, for various possible reasons the patient may prefer the health professional not to initiate attempts at personal interest, humour or rapport. The patient may not wish to waste time, or s/he may not want to discuss personal issues, feelings, experiences or concerns, or cultural and gender norms may impede discussions of a personal nature with the health professional. In such cases, it may be more polite and caring for the health professional simply to focus on the goals and tasks (the 'business') of the consultation using the voice of medicine (in this case, dispensing the ARV drugs, providing information to the patient and ensuring that s/he understands the instructions), rather than to involve the patient's lifeworld and his/her experiences of illness.

Patient-centredness is about patients deciding which communication style they prefer, be it a biomedical style or one that focuses on the lifeworld. If a biomedical style is chosen by the patient, this is in fact patient-centred: "patients should be involved in consultations in whichever ways they perceive to be appropriate" (Stevenson, 2007, p. 80).

Therefore, it is important for health professionals to take note of patients' communication preferences and adapt their style accordingly (van den Brink-Muinen, van Dulmen, Jung, & Bensing, 2007). The literature does contain some guidelines regarding how to determine patient's preferences – for example, asking the patient what kind of style they prefer (Swenson et al., 2006). In addition, however, sensitivity on the part of the pharmacist towards the patient's status and an awareness of atmosphere in the interaction is required. Indeed, this may only be achieved by becoming attuned to patients' non-verbal reactions, as described in *Section 7.3.5*, and developing intuition (Langewitz, 2007a, 2007b), as described in *Section 8.4.3*.

8.4.6 Summary of section

This section applied Mishler's theory of the voices of medicine and lifeworld to the data. Based on analysis of the data corpus and the identification of various recurring behaviours exhibited by the pharmacists, the researcher suggested additions to Mishler's list of behaviours that indicate attention to a patients' lifeworld. The work of Barry et al. (2001) on communication patterns was also applied to the data. The patterns of Mutual Lifeworld and Strictly Medicine are both evident in the data corpus and a new pattern was described, namely Lifeworld Ignored by Patients. Here pharmacists attempt to introduce discussions about patients' personal lives or experiences but patients ignore these attempts. Various reasons for this pattern were suggested, including the presence of cultural and gender barriers. The need for sensitivity to atmosphere and to patients' reactions within interactions was highlighted.

8.5 Summary of Chapter

This chapter proceeded from the presentation of the linguistic results of this study. It focused on contextual and disease-related factors which are present in the data, as well as how the macro context influences micro elements within the pharmacist-patient interactions.

It began with various extracts which illustrate the experience of side effects from ARVs and illness symptoms and how these affect patients' daily life as well as interactions with the pharmacist. It also discussed how the discovery of a positive HIV status may have an effect on a patient's relationship with the health professional and his/her trust in the health care system.

The chapter then focused on a discussion of the pressures felt by both patients and pharmacists, linked to the urgent need to achieve successful adherence to ART. Stressors that have the potential to affect the pharmacists' work and their interactions with patients were presented with relevant illustrative extracts.

Because of such pressures, creation of rapport with patients and promotion of collaboration in interactions becomes important. Various rapport strategies and collaborative behaviours identified in the data corpus were presented and discussed. The creation of rapport that results in collaboration is deemed crucial to strengthening the therapeutic relationship and achieving a model of concordance.

The chapter ended with a discussion of some interesting results regarding the way in which pharmacists and patients attend to and respond to the voices of medicine and the lifeworld, in line with Mishler's theory. Several atypical examples were reviewed which provide novel insights into how these concepts have been traditionally considered within health professional-patient interactions.

CHAPTER 9

CASE STUDIES

Continuing from the previous chapter, *Chapter 9* presents specific cases which illustrate the influence of the macro context on the micro elements of the interaction. Several emerging macro themes will be discussed using so-called ‘exceptional cases’ from the data corpus which depict deviant or unusual events. The presentation of these cases allows for more complex considerations and understandings of the phenomena described in this study (Perakyla, 2004; McPherson & Thorne, 2006).

Four cases have been selected for discussion. The first case details an interaction between a pharmacist and a defaulter, the only one of its kind in the data corpus. The second case illustrates the immense burden of care experienced by caregivers of patients with HIV/Aids and how emotional stresses may influence the pharmacist-patient interaction. This theme was identified in several other cases across the data corpus, but this is the only case in which the caregiver’s emotional concerns manifest strongly throughout the interaction. The third case demonstrates how an exceptionally assertive patient ‘negotiates’ her agendas within the interaction. Although other interactions contain instances in which patients promote their agendas, this patient is particularly assertive. The final case presents typical extracts which demonstrate the direct impact of the disease on the interactive and communicative style of the pharmacists. Some of the pharmacist behaviours illustrated by this case are present in other interactions, but this case contains repeated instances of these behaviours.

9.1 Aaron: The case of a defaulter

The case of Aaron, a patient who has defaulted on ART, provides interesting insights into the pharmacist’s handling of this type of situation as well as into

issues of power, guilt and choice. It should be noted, however, that discussions with a Tswana informant indicated that the pharmacist's behaviour towards this patient would not be considered generally appropriate in terms of cultural norms of respect and that the pharmacist may well have been 'playing for the camera'. Nevertheless, the case does contribute knowledge concerning non-adherence behaviours.

A discussion of studies that investigate reasons for patient non-adherence to ART is provided in *Chapter 2*. These reasons tend to be wide-ranging and vary according to the particular circumstances of the individual patient. Furthermore, any discussion of defaulting behaviours must inevitably address the concept of risk, because the intentional choice to default implies an acceptance of the risk of becoming resistant to ART and of spreading a drug resistant HIV strain. Aaron's case illustrates this as he decides to risk his treatment progress by defaulting even though he appears to be aware of both the negative implications of such a risky decision and the importance of strict adherence behaviours.

Some research into risk-taking behaviours amongst people receiving ART has been conducted. These studies have shown that because of the improvement in availability and treatment for HIV/Aids, misconceptions concerning the risk of HIV infection may have arisen. People may imagine that they are protected by the drugs and this may lead to an increase in risky sexual practices. People with high levels of self-reported risk have been found to have lower adherence to ARVs than those with lower levels of risk (Flaks, Burman, Gourley, Rietjeijer, & Cohn, 2003). These results highlight the impact of people's beliefs about HIV/Aids and ART on their behaviours (Crepaz, Hart, & Marks, 2004).

A link has been found between risk behaviours and non-adherence to ART, especially amongst vulnerable populations. Psychological distress, substance abuse, poverty and relational vulnerability have been found to impact upon adherence and these factors are associated with unsafe sex practices. A combination of risk factors exists in the South African environment, with

differences across levels of socio-economic status and between rural and urban communities. Risk factors include poverty, vulnerability, stigma, substance abuse, lack of basic living resources, community stressors, levels of knowledge about HIV/Aids, misconceptions about HIV/Aids (especially HIV transmission) and cultural beliefs and attitudes towards women and relationships (Kalichman et al., 2005; Eaton et al., 2003). Peretti-Watel et al. (2006) point out that poverty interferes with adherence and perpetuates a ‘culture’ of poverty in which patients are unable to worry about long-term issues such as the consequences of risky behaviours because of a more urgent need to sustain themselves.

The reason for Aaron’s non-adherence is unclear and a combination of influencing factors may have led him to decide to stop taking the medicine. Much of the interaction involves the pharmacist’s attempts to determine the reason for his non-adherence. Because adherence to ART has become a central focus in caring for patients with HIV/Aids, the way in which health professionals interact with patients has changed to an often adversarial relationship which involves checking patients’ behaviours and questioning their competence (Karasz et al., 2003).

As shown in the extract below, the interaction begins with a greeting sequence (lines 17-18). The pharmacist swiftly moves on to a discussion of when Aaron last collected his medicines and it would appear that she knows he has defaulted on treatment. She opens the discussion with a tactful, indirect statement (line 19) but his response is non-committal (line 20): at this stage of the interaction he is not prepared to offer a reason for his non-adherence and he may already feel ashamed or embarrassed and be attempting to avoid giving an explanation. He refers to “they” instead of to himself, thereby distancing himself from responsibility and deflecting attention from his own actions. The pharmacist’s response is rather terse (line 21) – she becomes irritated with him and his lack of honesty in the form of a direct answer appears to aggravate this.

Aaron persists with another vague and evasive answer (lines 22-23). He attempts to blame his non-adherence on the Clinic (or possibly Pharmacy) staff, giving the

The pharmacist appears to realise that her interrogative style is not going to produce the response she desires from Aaron. Therefore, she tries a different approach of questioning (line 28) and reminding him (lines 30-31) about the adherence behaviours that are required when on ART. She receives a minimal response from him (line 29). Once more, the pharmacist tries to ascertain the reason for his non-adherence, using a stern question (lines 30-32). Aaron breaks eye contact with her and does not answer (line 33), so she persists with a repetition of her previous question (line 34). Again, he avoids eye contact and does not answer (line 35). This time, instead of using an interrogative questioning style, she reverts to an open-ended invitation for Aaron to explain his situation (line 36). He provides a more direct reason for his behaviour (lines 37-38) – it would appear that he might have misunderstood the instruction not to take any expired pills.

Extract 161: Patient 25 (*Ph E, exp pt*)

28	E:	Ga o sena nna o tsaya dipilisi re rileng? <i>When you started taking the pills what did we say to you?</i>
		^ <i>gazes at E</i>
29	P:	Eh. <i>Yes</i>
		^ <i>gazes at E</i>
30	E:	Akere re rile kgwedi le kgwedi ga go tloisiwe akere? Jaanong wena ga o <i>Didn't we tell you that this is a monthly commitment, and you must not</i>
		^ <i>gazes at E</i>
31		bona e nna March, ebe e nna April, ebe e nna May ebe e setse e nna June, <i>skip a dose? And you just let March, April and May pass by and now</i>
		^ <i>gazes at E</i>
32		o ntse o nwang gone jaanong? <i>it's June, what have you been taking all this time?</i>
		^ <i>gazes at E</i>

33		(4.0)
		— — —

		^
		<i>lifts hands slightly, drops them into lap (while staring out the window)</i>
34	E:	Mmm, o ntse o nwang papa?
		<i>What have you been taking papa?</i>
35		(2.5)

		^
		<i>shakes head while looking down</i>
		<i>shakes head</i>
		v

36	E:	Nna free fela o ntlhalosetse fela.
		<i>Just be free and explain to me.</i>
37	P:	Mmnene (.) e bile, dipilisi di teng, jaanong go dira gore, tse tsa
		<i>Umm (.) the pills are there, but the thing is, these old ones you do not</i>
38		bogologolo ga o dinwe, date ele fa e fetile e fetile.
		<i>take if the date has passed, it has passed.</i>

However, Aaron's second reason (lines 37-38) differs from his first version (lines 22-23). The PA realises this and responds rather irritably, negating what he has said (line 39). She appears to have realised that he is trying to conceal the real explanation for his non-adherence. She reprimands him (lines 41-42) and he replies embarrassedly with an excuse (line 43), apparently aware that he has done something wrong. Throughout the interaction this pattern is repeated as the PA continues to reprimand Aaron (lines 86-88, 107) and he begins to show remorse (lines 89, 108).

Extract 162: Patient 25 (Ph E, exp pt)

		<i>leans forward,</i>
		<i>shakes head,</i>
		<i>frowns shakes head</i>
		v v

39	E:	< <u>He-e</u> > He-e.
		<i>No.</i>
40	P:	<u>Wa bona.</u>
		<i>You see.</i>

41	E:	<u>He-e.</u> Wena tota ke [wena o ka riyalong, wena o kabong o ruta ba
42		bangwe. <i>No. How can you say that, you of all people. You are the one who should be teaching others.</i>
43	P:	[Kana o bone, nako ya teng ke a bo ke seo so. <i>No, you should see here, around those times I'm normally not around.</i>
		----- ^ <i>shifts around in chair</i>
		... ((E and P discuss where P was during the past few months.))
60	E:	O ntse o sa nwe sepe ene jaanong wa bona gore o ipusetsa ko morago? <i>You have not been taking anything and now do you understand that you are regressing³⁹?</i>
61	P:	----- ^ <i>nods</i>
		... ((E and P argue over why P did not come to the Clinic: P says he was in another town at the time and could not come to the Clinic and E says he was too lazy to come to the Clinic.))
86	E:	Waitse akere ke se re se le boleletseng pele, jaanong why one o etsa jalo <i>You know that because that is what we told you in the beginning, now why</i>
87		papa? Why one o etsa jalo? Wena o re ipolellang gore wa tlhaloganya (.) <i>did you do that Papa? Why did you do that? You are the one we think</i>
88		le wena tota o re ipolellang gore wa tlhaloganya. Jaanong re etse eng? <i>understands the most, more than everyone. What must we do now?</i>
		----- ^ <i>tilts head to the side and scratches chin</i>
89	P:	Nee, ke mistake (.) ga nkitla (.) nka setlhole ke dira jalo. <i>No it is a mistake (.) I will never (.) I will never do it again.</i>
		... ((E asks P where he lives.))
92	E:	Ene jaanong waitse ke eng papa ga o setse o simolotse ditlhare tse o
93		tsamaya o ntse o di skip, o di skip, o di skip <i>And now you know what papa, when you have already started the treatment and you keep on skipping them, skipping them</i>

³⁹ Translator 1 used the phrase “slowing your progress” instead of the word “regressing”.

