

CHAPTER ONE: INTRODUCTION

Medical interns in South Africa are required to complete a two-year internship programme at a state hospital or clinics that have been identified as internship sites. In addition to this is a compulsory community service year which may be undertaken at a rural healthcare site before being granted the opportunity to practice in their private capacity. An additional challenge for medical interns is to operate in a demanding work environment in the public health sector which increasingly sees them compromising their own physical as well as psychological health in order to service patients using public health services. Arguably, this excessive stance towards medical practice in the long term could result in lower productivity and lead to work stress thus interventions from the Public Health office and educational system will be necessary in order to sustain medical interns' potential by considering their psychological well-being and creating a healthy environment for sustainable positive growth.

This study is located within the context of an overburdened healthcare system in the country in order to fully understand its implications. During the era of Apartheid, the healthcare system of South Africa neglected the health needs of the majority of the population, which lead to marked disparities in health status (Health Systems Trust, 1997). In order to address this issue, the African National Congress (ANC) instituted the Reconstruction and Development Programme (RDP) in 1994 which presented broad health goals and objectives for post-apartheid South Africa. The Health Systems Trust (1996) highlighted the complexity associated with achieving these goals by stating that the health system in South Africa must undergo many changes before it will be able to provide quality services to all South Africans. This view was reiterated by Allen, Makubalo, Shisana and Mbobo (2000) who suggest the transformation of the health system and resulting improvements in healthcare will require long-term and sustained efforts.

Considering that the majority of the population use state-funded healthcare services, the public health sector is relatively under-resourced and the health system in South Africa has scarce resources to cope with apparently infinite demands (Health Systems Trust, 1996). According to reports from the International Research Development

Centre (2006), the weakening of South African government structures, reduced public sector budgets and the deterioration of the public health system has fuelled the growth of the private health sector.

Retention of expertise is also a major concern (Essential National Health Research, 2001). Researchers from Essential National Health Research (ENHR) (2001) found the problem of brain drain to be a serious concern, particularly among health professionals such as nurses and doctors with as many as twenty percent of medical doctors and senior scientists leaving South Africa annually. In 2002, the South African Medical Association estimated that over 3,500 (approximately 50%) of its domestically-trained doctors were living abroad (Hagopian, Thompson, Fordyce, Johnson & Hart, 2004). The main causes of the medical brain drain has been identified by researchers from Essential National Health Research (2001) to be (1) monetary where there was movement from public to private sectors, (2) recruitment or scouting of local talented doctors and nurses by wealthy nations, (3) personal reasons for wanting to emigrate and (4) the state of transition in the country. Hagopian et al. (2004) view the brain drain situation in terms of immigration theory which states that significant "push factors" prompt professionals to leave poor countries in favour of emigrating to higher income countries which are more secure. Negative factors in the sending countries include insufficient suitable employment, lower pay, unsatisfactory working conditions, poor infrastructure and technology, lower social status and recognition and repressive governments (Hagopian et al., 