⁴⁰ Translator 1 used the phrase “won’t be effective” instead of “not progressing”.

		<i>We are going to stop them because you are not drinking/taking them and they are expensive.</i>
106	P:	Ok. ----- ^ nods gestures for emphasis v -----
107	E:	So ga o sa dinwe sentle di sa go tswele mosola ke moka re latlha madi. <i>So if you don't take them according to the instructions and they don't work for you then we are wasting money.</i>
108	P:	Mo dustbining. <i>In the dust bin.</i> ----- ^ opens hand, as if throwing something away holds out hand towards P v -----
109	E:	Mo dustbining wa tlhologanya? <i>In the dust bin, do you understand?</i>
110	P:	Mm.

From the evidence in the transcript and the various reasons given by the patient, as listed below, it would appear that Aaron knew that he needed to come to the Pharmacy to collect a new prescription and that he should not stop taking the ARVs. However, it seems that he wished to stop the treatment (line 52) and had made an agreement with the pharmacy that he would consider his decision (line 54) but had not returned to the pharmacy. He had stopped taking the regimen, perhaps because he was away from home (line 43) or could not get to the Clinic (line 71). Subsequently he decided that he did want to continue treatment (line 57) and came to fetch his ARVs.

Extract 163: Patient 25 (Ph E, exp pt) (Note that this extract presents an amalgamated list of the reasons given by Aaron throughout the interaction, to explain why he did not adhere to treatment.)

- 22 P: Ka March, ke ba tlhaloseditse gore ke ne ke seo (.) so date e ne ke
In March, I explained them that I would not be around (.) so the date I
- 23 tshwanetse go tsaya ditlhare ka yone, ga ke a tla ka yone ((unintelligible)).
was supposed to come and get medication on, I did not come on that date
((unintelligible)).
- ...
- 37 P: Mmnene (.) e bile, dipilisi di teng, jaanong go dira gore, tse tsa
Um (.) the pills are there, but the thing is, these old ones you do not
- 38 bogologolo ga o dinwe, date ele fa e fetile e fetile.
take if the date has passed, it has passed.
- ...
- 43 P: Ke ile ko Thabazimbi⁴¹.
I was at Thabazimbi.
- ...
- 52 P: Ne ke ile go discharga.
I was going to discharge.
- ...
- 54 P: Aba are dula three day or four days o inagane.
And they said take three days or four days and think about yourself.
- ...
- 57 P: Mare ke a batla go di nwa.
I do want to take it [the pills].
- ...
- 62 E: Ke gore pila pila o ntse o ntse fela fa re tla fela mo nneteng.
The truth is that you have just been sitting around and not coming.
- 63 P: Ahh ke nnete.
Yes, it is the truth.
- 64 E: Ke nnete, o ntse o ituletse fela o sa tlhoke chelete ya gore o tle.
It is the truth, you have been just relaxing and you don't have any
transport or money problems, but you just did not want to come.
- ...
- 71 P: Bona, ka neela motho kare a tle ka kwano a tle le dipilisi.
Look here, I gave someone [my card] to fetch the pills this side.

⁴¹ A town approximately 130km north-east of Rustenburg.

After the pharmacist has stopped berating Aaron, she offers him a second chance to take the ARVs as if he is a naïve patient. She stresses the importance of making a commitment to adhere to the ARV regimen (lines 113-126). She also elicits a commitment in the form of a promise (lines 157-192). The pharmacist also emphasises the importance of adherence to treatment (lines 168-169).

Extract 164: Patient 25 (Ph E, exp pt)

gestures for emphasis; has a stern expression, eyebrows up while talking

v

113 E: wena o tswanetse gore o ipolelle jaaka re tlogile re
114 le bolella lentlha gore ga o nwa dipilisi tse o tswanetse gore e nne for rest
115 of your life, o tswanetse gore o e tsefela jalo.

You must tell yourself that at the beginning of this session you were told that when starting this treatment, its going to be for the rest of your life, you must do that.

116 P: Mm.

^

nods

117 E: Mare jaanong ga e le gore o feela gore ga o sa tlhola o kgona, o tsaya gore
opens hands, shrugs shoulders

v

118 maybe, o tsaya gore ke mo metsamekong, ke taba tsa ga wena o re bolelle
119 gore ee fa gona ga ke sa tlhola ke kgona ka gore e tla be e le ((phone rings))
But now if you feel that you are not coping, maybe you take this as a game, now it is important that you tell us that you are no longer interested in [ARVs] because it will ((phone rings))

120 P: Mm.

^

nods slightly

points to page with emphasis

v

holds up hand for emphasis

v

121 E: So wena ga e le gore monakong ya jaanong wena wa ipolella gore o tlile
122 go dinwa pila ka nako e ba go fileng yona, ra se sokodisane, gosiamé

V

 $\wedge$ $\wedge$ $\wedge$ $\wedge$

427

164	P:	Mare wa bona ne ke tsamaya sentle ke kgwedi tse pedi tseo fela, go tloga ----- ^ <i>holds out hand, points to pills on desk</i>
165		le go tloga. <i>But I was on track, it was just those two months.</i>
166	E:	Kgwedi tse pedi tseo di senya dilo tse tsotlhe. <i>Only two months destroys everything.</i>
167	P:	Ok. <i>pokes head forward for emphasis</i> v -----
168	E:	Letsatsi le lengwe le le lengwe le senya dilo tse tsotlhe a kere re lo
169		boleletse ko ntlheng gore le icommittee a kere. <i>Even a day destroys everything, at the beginning we told you that you must commit yourself.</i>
170	P:	Ee. <i>Yes.</i> ----- ^ <i>nods</i>
171	E:	Re mitane half way a kere. <i>You must meet me half way.</i>
172	P:	Ee. <i>Yes.</i>

After she has elicited this new commitment, the pharmacist verifies Aaron's understanding of the dosage instructions. She uses specific questions (lines 183, 192) which enable him to demonstrate his understanding (lines 184, 193). Despite her annoyance towards Aaron for defaulting, she realises that he has made the choice to return to the Clinic to collect his medicines and that it is her responsibility to ensure that he understands the dosage instructions.

Extract 165: Patient 25 (Ph E, exp pt)

183	E:	O nwa ka nako mang? <i>What time do you take/drink your tablets?</i>
184	P:	Ke eight maitsiboa le eight phakela.

At eight at night and eight in the morning.

... ((E asks P to be serious about his health and about committing to the ARV regimen.))

192 E: Go ne o santse o itse gore o dinwa jang?

Do you still remember how you drink/take them?

193 P: Ee ka itsi ke phakela le maitsiboa.

Yes I know, morning and night.

This is the only interaction in the data corpus in which a pharmacist directly questions a patient about the adherence strategies that he is using (line 194); usually, such strategies are only suggested to patients. From the evidence in the extract below, it is apparent that Aaron understood the importance of adherence and had embraced the adherence strategies suggested by the pharmacists during previous visits (lines 195, 197), but that he had consciously decided to default on treatment. The pharmacist continues by providing him with several suggestions for promoting adherence, including a key holder (lines 204-214) and a yellow diary card, both of which she explains carefully.

Extract 166: Patient 25 (Ph E, exp pt)

194 E: O etsa jang gore o gopole nako ya gago?

What do you do to remember your time?

195 P: Ke le bella nako.

I check the time.

196 E: Ga eight e ka chaya e le gore ga o ko gae o etsa jang?

If it's after eight and you are not at home, what are you going to do?

197 P: Go raya gore (.) ke tsaya tse dingwe e be ke dinwa ga eight e chaya.

It means (.) I will take them with me and drink them.

... ((E explains that when P returns to Thabazimbi he should take an extra supply of ARVs with him in case of emergency.))

taps keyring holder

v

holds it out for P to see

v

204 E: O tla bo o tsenya, a kere gongwe o tla bo o nna 3 days, wa bona selo se?

Put in some tablets, maybe you are going to spend 3 days, you see this thing?

205	P:	Ee. Yes. ----- ^ nods
206	E:	Ga se key holder ↑nè, o tsenya dipilisi tseo tsa malatsi ao ka fa, le ga o tla ----- ^ nods
207		mo sepetlele o tlike go collecta a kere. <i>Is that not a key holder, you put in some tablets for those days you are going to spend (away). Even if when you are going to hospital to collect tablets.</i>
208	P:	Ee. Yes. ----- ^ nods
209	E:	O tla nako e santse e le teng before eight, o tla ka tsona o di tsentsa kafa le
210		ga o tla teropong kapa o ya ko kae? O ntse o nale spare, tse dingwe o di
211		beile ka fa o itse gore nako ga e tla chaya o le motseleng, ore o le ko kae? <i>points to wrist/watch</i> v -----
212		Ga e re eight o'clock, o di gopole o itse gore o nale ((unintelligible)) le ga <i>points emphatically to desk</i> v -----
213		o ntse o le fo teng fo sepetiele. <i>If you arrive here before eight o'clock, bring them, inside this key holder. Even if you are going to town or somewhere have the spare ones, wait for the time to come, at night time take your tablets, even if you are here in hospital please bring them.</i>
214	P:	°Fa Sepetlele. ° <i>In hospital.</i> ----- ^ <i>touches chin, nods</i>

The comment below (line 216), which appears towards the end of the interaction, is of interest. Apart from defusing the tension in the interaction, it indicates the

pharmacist's desire for Aaron to adhere successfully to the treatment, achieve good health and not waste the treatment opportunity which he has been given. This comment is therefore a justification of her anger and disappointment in Aaron's prior lax behaviour.

Extract 167: Patient 25 (Ph E, exp pt)

- 216 E: Wa bona re a go rata.
 Can you see how much we care for you?
- 217 P: Ee ke a bona la.
 Yes I can see.

Conrad (1985) describes two dominant perspectives in the social sciences that explain non-adherence. The first perspective posits that the source of this behaviour is the relationship, interaction or communication between the health professional and patient. It is suggested that by changing communicative or interactive styles, adherence behaviours may be improved. The second perspective holds that a patient's health beliefs are linked to non-adherence behaviour. Patients are more likely to adhere if they feel susceptible to illness, believe the illness has serious health consequences, or do not anticipate obstacles such as side effects.

As discussed in *Chapter 2*, the notions of 'compliance' and 'adherence' imply a medically centred perspective in which the patient is ordered to comply by a doctor and if the patient defaults on treatment, this is considered a deviant behaviour. However, Conrad (1985) suggests that compliance or adherence should be viewed from a patient-centred perspective, in which patients are active agents who are responsible for their treatment, rather than passive recipients of medical instructions. For many patients, taking chronic medications may lead to feelings of being controlled by or becoming dependent on an external force.

This idea of a more patient-centred view of adherence can be seen in the way that terminologies have changed in recent years. As described in *Chapter 2*, the term 'concordance' has been adopted in preference to the terms 'compliance' and 'adherence'. The notion of concordance concurs with recent calls for increased

patient-centeredness and the promotion of shared decision-making in health care by taking cognisance of the patient's perspective.

Conrad's (1985) research with epilepsy patients reveals much about how patients with chronic illnesses often modify their drug regimens in an attempt to self-regulate and gain control over their illness. Firstly, side effects from medications may make everyday life difficult; therefore, patients may decrease or stop treatment to try to reduce these side effects. Secondly, patients 'test' the medication, sometimes taking themselves off the drugs to see what will happen or to test for the existence or progression of the disease. Thirdly, by modifying the drug regimen or stopping treatment, patients may feel less stigmatised.

Most importantly, Conrad (1985, p. 36) reports that "regulating medication represents an attempt to assert some degree of control over a condition that appears at times to be completely beyond control". By choosing to default on treatment, patients may regain a sense of control over their own health and decrease their level of dependence on medicines. For patients, adherence is about the meaning of medications in their everyday lives, rather than simply complying with a doctor's (or pharmacist's) orders. "Sufferers of illness need to manage their daily existence of which medical regimens are only a part" (Conrad, 1985, p. 30).

Bissell et al. (2004) conducted research with diabetes patients. They found that constraints such as poverty, financial burdens or a lack of material resources cause patients to experience difficulty in integrating their treatment regimen into their daily lifestyle. Indeed, Rosen, Ketlhapile, Sanne and Bachman DeSilva (2007) report that although ARVs are provided free of charge in South Africa through the public health care system, patients have to pay considerable amounts for transport costs, food, supplemental medicines, herbal remedies, hospital fees, etc. Bissell et al. (2004) suggest that health professionals need to develop a shared understanding of each patient's experiences and circumstances, as well as the context into which the regimen must be integrated.

In recent years, there has been a definite move in health care fields towards patient consumerism. Patients are encouraged to make choices about their health and treatment, become active partners in decision making and interactions with health professionals, become informed about their illness, demand specific treatments and take greater responsibility for their health (Cline, 2003). Similarly, as outlined in *Chapter 3*, there has been a move towards providing health care services that are sensitive to the patient's cultural beliefs and background. Health professionals need to be aware of traditional healing methods which patients may choose to use in conjunction with, or in preference to, western medicine.

However, HIV/Aids appears to be somewhat of an exception: at this stage, there is no cure for the disease and there is only one medical treatment option which has proven results, namely ART. This is a western treatment and, as discussed in *Chapter 3*, patients who receive this treatment are discouraged from simultaneously consulting traditional healers. ARVs require such strict levels of adherence that the element of choice is largely removed: once a patient has decided to take the medications, s/he essentially relinquishes the opportunity to be a consumer who has the power to modify regimens or 'experiment' with medicines and, in the context of South Africa, s/he also relinquishes the option of taking traditional medicines. It would appear that the only way in which patients may regain the power of choice with regard to their own health is by deliberately deciding to abandon the ARV treatment option.

In Aaron's case, his decision to stop treatment may well have been linked to a desire to regain control over his life. Certainly, his attempts during the interaction to avoid providing a reason for his non-adherence are indicative of a desire to gain control over the pharmacist within the boundaries of the interaction and this may extend to a desire not to become passively dependent on medicine but to maintain an active role in his own health. However, he may also have been influenced by social factors such as poverty or stigma, or even by cultural beliefs about western versus traditional medicines. Perhaps he was seeking employment away from home and could not attend the Clinic. Regardless of the reason for defaulting, this

case concurs with Conrad's (1985) suggestion: adherence is not about simply following a doctor's orders and a patient's adherence behaviours need to be considered within the context of his/her circumstances, experiences, culture and psychosocial realities.

Summary of section

This section provided extracts from an interaction between a pharmacist and a patient who has decided to default on treatment, for various possible reasons. It is prefaced by a discussion of risk-taking behaviours and non-adherence. The pharmacist's attempts to ascertain the patient's reason for defaulting prove rather futile and the patient evades an honest answer. The pharmacist must adapt her questioning style in order to obtain a direct answer from the patient. Her anger at his decision is apparent but she offers him a second chance at commitment and ensures that he understands the dosage instructions. The section ended with a discussion of the notion of concordance and the possibility that the patient may have defaulted in an attempt to regain control over his health.

9.2 Mary and James: The burden of care

Because of the HIV/Aids epidemic, families and communities have been forced to take on the responsibility of caring for people affected by the disease. This burden of care often falls on women, particularly older women, who care for patients as well as orphans. Caregiving is often performed in the absence of basic physical and financial resources (Orner, 2006) and caregivers may rely on social grants or pensions to support the patient as well as children and other family members (Reddy, Williams, James, & Boon, 2006).

Caregivers must perform physical tasks such as feeding the patient, dressing wounds, assisting with bathing and walking, in addition to completing household chores such as washing, cooking or cleaning. Other important tasks involve accompanying and transporting the patient to clinic or hospital visits and assisting

the patient to take medications, including ARVs (Orner, 2006; Theis, Cohen, Forrest, & Zelewsky, 1997).

In addition to numerous physical demands, there is a great emotional demand placed on caregivers. In many instances, caregivers may experience a sense of despair or disheartenment because of the overwhelming nature of the disease, emotional over-involvement and over-identification with patients, grief or bereavement, difficulties with confidentiality and secrecy issues, fear of exposure to HIV (van Dyk, 2006), fear or experience of stigma, anxiety about the future or the prospect of the patient's death, inability to share the burden of the caring process with others, anxiety about the patient's health status and medical care, and difficulties in discussing sensitive issues with health professionals (Aujoulat, Libion, Bois, Martin, & Deccache, 2002). These emotional stresses often lead to mental or physical ill health in the caregiver, as well as feelings of depression or even suicidal thoughts which may impact negatively upon their ability to care for the patient with HIV/Aids (Prachakul & Grant, 2003).

In the data corpus, there are several instances of patients being accompanied by caregivers to the consultation with the pharmacist. Caregivers include fathers, mothers, daughters, brothers, sisters-in-law and members of the community (not related to the patient) who have taken on the role of caring for the patient and assisting the patient to take their ARVs. The case of Mary the caregiver and James the patient will be discussed in some detail. It is a particularly poignant example of the burdens experienced by a caregiver and it provides a clear illustration of how these burdens influence her interaction with the pharmacist.

Although James is present during the interaction, he is too ill to concentrate or participate. He is brought into the consulting room in a wheelchair, which causes much exasperation as Mary and the pharmacist together steer the wheelchair through the pharmacy door and then rearrange the furniture in the room in order to accommodate him.

The interaction begins with a discussion of Mary's work hours, prompted by the pharmacist's concern that Mary may not be at home to give James his tablets every day on time. After providing some information about the activities of daily living with which he requires assistance, Mary discusses his diet in detail. The pharmacist interjects with an instruction about limiting his intake of fatty foods. The interaction then turns to the ARV dosage instructions. The pharmacist explains the dosage, verifies Mary's understanding and ends the interaction by returning to her concern that the patient needs to learn to take the tablets by himself so that he is not reliant on Mary.

Mary expresses her anxiety concerning James' care. In the interview with the research assistant (see the extract below), she talks about the stress involved and the question of who should care for James while she and other family members are at work – they have been forced to send him to a hospice during the day. The interaction reveals that Mary appears to feel some degree of guilt about the fact that she cannot be there all the time to care for James.

Extract 168: Patient 10 interview (caregiver) (conducted in Setswana, translated into English)

*Then we decided he should start going to the hospice during the day because we are all working and **there was no one to take care of him at home.**...He nearly passed away. **He was not able to even eat, we used to feed him, bath him and do everything for him.** ...I just try my best to take care of him because **his children are living far away.***

The pharmacist begins the interaction by clearly describing the caregiver's responsibilities towards the patient and she reiterates these throughout the interaction. These responsibilities include giving the tablets to the patient or ensuring that the patient takes the ARVs correctly, helping the patient to remember the dosage instructions, making sure that the patient eats properly, ensuring that the patient has enough ARV tablets with him at all times, reading medication labels and diary cards to the patient and supporting the patient emotionally.

Extract 169: Patient 10 (*Ph B*, 3rd visit)

- 437

250		know what's going to happen. Something can happen and he's going to
251		be alone, he's going to take his tablets by himself.
252	C:	No [I-
253	B:	[So he must he must know by himself , in the ↑morning I take this.
254		And at <u>night</u> I take this. He's going to [have to know this.
255	C:	[He can ja he can do it by himself yes
256		but we are I've got the the problem he's uh he's just forgotten the
257		simplest things. Even the days, when we ask him what which day is
258		today, is it Sunday or Monday, ((unintelligible)).
... ((B assures C that P will improve after a few months on the ARV regimen.))		
266	B:	And then he's not going to- he he mustn't rely on somebody else
267		anymore. You must make sure he's the one that's responsible for taking
268		the medication every single day for the rest of his life.
... ((B and C argue about what might happen if C cannot give the pills to P. B uses the example of a taxi breakdown.))		
296	B:	Even though he forgets, but if you get him in a routine , and you get him
297		every single day at eight o'clock, every single night eight o'clock, he gets
298		into a routine
299	C:	Mm.
300	B:	Routine and he gets <u>used</u> to it. And he <u>understands</u> that he- this is the
301		tablets that saves his life.
302	C:	Mm.
303	B:	Then that's it will- he will start doing it by himself.

Physical and psychological symptoms of disease may be profoundly disruptive to the daily life of a person living with HIV/Aids. Makoe et al. (2005) report that patients and their families are often left to manage symptoms of HIV/Aids because prophylactic and palliative medicines are not always available in under-resourced countries (including South Africa). The following extract provides some indication of the extent of James' symptoms and their impact on his daily activities (indicated in boldface):

Extract 170: Patient 10 interview (caregiver) (conducted in Setswana, translated into English)

The sores were a real problem, he always used to scratch himself and then he developed scars because of that...and then the skin started peeling off, he looked terrible. You would have run away. He was also experiencing pain in his legs and could not walk. Even when the doctor is telling us that he is losing weight we feel his health is improving compared to last year. He nearly passed away. He was not able to even eat, we used to feed him, bath him and do everything for him. At the moment his other leg is the one giving a problem. He had pneumonia.

Many of the interactions in the data corpus highlight the physical burden experienced by caregivers in caring for the patient each day. Not only are they responsible on an often full-time basis for the daily activities of bathing, dressing and feeding the patients, but they must also care for the patient when s/he is ill, bring the patient to the hospital each month, and ensure that the patient is taking the ARV regimen correctly.

The extract below illustrates the time and energy involved in caring for a patient with HIV/Aids. Mary tells the pharmacist that she is trying to care for James (line 2) and be there for him because he experiences episodes of fear (line 4). She has to watch constantly to check that he is eating properly (line 6), wake him up in the morning and ensure that he exercises (lines 18-19), help him brush his teeth (lines 22-25), help him to bath (line 26) and make food for him (line 27).

Extract 171: Patient 10 (Ph B, 3rd visit)

- 2 C: No I have to be there fulltime as well, the doctor already said, because
 3 B: [Mm?
 4 C: [Since he started to be (scared) I never moved away from [him.
 5 B: [him.
 6 C: I always keep my ↑eye on him to check whether he's eating well or what.
 ... ((B tries to establish what time C will give the tablets to P, but C does not respond. B then asks when C leaves for work.))
 15 C:Eh eh (early) I I've said to the doctor eight o'clock in the
 16 morning, [it would be suitable for him. Because I will always (.)

17	B:	[↑Mm
18	C:	make sure that six o'clock he have to wake up to make [morning
19		exercises as well I [like to-
20	B:	[↑mm
21	B:	[(and ↑time) (.)↑mm
22	C:	Then (.) he started brushing his ↑name
23	B:	↑Mm
24	C:	his teeth I [°mean.°
25	B:	[His ↑teeth (.) ↑ja yes
26	C:	Thereafter he's getting to bath a ↑while (.)
27		 [Making the breakfast for him. After (.) eating
28		his breakfast, he have to take-
29	B:	[↑mm

Apart from the physical burden experienced by these caregivers, a deep emotional involvement comes with caring for a chronically ill and often deteriorating patient, especially because this disease involves additional issues such as stigma. In the majority of these interactions, this burden of care is revealed subtly; in Mary's case, however, she openly shares her feelings and experiences as a caregiver and the emotional burden which she carries:

Extract 172: Patient 10 interview (caregiver) (conducted in Setswana, translated into English)

I was really heartbroken when I found out he was HIV positive you know, it is not easy ...I really don't know what to do for him... sometimes it's hard.

Many caregivers experience stigma or a fear of stigma because of their association with an HIV positive person (Aujoulat et al., 2002; F. Thomas, 2006). As discussed in *Chapter 2*, the results of stigma may be devastating to both the individual living with HIV/Aids and his/her family. Although the researcher did not specifically ask about stigma, Mary volunteered information about her family's experiences of stigma linked to James' HIV status during the interviews with the research assistant. The simple statement below implies much about how life has changed for her as a result of taking on the role of caregiver.

Extract 173: Patient 10 interview (caregiver) (conducted in Setswana, translated into English)
You should see the way our neighbours look at him.

In this particular case, the emotional stress experienced by Mary becomes apparent in her interaction with the pharmacist – more so than in other cases in the data corpus. Specifically, the atmosphere in the interaction becomes tense as the goals of each party become conflicting rather than collaborative. *Extract 174* illustrates the presence of these conflicting agendas in the interaction. As discussed in *Chapter 4*, such conflicts are common in medical encounters. However, in this case, the conflict appears to be heightened by the disease context and the apparent urgency felt by Mary to ‘do the right thing’ for James. This conflict eventually reaches a climax and Mary’s resulting non-verbal behaviours demonstrate her reaction to her agenda not being heard by the pharmacist.

Mary appears to be under tremendous stress: she is caring for her sick brother-in-law James and she is doing this to the best of her ability. She tells the pharmacist at length how she is feeding James, what she is feeding him, what supplements he is giving, why she is giving him certain foods, etc. She appears to be knowledgeable about issues of nutrition and chooses appropriate foods for James to eat (e.g. lines 37, 49). Mary seems to need someone to listen to her, to attend to her fully, to give her approval.

Pharmacist B does offer encouragement (line 51) and attempts to initiate a shared moment of humour which is quickly reciprocated by Mary (lines 42-43). However, the pharmacist tends to focus on her own agenda of completing the dispensing tasks; her responses are generally short and minimal (e.g. lines 34, 36, and 38). Mary does not seem discouraged by this, however, and she continues to talk at length. The pharmacist attempts to hurry her along (line 50), cuts her off in mid sentence and tries to end the topic (line 51). However, Mary continues to gesticulate and talk animatedly.

Mary mentions that she gives James chicken and fried potatoes for supper (line 70). Pharmacist B immediately focuses on this point (lines 72-73) and explains that Mary must stop giving James fatty foods at night because they will interfere with the ARVs (lines 99-100). This is a turning point in the interaction: Mary looks crushed and she stops talking and gesturing, except for a few gratuitous, minimal verbal and non-verbal responses (lines 99-123). Pharmacist B soon appears to realise that she has offended or hurt in some way and she tries to repair the damage by encouraging Mary and telling her that she is doing a good job (lines 118, 121). However, the interaction continues in an inhibited manner and ends rather unsatisfactorily, with much mumbling from Mary.

Extract 174: Patient 10 (Ph B, 3rd visit)

((Note: the pharmacist is sitting at the computer and is out of the view of the camera for the duration of this extract))

- 30 B: And what does he get for breakfast, mommy?
- 31 C: Eight o'clock.

^
wipes eye with tissue, looks at tissue
- 32 B: Ja what does he get for breakfast?
Yes
- 33 C: E:h I bou- I u- ↑normally (.) he don't like mabela⁴².

^
wags finger towards pt
- 34 B: [↑Mm
- 35 C: [Eh he used to eat it too much. I used to: buy nutri

^ ^
points splayed hand towards pt ticks off left little finger with right index finger
- 36 B: ↑Mm
- 37 C: High energy with protein and minerals.

^
ticks off left ring and middle fingers with right index finger, while nodding slowly
- 38 B: ↑Hey

⁴² A cooked South African breakfast food made from sorghum.

- ⁴³ A ready to eat South African sorghum-based breakfast food.

67		sometimes I <u>[know]</u> that, like pumpkin. ----- ^ <i>nods</i>
68	B:	[↑mm
69	B:	Pumpkin? [(laughs)]
70	C:	[Yes and fried (.) eh potato. And chicken. Red meat not so ----- ----- ^ ^ <i>moves left hand over right hand moves hand to side</i>
71		much [because (he see that)- ----- ^ <i>moves hands back and forth</i>
72	B:	[Ok ↑mommy now (.) now if you tell me you fry potato and ----- ^ <i>leans head on fist, elbow on desk</i>
73		chicken, ↑nè (.) is that his (.) his his <u>supper</u> ?
74	C:	No I say in the for breakfast it's more..... ----- ^ ^ <i>sits back holds hands up, fingers together</i>
... ((C discusses what kind of tea she gives to P.))		
83	B:	Ok. Now [when do you give him the chicken and the and the potatoes?
84		When do you [give him-
85	C:	[But but then-
86	C:	[Supper. ----- ^ <i>nods</i>
87	B:	Supper?
88	C:	Yes.
89	B:	Ok ↑mommy because with the <u>medication</u> that James is going to <u>take</u> now, ↑nè ----- ^ <i>leans forward, rests elbow on desk</i>
90	C:	Mm
91	B:	The pillies that he takes at night (.)↑ <u>doesn't</u> like the fatty food.
92	C:	No he he <u>don't</u> like fat. ----- ^ <i>lifts hand, fingers splayed</i>
... ((C explains that she prefers to eat vegetables))		

99	B:	Because now what I'm ta- what I'm <u>saying</u> to you is instead of <u>frying</u> his
100		food [that he's eating at night, ↑nè [you must <u>stop</u> that.
101	C:	[mm. [mm.
102	C:	Ok.
103	B:	You o- either you boil something ↑nè and you give him a <u>whole</u> potato
104		that you've boiled in ↑water (.) um with some ↑salt and that's how he he
105		has to eat it.
106	C:	[Ok. ----- ^ <i>nods</i>
107	B:	[You don't boil it in in [oil or in anything anymore.
108	C:	[with oil
109	B:	He doesn't eat a a potato with <u>butter</u> . ----- ^ <i>nods</i>
110	C:	Ok.
111	B:	Does the- he can <u>eat</u> that, but in the ↑morning or in in the afternoon. Not
112		at night anymore.
113	C:	Ok.
114	B:	↑Ok because (.) it's going to s <u>stop</u> the working of the tablets at night.
115	C:	Ok. ----- ^ <i>shifts back and forth slightly</i>
116	B:	And it's going to make him feel sick. Ok? You understand? ----- ^ <i>nods slightly</i>
117	C:	°Ja I understand. ((unintelligible)).° ----- ^ <i>nods quickly</i>
118	B:	But it sounds like he's eating <u>very very</u> well and <u>very</u> nice. He's- that's [<u>good</u> .
119	C:	[I
120		think) he say he's hungry ((unintelligible)). ----- ^ ^ ^ <i>turns to side, touches paper on desk, puts head in hand</i>
121	B:	((laughs)) But it's good mommy, if he ↑eats he must- if he's if he's ----- ^ <i>holds head in hand</i>

and the numerous emotional stresses which result from caring for the patient. These concerns and stresses become apparent in the interaction between pharmacist and caregiver, leading to tension and conflicting agendas. This case demonstrates the need for pharmacists to become skilled counsellors who are able to meet the emotional needs of patients and caregivers.

9.3 Martha: The assertive patient

An analysis of the data strengthens the observation that influences of power and asymmetry are important in this research context. As discussed in *Chapter 4*, asymmetry within medical interactions is a natural and perhaps necessary factor. In this study, a power asymmetry does appear to exist between some patients and pharmacists. However, the reasons for this asymmetry may well differ from those reported in the literature, in which the health professional is seen as someone who seeks to exert power and control over patients. In this particular context, the presence of a number of influencing factors appears to be the source of the asymmetry, rather than an active misuse of power and control over patients. For instance, the fact that there is a mismatch in language and culture immediately puts one or other party at a disadvantage in the relationship, usually the patient.

Discussions between the researcher and several cultural informants revealed that patients from the Tswana culture (and indeed other black African cultures) consider the doctor to be a figure of authority. Therefore, they acknowledge the expert status of the doctor (and by extension, other health professionals) and they refrain from explicitly questioning the doctor's advice or decisions regarding diagnosis and treatment of disease. Data presented in *Chapter 7* demonstrates that in order not to appear disrespectful to the pharmacist, patients may answer affirmatively even when they do not understand information. This is confirmed in the literature: according to Raubenheimer (1987), it is culturally appropriate for black Africans to respect elders and authority figures. Traditional healers have great status, authority and influence within communities. In line with Parson's 'sick role' and Lupton's concept of the 'good patient' (refer to *Chapter 4*), health

professionals are seen as authority figures who are expected to dispense definite solutions to problems while the patient assumes a more passive role.

Many patients are disadvantaged by being physically unwell and unable to concentrate fully or process the information given. This results in a disparity in the interaction and the pharmacist is immediately put at an advantage. Certainly in this study, those patients who appeared to be particularly weak or ill did not take control or actively participate in interactions with the pharmacist, while those patients who did not appear to be suffering severe symptoms were able to interact more actively with the pharmacist.

The case of Martha, however, appears to be an exception to the general pattern of patient behaviour observed in the data corpus. She is particularly assertive during the interaction, frequently driving her own agendas or directing conversation. This patient is an older female which may explain her assertive behaviour: in Tswana culture, a person of inferior age and status must remain non-confrontational (Kasanga & Lwanga-Lumu, 2007) but since Martha is older than the pharmacist, it may not necessarily be culturally inappropriate for her to assert her agenda and take control in the interaction. This assertion and active participation is also apparent in the semi-structured interview conducted by the research assistant (also a woman, but younger than the patient).

From the start of the interaction, Martha takes an active role. The interaction begins with reassurances from the pharmacist and research assistant in response to Martha's concerns about the interview with the research assistant which will follow the interaction (lines 1, 2) (note, however, that Martha has already given consent to participate in the study, but she is concerned about the potential length of the interview). Martha does not respond to these reassurances but turns to the researcher who is present in the room and asks whether she can begin her interaction with the pharmacist (line 3). By doing this, she cuts off her conversation with the pharmacist and research assistant and steers the interaction towards her agenda: she would like to begin the interaction. The pharmacist

responds to Martha's request (line 5), but the research assistant interjects with a reassurance in Setswana (line 6). Martha responds minimally to this reassurance and steers the interaction back towards the pharmacist: by turning towards the pharmacist, she ends the discussion about the interview and indicates her desire to start the 'business' of the interaction (line 7).

Extract 175: Patient 13 (*Ph A, 2nd visit*)

- | | | |
|---|-----|--|
| 1 | A: | ((laughs)) Dis net [soos ek altyd met jou praat.
<i>It's just like I always talk with you.</i> |
| 2 | RA: | [Dis net vyf minute.
<i>It's just five minutes.</i> |
| 3 | P: | Moet ek er kan ek nou begin om met al dit is wat ek wil sê?
<i>Must I er can I begin now with all that I want to say?</i> |
| | |
^
<i>looks towards researcher</i> |
| 4 | RA: | ((laughs)) |
| 5 | A: | Ok when you're ready we can start. |
| 6 | RA: | Buisana le ngaka gone jaana, rona re tlile go buisana le wena ko morago.
<i>Talk to the pharmacist now, we will talk to you at the end.</i> |
| 7 | P: | mm.

.....
^
<i>turns towards A</i> |

Later in the interaction, Martha again takes an active, somewhat aggressive role in steering the interaction towards her agenda. *Extract 176* provides an interesting display of the negotiation of power and control which can occur within an interaction.

The extract begins with Pharmacist A and Pharmacist B discussing key ring holders (an adherence support tool) (lines 72-76). While they are talking, Martha interrupts with a request for attention from the pharmacist (line 77). The pharmacists continue their discussion about the key rings (lines 78-80) and ignore Martha. She again interrupts Pharmacist B by reaching across the desk to pick up

a packet and asking a specific question about vitamins (line 81). By doing so, she manages to get Pharmacist A's attention, who then turns towards her.

Interestingly, the pharmacist removes the packet from Martha's hand and puts it down again on the desk (line 82). By doing this, she appears to be attempting to re-establish her control in the interaction. Martha acknowledges this gesture by sitting back in her chair, but she continues to exert control by apparently indicating that she no longer wishes to take the vitamins (line 83), perhaps because they make her feel ill. However, this is somewhat unclear in the extract. The pharmacist continues her efforts to regain control and several turn overlaps occur (line 84), indicating competition between the pharmacist and patient. Pharmacist A appears to interpret the patient's statement preemptively as something to do with the vitamins making her stronger (perhaps the pharmacist is trying to reiterate the purpose of the vitamins, but it does not seem that this is what the patient is trying to say here).

Pharmacist B then makes a comment to the researcher about the situation (lines 85-86) which rather perceptively sums up what is happening. Both pharmacist and patient are manipulating the interaction and they are not listening to each other. However, this negotiation is not necessarily productive as the focus is on gaining control rather than listening to each other or focusing on the task of dispensing, hence Pharmacist B's remark that "everything is going in the one ear and out of the next".

The extract ends with an interesting strategy on the part of the pharmacist. She neatly stops the discussion about the vitamins, changes the topic and steers the interaction back towards dispensing and providing instructions about the ARVs (lines 87-89). The pharmacist has regained control of the interaction.

Extract 176: Patient 13 (Ph A, 2nd visit)*turns away from P and looks at B*

v

....

72 A: ↑*****⁴⁴ wil jy nie [nou vir my net langsaan gaan uitvind, ons het sulke
won't you just go next door and find out, we have key rings

73 *key hangertjies?*
like this?

74 P: [Dankie.
Thank you.

75 B: O ja. Daai keyhangers.
Oh yes. Those key rings.
continues to look at B

v

76 A: Ja, [asseblief wil ek graag hê.
Yes, please I would really like some.
turns towards P, looks at file

v

77 P: [Eh hh. [(Kan jy vul my hier in)?
Can you fill me in here?

^ ^

*touches paper on desk; puts hands in lap (looks at paper while talking)**A turns to look at B*

v

....

78 B: [Waar langsaan kan ek gaan hoor?
Where can I go next door to find out?

points to her left

v

79 A: Hierso by die kantoor.
Here at the office.

80 B: [Die kantoor.
The office.

⁴⁴ Pharmacist B.

The next extract illustrates a conflict of agenda between the patient and pharmacist. The pharmacist needs Martha to go to the outpatient (OPD) pharmacy to collect a particular medication which is not stocked at the Wellness pharmacy, but Martha is tired and does not want to sit waiting in yet another queue at the end of a long day.

The pharmacist rather apologetically tells Martha that she must go to the other pharmacy to collect some sleeping tablets (lines 323-324). Before the pharmacist finishes her request, Martha irritably asks for directions to the OPD pharmacy (line 325). The pharmacist presses forward with her agenda and explains that the patient will not need to wait in a queue at the other pharmacy. She uses phrases such as “just one pill” and “just see you quickly”, as well as emphatic gesturing, to mitigate the need for the extra trip to the other pharmacy (lines 326-328).

Again, Martha does not wait for the pharmacist to finish talking but repeats her irritation and unwillingness to follow the pharmacist’s request (lines 329-330). This unsuccessful negotiation and clash of the two agendas continues as the pharmacist reiterates her instructions with emphatic gesturing (lines 331-334) and Martha continues to refuse. In fact, Martha non-verbally signals the end of the discussion by reaching to pick up the paper bag – an action that usually signals the end of an interaction in this context (line 335). The pharmacist tries a different approach and begins to persuade Martha that perhaps the tablets will help her difficulties with sleeping (line 336). Again, Martha interrupts the pharmacist and explains why she is reluctant to go and fetch these tablets (line 337).

The pharmacist appears to realise that this conflict will continue until one of them ‘gives in’, so to speak. Therefore, she allows Martha’s agenda to prevail and offers her a chance to reconsider her decision (line 339). Martha again interrupts the pharmacist: she has made up her mind that she would rather struggle with her sleep difficulties than go to the other pharmacy and wait to collect the medicine (line 340). The pharmacist accepts her decision and responds by discussing the advantages of not taking sleeping tablets. She discusses this in general terms, rather than specifically talking about Martha’s condition. She then suggests

another option, that the Martha should try the other medications first and return to the OPD pharmacy should she require the sleeping tablets (lines 341-343). Martha agrees with this suggestion (line 346) and the conflict is resolved.

Extract 177: Patient 13 (Ph A, 2nd visit)

- reaches across, picks up file, reads file*
v
- 323 A: >(Kan) ek net ↑sien< daai pilletjie om jou te help slaap, het ek nie hier nie,
Can I just see that pill to help you sleep, I don't have here,
points outside with both thumbs
v
- 324 so ek wil hê jy moet sommer [gou met die file ↑gaan, nou stuur ek jou weer-]
so I need you to just go with the file, now I'm sending you again-
- 325 P: [↑woo:: nee nou waar is dit?]
no now where is it?
- shakes head moves hands up and down over file for emphasis*
v v
- 326 A: Nee. Weet jy ↑wat jy sê vir hulle, jy het klaar jou medisyne by Wellness
No. You know what you say to them, you've already got your medicines
holds up one finger shakes head and hand rapidly
v v
- 327 gekry. Maar ons's short net een pilletjie. Dan sal hulle jou sommer gou
from Wellness. But we're short just one little pill. Then they'll just
- 328 gaan [sien.
see you quickly.
- 329 P: [Ek wil liewer (dan) net so sukkel, [(word) hierdie, hierdie (wag
I will rather just struggle like this, this (becomes), this wait
- 330 teen die lawaai).
against the noise.
pats file with both flat hands smiles
v v
- 331 A: [Ag shame, nee weet jy wat?
Oh shame, no do you know what?
lifts one finger makes a square shape with hands
v v
- 332 Hulle weet. As jy daar by hulle gaan, jy gaan by die venstertjie. Dan sê jy
They know. If you go there to them, you go to the small window. Then you

		<i>touches chest</i> v	<i>lifts one finger for emphasis</i> v
333		Wellness het jou gestuur hierso, jy soek <u>net</u> die eenetjie wat hulle nie het <i>say that Wellness sent you here, you're looking only for the one that they</i> <i>shakes head quickly</i> v <i>writes in P's file</i> v	
334		nie. As jy so vir hulle sê hulle sal vinnig vinnig vir jou help. <i>don't have. If you say that to them they will help you quickly quickly.</i>	
335	P:	Ag, ek dink ons moet dit (los). <i>Oh, I think we must leave it.</i> ^ <i>frowns and picks up paper bag</i>	
			<i>points to pill boxes with her pen</i> v
336	A:	((chuckles)) Gaan jy kyk, [miskien gaan hierdie pilletjies- <i>Are you going to see, maybe these pills will-</i>	
337	P:	[(Dis vêr, dis vêr en langsaam) daar (uit) <i>It's far, it's far and slow there out</i> ^	
			<i>folds the top of the paper bag</i>
338		((unintelligible)). Jy weet dit maak mens moeg. <i>You know it makes people tired.</i> <i>writes in P's file</i> v	
339	A:	Is jy seker? Want [ander- <i>Are you sure? Because other-</i>	
340	P:	[Maar ek sal maar aanhou, tot= <i>But I'll just go on, until-</i>	
			<i>points to pill boxes with pen</i> v
341	A:	=Ok dis <u>beter</u> as 'n mens <u>nie</u> slaap pilletjies hoef te vat nie. So miskien as <i>it's better if a person doesn't have to take sleeping pills. So maybe if</i> <i>points to pill boxes with pen</i> v <i>moves pen up and down for emphasis</i> v	
342		[jy nou die ander (pillies) eers vat dan <u>kan</u> jy [(daarso by) <i>you take the other pills first then you can (there by)</i>	
343		((unintelligible)).	

344	P:	[Ja Yes ----- ^ <i>rolls paper bag down into a small bundle</i> <i>writes in P's file</i> v -----	[Ja Yes
345	A:	Dan kyk ons maar volgende keer. <i>Then we'll see next time.</i>	
346	P:	Ek maak so. <i>I'll do that.</i>	

What is also apparent in this case is Martha's awareness of her rights as a patient and her ability to assert herself in this regard. This is seen in the way in which she asks for information about medications (*Extract 070* (p. 251)), indicates when she does not understand information, makes choices about her health and treatment (*Extract 177* (p. 453)), asks for medication for specific ailments (*Extract 154* (p. 391)) and complains about the service which patients receive at the hospital (*Extract 144* (p. 378) lines 352-354). This is encouraging, because it indicates that patients are beginning to show an awareness of their rights to quality care and their responsibilities to become active agents in charge of their own health and wellbeing. It reflects the government's drive towards healthcare services which focus on the patient and its call for patients to become knowledgeable about their rights and the principles of Batho Pele ("people first") (Department of Health, 2000b).

Summary of section

This section presented the case of Martha, a patient who is particularly assertive during her interaction with the pharmacist. Extracts demonstrated how she steers the interaction towards her goals and agendas through behaviours such as initiating topics, interrupting the pharmacist and refusing to follow the pharmacist's advice. There is a negotiation of power and control between the pharmacist and patient within the interaction, which is exceptional in the data corpus.

9.4 Solly: The impact of HIV/Aids on the pharmacist-patient interaction

In light of much of the data already presented in this thesis, it is clear that the presence of HIV/Aids is a pervasive influence which shapes communication between pharmacists and patients. The pharmacists' interactive behaviours and their use of specific communication strategies appears to be influenced by the urgency of the disease, the need to give patients hope and a reason to live, and the importance of ensuring patients understand the ARV dosage instructions and thus have the best chance of correctly adhering to the regimen.

Many of the interactions contain communication strategies and processes which appear to be specifically related to or influenced by the presence of HIV/Aids. Examples include the way in which people refer to ARVs and the communication style of the pharmacist. Some of these characteristics will now be discussed using examples from the case of Solly.

Solly is illiterate, which has the potential to affect his ability to adhere to ART negatively. He cannot read the names on the medicine bottles or the dosage labels, nor can he read the yellow diary card which will assist him to remember to take the pills. Therefore, he must learn the dosage instructions by heart and rely on the aesthetics of each pill, or he must ask someone to assist him to read the labels and drug names. If he is given generic drugs at any stage or if the drug packaging is changed, this could interfere with his ability to adhere.

He is being cared for by his brother, who also attends the consultation at the pharmacy. Both brothers show a keen interest in the interaction from its start and there is clear evidence of collaboration with the pharmacist to achieve understanding of the ARV dosage instructions. The pharmacist takes much time in ensuring that both patient and caregiver understand the instructions. In the interview with the research assistant, however, Solly expresses some confusion regarding his illness and he does not appear to understand that the cause of his symptoms is HIV/Aids.

9.4.1 Life, death and hope: references to ARVs

A recurring trend in the data corpus is the manner in which the pharmacists refer to or introduce ARVs. The manner in which pharmacists refer to or introduce ARVs in the interactions is consistent across the data corpus. Pharmacists frequently link the concepts of life and death to ARVs and adherence, using statements such as “these will save your life” or “you must take them every day for the rest of your life until the day you die”.

In the extract below, Pharmacist B refers to the concept of life (highlighted in boldface), specifically that the drugs will save Solly’s life (line 142) and prolong his lifespan (line 145). Interestingly, the pharmacist’s statements are definitive and emphatic. She chooses not to use mitigative statements such as “the ARVs *might* save your life” or “you will *probably* get better”, even though there is a possibility that the drugs may not lead to an extension of the patient’s life. These statements appear to be linked to the promotion of adherence, seen later in lines 469 and 471, in which the pharmacist emphasises that taking ARVs is a daily, lifelong commitment.

In this interaction, the pharmacist also refers to death explicitly (line 474). This is the only instance in the data corpus of a direct reference to death. In other interactions, pharmacists usually make use of a statement like “for the rest of your life”, thereby choosing to refer to death (or the end of life) implicitly.

Extract 178: Patient 17 (Ph B, 1st visit)

moves 3 ARV containers into a row in front of P, C

v

142 B: **Nou hierso kom die pillies wat nou jou lewe gaan red.**

Now here come the pills that are going to save your life now.

143 P: [Dis reg.

That’s right

144 C: [Dis reg.

That’s right

145	Ph B:	>Hulle gaan jou sterk ↑maak< en jy gaan lank lewe. <i>They will make you strong and you will live long</i>
146	Pt:	Lank lewe. <i>Live long</i>
...		<i>presses lid down on pot picks up another pot, opens it</i> v v -----
469	B:	<Nine o'clock sharp. Every single [day]. >
470	C:	[Ja. <i>Yes.</i>
471	B:	<[Elke liewe dag]. <i>Every single day</i>
472	P:	[Ja. <i>Yes</i> ----- ^ <i>nods firmly</i>
473	P:	Dag. <i>Day</i> ----- ^ <i>nods</i>
474	B:	Tot die dag wat jy [doodgaan, ↑nè <i>Until the day that you die</i>

It would appear that the reasons for the pharmacists' repeated references to life and death in the context of ART are multiple and are linked to the severity of the disease, its history of death and despair, and the renewed but somewhat fragile hope brought by the advent of ARV drugs.

The disease of HIV/Aids is unique: medicine can offer no cure at this stage; it can only extend life through ART. However, death is still inevitable. Makhura (2004, p. 2) writes that "people who are diagnosed with this disease are in a way given notice of death". She discusses HIV/Aids in terms of the concept of a 'good death', which embodies the ideas of dying well or dying nobly; being prepared for death; and death as an appropriate, correct, healthy, peaceful or even happy process. Often, however, patients living with HIV/Aids die a slow and degenerative, stigmatised, fearful and dehumanised death. This death can be

termed a ‘wild death’, which may be unnatural, inhumane, shameful and often solitary, or even a ‘bad death’, which is unexpected or threatening and which often occurs in young rather than elderly people (Posel, Kahn, & Walker, 2007). According to Teguis (1992), in order to die peacefully and have a ‘good death’, a person needs to be able to talk openly about their disease and about death itself.

Therefore, one could conjecture that the pharmacists in this context are attempting to ‘normalise’ discussions of life and death by making continuous references to these concepts, in the same way that they attempt to ‘normalise’ discussion of HIV/Aids, stigma and disclosure by actively and openly introducing these topics in several interactions in the data corpus. Van Niekerk (2005) emphasises the need to confront stigma and discrimination and discuss these topics candidly in order to provide effective HIV treatment and care. Further, Ellis (2004) cautions that when an illness is talked about in euphemistic terms, the avoidance of naming it cultivates the fear of the illness.

Even though the diagnosis of HIV is firm by the time the patient arrives at the pharmacy, there is no guarantee that the patient has disclosed their status. In fact, interviews with the patients revealed that in many cases, they have not disclosed their status even to close family members and that they experience stigma on a daily basis. Interviews with the pharmacists revealed that they are well aware of this stigma and the need to ‘normalise’ discussions of the disease.

The availability of ART means that HIV/Aids is no longer an imminent death sentence. Many patients on treatment regimens experience improved quality of life, renewed health and a sense of hope. Indeed, this phenomenon has been described by some as the ‘Lazarus Syndrome’ – people who have prepared for death from Aids, or who were near to death, have been ‘brought back to life’ by ART (Gregonis, 1997). The advent of ART has meant that health professionals are now able to offer hope to their patients in the form of a life-saving medication and many have become enthusiastic about implementing ART rollout programmes (Stein et al., 2007).

However, the lack of access to ART in developing countries has meant that communities have little experience of being able to live productive, healthy lives with HIV/Aids. With the increasing availability of ART, health professionals need to assist communities to develop the concept of “living well with HIV/Aids” (Phaladze et al., 2005, p. 121). A study conducted in several South African communities (Smit, 2007) found that a strong coping mechanism for people living with HIV/Aids entails a positive mental attitude and a positive outlook on both life and death. Part of this attitude involves the promotion of health, well-being and wellness (Evian, 2000).

The Wellness Clinic has embraced this challenge, starting with its choice of name – ‘wellness’. The staff at RPH has created a health care environment of positive concern with a strong emphasis on well-being and the holistic treatment of patients and their families living with HIV/Aids. This emphasis is also present in the way in which health professionals openly discuss HIV/Aids with patients during consultations. Many of the health professionals including the pharmacists who work in this Clinic show commitment to and enthusiasm for implementing the ART rollout programme. This appears to be based on their ability to provide patients with hope and a practical lifeline in the form of the ARV drugs.

With the need to spread hope comes pressure for pharmacists to remain optimistic, cheerful and confident, even when interacting with patients who have life-threatening symptoms or who have entered an advanced stage of Aids. This somewhat overemphasised focus on life may be linked to social taboos surrounding the topic of death and may serve to minimize patients’ symptoms or the severity of their illness. For example, even with severely ill patients, pharmacists make references to ‘life’ or to ARVs as medications that will ‘save your life’. By ‘normalising’ discussions of life, pharmacists may also be attempting to demonstrate how patients may incorporate their illness and ARV treatment regimens into their changed lifestyle (cf. Bury, 2001).

In light of the importance of adherence and lifelong commitment to ART, one can understand the necessity for this type of discourse. Another explanation for the references to life and death may lie in the pharmacists' need to emphasise that ART is the only treatment which has the potential to extend or 'save' a patient's life. In the South African context where patients frequently consult both traditional and western healers (Ellis, 2004), it is important that traditional healing practices which are unlikely to lead to improved health and which may interfere with ART are discounted. Interviews with the pharmacists revealed that many patients who attend the Clinic appear to be accessing traditional healers or even taking traditional medicines in conjunction with ARVs; however, they usually do not disclose this fact to the pharmacists or doctors. In an attempt to prevent subsequent ART failure, health professionals at the Clinic discourage patients from consulting traditional healers. Patients are therefore steered towards accepting the ARV method of treatment and the elements of choice and patient consumerism are removed out of necessity.

9.4.2 Pharmacists' communication style – is this condescending?

Another apparently unique aspect of a number of cases in the data corpus is the manner in which pharmacists question patients. Although questions are used routinely throughout the interactions, in most of the interactions there is at least one sequence in which pharmacists repeat questions in a rather incessant manner. These sequences vary in terms of content and include attempts to find out how many pills a patient has left at home, who is looking after the patient, whether a patient knows the purpose of a particular medication, patient details e.g. name or address, whether the patient has experienced side effects, whether the patient will return to the clinic and, most commonly, to determine whether the patient has understood the dosage instructions or requires further clarification.

When this work was presented at an international conference (Watermeyer & Penn, 2007a), the audience felt that this approach suggests condescension on the part of the pharmacists or even the abuse of power and control over patients.

However, this behaviour appears to be linked to the urgent nature of the disease and the vital need for the pharmacists to ensure that patients understand dosage instructions and HIV-related concepts in spite of language and cultural barriers.

In the extract below, Pharmacist B has just finished explaining the dosage instructions to Solly for the fourth time. She uses a response solicitation in the form of a question in order to offer him an opportunity to request clarification (line 359), to which he responds positively (line 360). She does not seem satisfied with Solly's minimal response, so she probes further, asking if he understands the instructions (line 361). Again, he responds positively and his verbal and non-verbal behaviours congruently indicate his satisfaction with her explanation (line 362). However, this question-answer sequence is overlapped, so she repeats her question (line 363) and Solly reiterates his answer (line 364).

Still not satisfied, Pharmacist B begins a line of rather persistent repetition of her attempt to ascertain whether he understands or not (lines 365-368) and possibly to provide him with an opportunity to request clarification or indicate misunderstanding. Solly seems to become somewhat annoyed by this and his non-verbal behaviours intensify, with a deep nod of the head, emphatic body posture and irritated tone of voice (indicated on the video) (line 368). Pharmacist B then changes her question into a rather playful command (line 369) which is repeated by the patient (line 370). Apparently satisfied, the pharmacist moves on to another instruction.

Extract 179: Patient 17 (Ph B, 1st visit)

		<i>nods</i>
		v

359	B:	Ok?
360	P:	Ja.
		<i>Yes</i>

		^
		<i>nods</i>

		<i>nods</i> v -----
361	B:	[Jy het hom? <i>You've got it</i>
362	P:	[>Nee ek sien<. <i>No I see</i> ----- ^ ^ <i>nods leans back in chair and smiles</i>
363	B:	Jy het hom? <i>You've got it</i>
364	P:	Ja ek het hom, ek het hom. <i>Yes I've got it, I've got it</i> ----- ^ ^ <i>nods points finger at ARVs</i>
365	B:	Jy gaan >hom hou<? <i>Are you going to (remember) it</i>
366	P:	mm. <i>smiles, raises eyebrows</i> v -----
367	B:	[mm?
368	P:	[Ja ek gaan >hom hou<. <i>Yes I'm going to (remember) it</i> ----- ^ <i>leans far forward while nodding deeply and smiling</i> <i>grins</i> v -----
369	B:	Jy gaan hom hou. <i>You're going to (remember) it</i>
370	P:	°Ek gaan hom hou.° <i>I'm going to (remember) it</i>

This apparent irritation on the part of the patient becomes more noticeable and is verbalised a little later in the interaction. Solly and his brother seem to be somewhat offended by the pharmacist's rather laborious elucidation of the pictures on the yellow diary card. Despite moments of irritation, however, both

Solly and his brother remain upbeat during the interaction. They appeared particularly excited about receiving ARVs for the first time.

The extract begins with an explanation by the pharmacist of the yellow diary card. She carefully indicates each picture on the card and explains what it means. She carefully indicates each picture on the card and explains what it means. Although both caregiver and Solly are concentrating on this explanation, initially it is only the caregiver who responds to the pharmacist's instructions, albeit minimally (lines 392, 394, 397). In line 401, Solly responds to the pharmacist's explanation with some degree of irritation, perhaps at her rather time consuming explanation. It would seem that he is trying to indicate to the pharmacist that he understands clearly and she can move on to the next instruction.

Extract 180: Patient 17 (Ph B, 1st visit)

		<i>holds up yellow diary card so C and P can see it</i> v		
391	B:	Hierdie eene, ↑nè, hy wys vir jou die [prentjies. <i>This one it shows you the pictures</i>		
		^		
		<i>C, P lean forward in unison</i>		
392	C:	[Eh ja. Yes		
		<i>makes circular movements with pen on card</i> v	<i>circles picture of sun on card with pen</i> v	
393	B:	Die ligter kant, dis die [oggend. Daar jy sien die [sun. Hy [shine. <i>The light side, it's the morning. There you see the sun. He shines</i>		
394	C:	[Ja. Yes	[Ja. Yes	[Ja. Yes
				^
				<i>nods</i>
395	C:	Hy shine, eh.= <i>He shines</i>		

		<i>moves flat pen up and down over dark area of card</i> v
396	B:	=Ja. Hier by die aand hy word [donker, [↑nè <i>Yes. Here at night he becomes dark</i>
397	C:	[Ja. <i>Yes</i>
398	P:	[Donker ja. <i>Dark yes.</i>
		<i>circles pictures of moon and stars on card with pen</i> v
399	B:	Daar's die moon en die stars. <i>There's the moon and the stars</i>
400	C:	Ja. <i>Yes</i>
401	P:	Dis reg, ons weet dis by die aand, [nè. <i>That's right, we know it's at night</i>
		^ <i>lifts hand up in air and back down into lap</i>
402	B:	[Ja. <i>Yes</i>

In the extract below, the pharmacist is anxious to find out whether Solly is going to take the ARV pills by himself, or whether his brother will assist him with this responsibility (line 66). Solly and his brother deliberate over their answer (lines 67-68) and the pharmacist asks again who will give Solly the pills (lines 70, 72). The caregiver responds that he will assist Solly (line 71), who firmly reiterates that his brother will give him the pills each day (line 73). However, the pharmacist does not appear to be satisfied with their answers and she persists, emphasising that Solly himself must know how to take the pills (line 74). This time, Solly responds by raising his voice considerably and indicating rather indignantly that he will know how to take the pills (line 75) (conveyed via tone of voice). His brother repeats that he will assist him (line 76).

Extract 181: Patient 17 (Ph B, 1st visit)

- 66 B: ↑Ok, maar ek wil weet of gaan Solly by homself die pillies drink?
but I want to know is Solly going to drink the pills by himself?
- 67 C: Ee.
Yes.
- 68 P: ((unintelligible [Tswana]))
- 69 B: [Hmm?
- 70 B: Wat is dit? Gaan, gaan jy gaan elke oggend, of gaan=
What is it? Are, are you going (to) every morning, or will
- 71 C: =Ja.=
Yes
- 72 B: =net die boetie die pille gee?
just the brother give the pills?
- 73 P: **Nee nee, boetie sal vir my gee.** (uh f [uh f)-
No, no, brother will give to me
- 74 B: [Maar jy moet, jy moet weet.
But you must, you must know.
- 75 P: [NEE EK SAL WEET.
No I will know.
- 76 C: [°(Ja ek help hom. Ja.)°
Yes I'll help him. Yes.

It is almost as if the pharmacist is testing their answers in an effort to obtain a definite commitment from Solly's brother to assist him with taking the ARVs and thus ensure adherence to the regimen. It is probable that due to the critical need for strict adherence to the ARV regimen, the pharmacist persists with questioning until she has fulfilled her responsibility to make sure that the patient is able to adhere.

A critical question is whether there are special aspects related to HIV/Aids, ARVs and/or the specific context which prescribe, predetermine, delimit or lead to certain verbal and non-verbal features, or whether these features are merely a product of the interlocutors. For example, a pharmacist who dispenses other life-

sustaining drugs such as chronic asthma medication might not use such repetitive or persistent language with a patient.

Persistent, repeated questioning has been identified in the contexts of abuse (e.g. Bacchus, Mezey, & Bewley, 2002) and the questioning of witnesses to crimes (e.g. Memon & Vartoukian, 1996) as well as in cases of unclear medical diagnosis (e.g. Siminoski, 1993), in order to ascertain the consistency of a person's response through interrogation. However, in these studies, the communicative goals are different to those in health care interactions.

Preliminary analysis of data from studies in different disease contexts shows an absence of the type of strategies identified in this HIV context. For example, no repeated questioning is evident in Pilnick's (1997) study. Pharmacists do not generally verify patients' understanding of information, other than the use of a rudimentary "okay?" to invite patients to request clarification. Salter's (2005) study shows some evidence of intense question-answer sessions in what could be considered a rather probing tone. The use of questioning in her study appears to fulfil similar roles to those identified in this HIV context, such as to determine whether patients have the necessary support from caregivers to enable them to adhere to medication regimens or to find out whether patients understand the purpose of a particular medication. However, contrary to the data in this HIV context and in Anthonissen and Meyer's (2007) study, the same question is not repeated, or rephrased and repeated.

Also of interest is whether these behaviours are present in other HIV contexts. A brief analysis of data from HIV risk counselling sessions in the UK (Silverman & Perakyla, 1992; Perakyla, 1990) shows that when health professionals question patients about their understanding of information, only one question is generally used, rather than a repeated sequence of questions. In addition, the type of questioning in these studies seems rather hesitant in comparison to the intense, direct questioning style of the pharmacists in this study.

The results presented in this thesis appear to concur with Anthonissen and Meyer's study (2007), which shows similar patterns of repeated and often intrusive questioning of patients by doctors in a South African HIV clinic, characterised by rephrasing and repetition of a particular question. Specifically, the functions of question sequences in their study appeared to be related to patient preparedness for ART, monitoring psychosocial situations, education regarding HIV and a need for the doctors to ascertain whether patients understand their illness. Preliminary analysis of data from a study of doctor-patient interactions in a South African paediatric clinic also shows repetitive questioning and 'strings' of questions used in interactions by different doctors (Penn, Ogilvy, & Swartz, 2003). Therefore, it would appear that these communicative features are present in other HIV and ART contexts in South Africa and with other health professionals. The common links between these studies are the disease of HIV/Aids, ART and the South African context.

One must also question whether these phenomena are unique to the multicultural South African context. It is acknowledged that some of the pharmacists' communicative behaviours may be linked to the fact that language barriers are often present in this context and the need for pharmacists to ensure mutual understanding and successful communication across barriers. However, these repetitive questioning sequences are predominantly present in interactions in which patients reported being fluent in either English or Afrikaans, or in interactions in which an interpreter is present. Therefore, this leads to the suggestion that the pharmacists' repetition of questions and protracted explanations are not necessarily linked to the presence of language barriers, but rather to the disease context and the need to ensure adherence to treatment.

It is also acknowledged that pharmacists' questioning style may be linked to a difference in communication style between English speakers and Afrikaans speakers. According to Chick (1995), Afrikaans speakers prefer to use what Brown and Levinson (1987) term a 'bald-on record' (i.e. a direct) strategy, whereas South African English speakers prefer a more subtle, deferent approach

to communication. Therefore, when Afrikaners use the bald-on record strategy when speaking English, this may appear overbearing, insensitive or authoritarian. This might explain these communication characteristics in the pharmacy interactions.

However, analysis of the data from Penn et al.'s (2003) study reveals that repetitive questioning or the use of a 'string' of questions is found in interactions in which the doctor is a first-language English speaker. This evidence therefore negates the possibility that this communication phenomenon is influenced by Afrikaans. However, further research is necessary in order to determine whether this phenomenon is unique to the South African context.

Nevertheless, the preliminary data presented in this section suggests that HIV/Aids appears to have a unique impact on communication processes. In the context of ARVs, pharmacists are under pressure to ensure adherence to treatment, provide hope and achieve treatment success.

9.4.3 Summary of section

The final case in this chapter presented evidence of how the disease of HIV/Aids appears to shape communication processes in the pharmacist-patient interactions. The manner in which pharmacists refer to ARVs was shown to indicate a need to talk openly about life and death as well as a desire to spread hope, normalise the disease and promote wellness. The question of whether the pharmacists' communication style is condescending was discussed, specifically their use of persistent questioning and laborious explanations and the resulting irritation displayed by Solly. However, this behaviour appears directly linked to the need to ensure comprehension of instructions and promote adherence to ART.

9.5 Summary of Chapter

This chapter used case studies to demonstrate how contextual and disease-related factors influence the pharmacist-patient interaction.

The chapter began with a description of the case of a defaulter, Aaron. Although the reasons for this patient's non-adherence are not clear, the case provided insights into the pharmacist's emotional responses to his behaviour, the patient's reluctance to reveal the reason for defaulting and the negotiation of a 'second chance' at adherence and commitment. Ultimately, it suggested that by defaulting, the patient is attempting to maintain control over his health and treatment.

The second case of Mary and James illustrated the physical and emotional burden of care experienced by caregivers. In particular, the case demonstrated how emotional stress may translate into conflict during interaction with the pharmacist. The third case of Martha presented exceptional evidence in which the patient is seen to be assertive in steering the interaction towards her own goals and agendas. Power and control is negotiated by the pharmacist and patient. The fourth case highlighted how HIV/Aids may directly influence communication through references to life, death and hope. In addition, the pharmacists' style of communication may be seen to result from a need to ensure adherence.

CHAPTER 10

GENERAL DISCUSSION AND CONCLUSION

10.1 Discussion of the findings

The pharmacist-patient interaction in the context of South Africa and HIV/Aids provides a fascinating glimpse into the realms of the historical, the present and the future – the worldviews of the participants and historical relations between Tswana and Boer; the pressures and urgencies brought about by the pandemic; and hope for the future, in the form of ARVs. This study provides a unique description of pharmacy interactions as they exist within their context, in response to an identified gap in the current knowledge of the fields of both pharmacy and ARV treatment across cultural and linguistic barriers. The two worldviews which are presented lend insight into the motivations, situations, perceptions and perspectives of both patients and pharmacists. Much can be learned for pharmacist-patient interactions in general as well as in the context of ART and HIV/Aids.

South Africa presents a unique context for conducting research. Its rich diversity allows the researcher to engage with extremes across cultural and linguistic interfaces. It is an environment of ever-present dualities: rich and poor, black and white, traditional and western, resourced and under-resourced. The disease of HIV/Aids has, in many ways, widened these gaps because of the way it has become politicised in this country. This study provides evidence of the existence of numerous barriers to access to health care and provision of treatment and health services. Pharmacists and patients face immense pressures in their attempts to achieve successful treatment of HIV/Aids with ARVs.

The plague of HIV/Aids is a challenge to the human condition. Perhaps more than any other disease, it encompasses a social, psychological, political, historical and economic realm. The medical status of the disease becomes insignificant in the light of other issues such as life, death and sex which are embodied by HIV. It is a

pandemic, from which thousands of nameless people die every day, yet the experience of the individual is paramount and this study attests to this observation. Within each interaction in this study, we are given glimpses into the reality of life for each patient: the apparently insurmountable challenges brought about by the disease, the determination to live a positive life with the disease, the basic human requirement for care and empathy which extends beyond medical treatment, and the desperate need for hope for the future. As Nelson Mandela (2004) reminds us, “We must seize this opportunity to demonstrate that we share a common humanity and that it matters who my sister or brother is. We must never reduce the issue to statistics”.

Our illustrious constitution affords the basic human rights of life, dignity and quality of life. In the pharmacy interactions, we see how these constitutional principles are embodied in our post-apartheid nation. There is a strong sense of community and commitment amongst both pharmacists and patients in this environment and a desire to work together to make the ARV rollout worthwhile for each individual. Pharmacists go beyond their basic obligations towards patients in an attempt to ‘make things work’ across barriers. They worry with patients over how many taxis must be taken to get to the nearest clinic and they get excited about the patient who started ART with a CD4 count of zero but is now complaining that she is overweight. They show concern for the patient who is scared of side effects. There is a sense of anticipation evident in many patients as they embark on the journey of ARV treatment. Patients travel from far afield and wait in long queues at the hospital because they know that there is hope for their situation. Within their communities, people who are not related to patients have become actively involved in the daily care of the sick and the dying. And so we are reminded of how humanity transcends disease, history, class, race, gender, culture and language.

What has emerged in this study is that within the Pharmacy at Rustenburg Provincial Hospital lies a microcosm of something hopeful that is working in the midst of a horrible situation brought about by the disease of HIV/Aids. It is in the

minute details of each interaction that we are shown how, despite innumerable barriers to both patients and pharmacists, positive, successful, collaborative interaction can be achieved. This study proves that one cannot assume that a profoundly difficult context will necessarily hamper communication between health professionals and patients.

In many of the interactions described in this thesis, there appear to exist finely tuned moments of collaboration in which pharmacist and patient ‘connect’ on some level and a sharing not only of information but also of emotion takes place, regardless of linguistic and cultural barriers. This ‘connection’ seems linked to an awareness of atmosphere (Langewitz, 2007a, 2007b) on the part of pharmacists, coupled with attempts to create rapport which are reciprocated by patients. In such instances, we see concordance between the two worlds of pharmacist and patient, be it working together across linguistic barriers to establish mutual understanding, or a shared moment of humour. This notion of concordance implies harmony and congruity between pharmacist and patient and the success of an interaction appears to be linked in some way to the success of these moments.

The interactions have a clearly demarcated structure within which there are many interactive verbal and non-verbal features which are utilised by both pharmacists and patients to achieve the collaborative goals of understanding of the ARV regimen and (ultimately) successful adherence to the regimen. What is also apparent is the sensitivity of pharmacists towards each patient’s communication needs and their ability to adapt their communication style accordingly. For example, the pharmacists’ strategy of stipulating the agenda for the consultation may be utilised more than usual in the case of a patient who is too ill to concentrate fully during an interaction.

What is also surprising about these findings is the emergence of so many macro themes. Prior to data collection, the researcher expected that the study would focus on the micro elements of communication, interaction and understanding, but

even before any analysis had taken place, the salient influence of the macro context in this pharmacy setting was immediately obvious.

The emergence of numerous macro themes in this data seems to demonstrate that one cannot consider an interaction without a consideration of the context and the worldview of the participants. This study reveals that the way in which the pharmacists communicate with patients and the level of concordance achieved in an interaction is dependent on and influenced by disease, cultural, economic, political, and organisational factors, as well as interpersonal variations and the worldview of both the pharmacist and patient. Therefore, the results of this study show a relationship between micro and macro elements which lends support to the model of communication in health care encounters proposed by the researcher in *Chapter 4*.

The ecological model centres on the need for both pharmacists and patients to take cognisance of context and worldviews in order to achieve concordance in interactions. The results of this study lend insight into the notion of concordance and how it may be implemented practically by pharmacists working in the ARV context. Much of the data presented in this thesis indicate that the pharmacists are incorporating elements of concordance into interactions with patients, whether consciously or through intuitive experience. As the findings attest, the use of facilitative communication skills, modifying the delivery of information according to patients' communication needs and attending to whether this information is understood by the patient are strategies which are paramount to accessing concordance.

Patients in this study are revealed to be perceptive consumers who are often aware that they have not understood information and who are able to initiate attempts to clarify misunderstandings. Patients also come to consultations with concerns, needs and agendas, be it to obtain information or emotional support, or, on a larger scale, regain their health and quality of life through taking ARVs. They are

aware of their rights as people and as patients and this knowledge influences their level of collaboration and concordance in interactions.

The results also provide evidence which suggests that the creation of rapport and an appreciation of the patient's lifeworld are crucial to encouraging a positive therapeutic relationship – the cornerstone of concordance. The key to accessing the lifeworld and achieving concordance, however, lies in the minute details of communication. As Chen (1999, p. 670) notes, “medication concordance may require a radical change in consulting styles”.

As this study attests, paying attention to communication behaviours leads to sensitivity to atmosphere and allows for the creation of concordance in interactions. Although this study only touches on the concepts of atmosphere and intuition, the micro-level analysis of the verbal and non-verbal characteristics of the interactions allows some insight into the mechanisms of atmosphere and intuition (Langewitz, 2007a).

It is not possible to say whether the concordance seen in this data stems from a paternalism which manifests as taking responsibility for others, as described by Bozzoli (1991) in her history of the Rustenburg area. However, this attitude, which stems from historical inequalities and power imbalances, may well be contributing to the actions of both pharmacists and patients. This study demonstrates that promising progress towards reducing inequalities in our post-apartheid society has been achieved. It is conjecture whether the participants will demonstrate different strategies of concordance with the passage of time.

10.2 Implications for pharmacists and other health professionals

The question arises as to how pharmacists may achieve sensitivity to atmosphere and ultimately promote successful communication with patients across cultural and linguistic barriers. Is this a learned behaviour, is it instinctive, or is there some other reason which explains why communication in this context ‘works’ in some

instances and not in others? Pharmacists reportedly do not receive training in communication skills, so the behaviour cannot be said to have been ‘taught’ or ‘learned’.

It is interesting to note that many of the communication strategies for promoting rapport with patients that are described in this thesis are found across the data corpus and across pharmacists. If one returns to the description of the pharmacists, it is apparent that Pharmacist A has extensive experience of working with ARVs and patients living with HIV/Aids. Pharmacist B, however, has minimal experience as a pharmacist and little experience of dispensing ARVs. Pharmacist E has been trained as an HIV/Aids counsellor, but the other two pharmacists have not received this training. Therefore, it would appear that experience might not necessarily be related to the ability to achieve a positive atmosphere and succeed in communicating with a patient. An alternative must be considered.

If one examines the findings of this data in relation to previous studies, it is immediately obvious that certain differences exist between the pharmacist-patient interactions in this context and elsewhere. Although only a small number of published studies exist, these indicate that pharmacist-patient interactions are not typically collaborative and pharmacists do not encourage patient participation, even when there are no language and cultural barriers. However, the data presented in this thesis overwhelmingly suggests that pharmacy interactions can be efficient and collaborative, patients can be encouraged to participate actively in interactions, rapport can be established and communication can be successful even across cultural and language barriers.

The daily interface of different cultures and languages within the South African environment and the normality of communicating across barriers are possible reasons for the differences between this study and other research. Indeed, when two cultures meet, a process of cross-cultural adaptation inevitably and naturally occurs (Kim, 2001). In order to achieve effective communication across cultural barriers and meet role requirements in specific situations, people adapt their

interactive styles and may reciprocate the style of the conversational partner (Burgoon, Stern, & Dillman, 1995). The evidence in this study suggests that through a process of adaptation, pharmacists and patients have been able to transcend some of the barriers to communication and collaboration that have been identified in other studies.

This study also suggests that the influence of the historical context of segregation has heightened awareness of differences between cultures. Recent moves towards reducing inequalities and racial boundaries in South Africa may have encouraged participants to incorporate the norms of other cultures into their communication style – for instance, pharmacists have adopted Tswana forms of address and patients initiate clarification requests which appear to transgress their cultural norm of not questioning authority. The results are therefore particularly interesting and imply that the diversity of South Africa provides a resource that can inform training, policy and future practice both locally and worldwide.

The profound urgency of the disease, the intense pressures and anxieties associated with the need to adhere strictly to a life-prolonging treatment to ensure success and the resultant pressure felt by pharmacists to promote patient understanding are driving factors within the interactions. Stein et al. (2007, p. 961) note that “the long wait for ART [in South Africa] appears to have heightened the sense of urgency and enthusiasm for implementation”. Several communication strategies, for example checking understanding and the use of response solicitations, appear to have evolved out of this urgency and the need to ensure that patients understand the information and dosage instructions related to ARVs and HIV/Aids. Patients have adopted communication behaviours such as the initiation of repair sequences, perhaps in recognition of the fact that they are responsible for ensuring understanding so that they are able to adhere to ARV treatment.

In response to the question of how this sensitivity may be imparted to pharmacists and other health professionals, the answer lies in the way in which pharmacists are

trained. Pharmacy curricula are largely scientific in nature and they often ignore the social sciences. As far back as 1986, the Nuffield Inquiry into Pharmacy identified “pharmacy’s neglect of its own social context, and social science’s neglect of pharmacy” (p. 98, as cited in Dickson et al., 1996). This study demonstrates the continued need for pharmacy curricula to include aspects of anthropology, sociology and psychology as well as communication and counselling skills, to equip pharmacy graduates for encounters with patients and enable them to achieve concordance in interactions.

The results of this study can be used to inform training, policy and future pharmacy practice in the context of HIV/Aids, both locally and worldwide. Realising the goals of communicating dosage instructions successfully and promoting adherence to complex ARV regimens on a large scale may be more elusive than we realise. Although the pharmacists in this study intuitively make use of facilitative communication strategies and appear to be able to achieve concordant interactions with patients, their success is perhaps due to the influence of site, disease and context which makes their behaviours instinctive.

However, the process of globalisation means that there is a greater need for the inclusion of communication skills training as a component of pharmacist training to enable pharmacists to improve service provision across cultural and linguistic barriers. By becoming aware of potential facilitators and inhibitors to communication, as well as the range of contextual and process variables that may affect patients’ comprehension of dosage instructions, the interaction between pharmacist and patient will become more efficient. The findings of this study also demonstrate the impact of a specific site and disease on communication. The researcher feels that there is a necessity for communication skills training for pharmacists working at other sites and with a range of diseases.

The linguistic findings from this study may be used as the basis for future communication skills training programmes for pharmacists and guidelines for good communication practice. The researcher has completed some preliminary

work to develop a practical communication skills training programme for ARV pharmacists (Watermeyer & Penn, 2007b), based on the results of this study together with elements of training programmes for other health professionals devised by the University's Health Communication Project (Penn, 2007). The framework for this programme is outlined below:

Suggested Communication Strategies for ARV Pharmacists

Strategies for providing information

- Stipulate the agenda of the session (what you plan to do) or negotiate the agenda with the patient
- Give a 'running commentary' during the consultation
- Give clear, simple explanations
- Get patients' attention before giving important information
- Use visual demonstration and props (pill bottles/boxes)
- Repeat, reinforce and summarise information frequently
- Use gesture to supplement verbal
- Acknowledge patient's competence: relate information to their knowledge
- Important information: use stress, slower speech, gesture
- Use phrases or words from the patient's language (e.g. Setswana)
- Ask general open-ended questions about patients' health or concerns
- Wait for a response from the patient
- Use pauses to provide opportunities for patients to request clarification
- Give patients time to process information
- Do not proceed to a new topic unless you are satisfied the patient has understood – check patient's understanding
- Use clarification opportunities to reinforce and repeat information

Rapport and Sensitivity

- Show interest in patients' lives e.g. ask about their children or their health
- Respond emotionally to patients' fears, feelings and concerns

- Show sensitivity to HIV and stigma-related issues
- Encourage patients to discuss issues of stigma and disclosure
- Create moments of shared humour where appropriate, to defuse tension and relieve pressure
- Reassure patients who are anxious about understanding information (e.g. “I’ll explain to you, don’t worry, you’ll get it now”)
- Use personal, ‘human’ moments to build rapport (e.g. “that was a lot to remember” or “let me not get mixed up”)
- Encourage caregiver involvement in sessions

Checking understanding

- Invite patients to request clarification, e.g. “ok?”, “you understand?”
- Ask patients to demonstrate understanding of instructions, e.g. “show me how you must take the pills”
- Let patients use props to demonstrate understanding of instructions
- Be attuned to patients’ non-verbal behaviours, which may indicate understanding of information
- Be aware of when to repeat instructions or clarify in a different way, e.g. with a visual demonstration
- Check that you have understood the patient correctly by repeating and summarising their speech, e.g. “so what you’re saying is...”
- Provide prompts, scaffolding and encouragement while patients demonstrate comprehension of dosage instructions

Collaborative strategies

- Encourage patients to initiate and ask for clarification
- Encourage patients to volunteer information or concerns
- Encourage patients to ask questions
- Encourage patients to contribute comments or information
- Give patients an opportunity to voice their concerns, e.g. “do you have any questions?” or “are you unsure about anything?”

- Work together with the patient to solve problems, e.g. incorrect dosages or prescriptions

The research highlights the need for the provision of pharmacy services in the patients' own language and the benefit that patients gain when an interpreter is available during a consultation. Despite constitutional recommendations for access to interpreters, a lack of institutional resources and infrastructure means that this ideal cannot be fulfilled (Levin, 2006b). This is not a situation unique to South Africa (Flores, 2006). A lack of availability of interpreting services could be deemed contradictory to the principles of concordance and patient-centred care. However, the evidence presented in this study proves that although interpreters may not be available, pharmacists can modify their linguistic output when providing essential information about dosage instructions by making use of non-verbal gestures and code switching into a few words and phrases in the patient's language. As the patients' responses attest, this linguistic tailoring goes a long way to promoting understanding across linguistic barriers.

This study also lends insight into the expanded role of the pharmacist in the context of HIV/Aids. Pharmacy work is no longer merely about dispensing pills to patients, but also entails ensuring patient understanding and monitoring adherence within an emotionally charged and socially complex arena. The disease of HIV/Aids appears to render patients particularly vulnerable in numerous respects, often resulting in delicate situations during pharmacist-patient interactions.

However, simply incorporating empathetic responses into interactions does not appear sufficient. There is a sense of contradiction in the data: a need exists for pharmacists to preserve their professional face, accomplish their tasks and duties and maintain control in interactions with patients, whilst simultaneously showing their caring side and responding to the lifeworld and emotional experience of the patient (Bolton, 2001). In some interactions in the data corpus, this 'juggling' of roles appears to be accomplished effectively where pharmacist and patient are seen to collaborate successfully. However, other interactions appear discordant,

leading to competition between patient and pharmacist for control, or negation of pharmacists' attempts at emotional response and unwelcome intrusion into the lifeworld of the patient.

Again, achieving a concordant interaction is dependant on intuition and sensitivity to atmosphere. The evidence presented in this thesis irrefutably advocates the need for pharmacists to incorporate counselling skills into their communication style. However, these skills must be learned and training institutions have a responsibility to include communication skills as well as counselling skills in their pharmacy curricula.

10.3 Research methodology

To the researcher faced with the reality of an interaction between a vulnerable, ill patient living with HIV/Aids and a health professional within a complex context, it became apparent that merely applying purist, traditional methodologies and theories from the social sciences would not do justice to the subtleties of such a situation. What is needed for this problem is a methodology that will capture, describe and explain the essence of a human encounter – what Langewitz (2007a, 2007b) refers to as 'atmosphere'. The hybrid methodological approach utilised in this study, which incorporates aspects of various methods in the social sciences tradition, captures some critical elements of the pharmacist-patient interaction.

The careful scrutiny of verbal and non-verbal behaviours using CA techniques allows a glimpse into the notion of 'intuition' or 'atmosphere'. As Langewitz (2007a, 2007b) explains, the examination of verbal and non-verbal cues may allow for some insight into 'intuition'. For example, some of the extracts presented in this thesis demonstrate finely tuned moments of collaboration as well as precise instances in which rapport and collaboration are broken. The data illustrates how pharmacists monitor patients' non-verbal responses to attempt to ascertain their understanding of information and how pharmacists make some kind of intuitive judgement of patients' linguistic ability and communication needs. CA also allows

for the identification of potential facilitators and barriers to communication in this context.

However, as Langewitz (2007a) notes, identifying and describing ‘atmosphere’ is a particularly difficult task and this study attests to his observation. The initial focus of this study was on the micro elements of the interactions but the numerous macro themes that were immediately apparent in the data were somewhat unexpected and could not be ignored. As this study confirms, the micro and the macro are interrelated and affect one another, making it impossible to ignore the macro context and its influence on ‘atmosphere’. Although useful, CA alone did not render sufficient insight into the essence of the pharmacist-patient interaction and did not contribute to the consideration and understanding of macro themes, as authors such as Maynard (2003) and Atkinson and Heritage (1984) realised.

In selecting a method to study the macro themes and context, the researcher found that using an isolated approach such as CDA proved too ideological. While offering some insight into a few contextual elements such as power relations, such methods did not represent those contextual factors that are directly related to each participant and to the interaction itself – namely, the socio-historical context, the two often vastly differing worldviews of the participants and the disease context of HIV/Aids. In this study, utilising elements of DA and TCA approaches allowed for consideration of these factors and this enabled the researcher to attribute meaning and explanation to observed phenomena.

For example, the rather tense atmosphere of conflict which arises in the interaction with Mary and James makes sense when considered in the context of the caregiver’s burden, emotional stress, anxiety, guilt and desire to ‘do the right thing’ for the patient. The pharmacist’s irritation can be explained by considering the institutional context, in which she is overworked and harassed by the need to attend to other waiting patients. The apparent power asymmetry that arises in this instance may have its source in the presence of contextual barriers. Using another example, the pharmacists’ repeated questioning and references to death and life, as

seen in the case of Solly, can apparently only be understood primarily in the light of the fact that the disease context of the interaction is HIV/Aids.

In this study, the use of a hybrid analytical approach has allowed the researcher to achieve the aim of describing pharmacy interactions within their context. The findings of this study demonstrate how the context frames and influences institutional talk. In the multifaceted context of South Africa and the disease context of HIV/Aids, researchers have a responsibility to acquire an in-depth understanding of cultural and linguistic influences as well as the impact of poverty, resources and skills on the processes of communication and research. It is the researcher's strong belief that research should not focus exclusively on the micro structure of interactions if it is to have an impact on methods of communicating with patients, dispensing drugs, as well as treating, counselling and educating patients. Therefore, the issue of choice of research methodology has implications for researchers in general.

The combination of data collection methods utilised in this study, namely interviews, recorded interactions and ethnography, allowed for triangulation of the data and findings. The recorded interactions provide 'objective' evidence of the substance of the interactions and this is corroborated with 'subjective' evidence from the participant perspectives given in the interviews, as well as the researcher's 'subjective' perspectives gained from ethnographic observations. Greenhalgh et al. (2006, p. 1183) note that this verification of "what 'really happened'", which is achieved with multiple methods of data collection, is often absent from research studies – research into pharmacy interactions to date has not considered the context or participants' perspectives.

Therefore, this data corpus provides unique insights into pharmacist-patient interactions by using data and methods of analysis which consider the micro elements of interactions as they exist within a macro context.

10.4 Implications for drug manufacturers

A number of phenomena observed in the data hold particular implications for the companies who manufacture and distribute ARV drugs. As demonstrated, the pill boxes and containers, as well as the pills themselves, form an essential part of the communication process in each interaction.

As the data reveals, the aesthetics of the pills themselves, as well as the boxes, pots and containers, are particularly important factors which may be linked to patients' understanding of instructions. The names of the drugs are somewhat complicated and lengthy, making it difficult for patients to learn them despite urging from pharmacists. Although pharmacists refer to the names of the drugs on numerous occasions, pills are often referred to by how they look and patients and pharmacists may simply point to the relevant box when discussing dosage instructions. Changes in the packaging of the pills or the introduction of generic drugs often lead to misunderstanding or confusion for patients and even to non-adherence to the treatment regimen. Drug manufacturers have an obligation to become aware of the potentially detrimental impact of any changes in the shape and colour of pills as well as changes to the colour and design of the drug packaging.

The man holding a ball, illustrated on the Stocrin box, has inadvertently become an identifying icon used by both pharmacists and patients as an aide memoir to facilitate understanding of the dosage instructions through the use of an analogy. Again, this demonstrates the implication of the drug packaging not only for understanding but also for adherence. In future, specific symbols that are displayed on ARV drug boxes by drug manufacturers may become associated with a specific drug and could be used advantageously by pharmacists.

The patients' curiosity and desire to explore and interact with the pill boxes and containers is also a noteworthy behaviour. As demonstrated by the data, this is endorsed by pharmacists. This plays a positive role in encouraging patients to take

responsibility for their health and treatment, which ultimately affects adherence behaviours. For most patients, the idea of taking western medicines and adhering to a life-long regimen may be a daunting, unfamiliar concept. Drug manufacturers might consider making available culturally and linguistically appropriate additional materials related to the ARV drugs, in order to encourage further understanding of the drugs and promote adherence. For example, organisations such as Soul City (2008) have published pamphlets and booklets which make information about HIV/Aids accessible to patients and drug manufacturers could develop similar materials.

What is perhaps most evident in the results of this study is the need for drug manufacturers to enlist the expertise of communication specialists at ARV rollout sites. The communication specialist could contribute much to ensuring successful delivery and understanding of dosage instructions across cultural and language barriers. Communication has a potentially large impact on patient adherence to treatment regimens and improved communication which focuses on the patient will result in more patient-centred care. While pharmacists are not usually trained in these vital skills, their role as an ‘HIV specialist’ is crucial in terms of treatment success.

Therefore, it is suggested that a communication specialist could train pharmacists who dispense ARVs to recognise verbal and nonverbal communication behaviours and communication breakdowns related to patients’ understanding of dosage instructions, as well as how to adapt their communication skills accordingly. Various strategies which emerged in this data, such as verification of patient understanding by eliciting a demonstration of comprehension, are relatively simple mechanisms yet they hold potential for radically improving communication processes.

10.5 Final reflections

This study opens the door to future research possibilities. Broader study of the communication competencies of pharmacists who dispense ARVs, as well as investigation of interactions in other research settings, may provide additional insight into the complexities of interaction in the context of HIV/Aids. The apparent impact of disease context on a pharmacist's communication style is a topic of interest. It may prove worthwhile to focus on how other diseases and their related treatments shape communication in the pharmacy setting.

While this is a South African study conducted within a specific context, it informs other global and multicultural issues in the profession of pharmacy. In response to the call for the provision of communication and counselling skills training for pharmacists and the need for pharmacists to acquire such skills (Salter et al., 2007), training programmes need to be developed, evaluated and implemented. It is the researcher's belief that given the results of this study, such programmes should take cognisance of site-, context- and disease-specific needs as well as multicultural and multilingual issues.

An opportunity to track the patients included in this study across multiple visits, in order to ascertain whether the apparently successful pharmacy interactions translated into correct understanding of the dosage instructions and positive adherence behaviours, would have been advantageous. It would also have been beneficial to record patients' interactions with nurses or counsellors prior to their consultation with the pharmacist, in order to examine the type of HIV- and ARV-related information given to patients and how this links to information given by pharmacists. This would have enabled the researcher to obtain insight into the whole process of counselling, education and treatment of these patients as well as how patients manage and adhere to their ARV regimens. These are seen as limitations to the study which could be addressed in future studies. In addition, future research could focus on obtaining more comprehensive interview information concerning the influence of the macro context through the eyes of the

participants. Additional research using similar methodologies may address the current gaps in the literature in terms of our understanding of why some patients do not adhere to ART.

It could be said that this study does not apply the methods of CA and DA in a traditional or ‘purist’ manner and that it does not describe interactive phenomena in enough detail. However, the researcher’s goal was to examine communication with a view to improving current practices. There is an action research element to this study – through research, new knowledge about pharmacy interactions and the pharmacist-patient relationship may produce change in practice and improved service delivery to patients (Meyer, 2000). Therefore, the methods were adapted to suit the requirements of the study.

No one in South Africa can stand by idly and let this horrific epidemic happen. The researcher wanted her methods to be meaningful, relevant and useful, rather than ‘correct’ in the eyes of traditionalists or pure research for research’s sake. In future, time will undoubtedly be spent analysing specific phenomena in greater detail and looking for patterns in the minute elements of the interactions, or considering notions of power and access on an ideological level. For now, however, an initial foray into both micro and macro provides fascinating insight into the window of interaction between pharmacist and patient.

This study has yielded much about interactions in this particular setting as well as about practices in general. The disease context of HIV/Aids has a profound influence on the pharmacist-patient interaction and this study demonstrates the significant impact of the macro context on micro aspects of communication. The evidence suggests that the human condition and the daily interface between culture and language in South Africa enable pharmacists and patients to transcend some of the barriers to communication and collaboration that have been identified in previous studies. The findings imply that this diversity provides both hope and a resource which can inform policy and future practice.

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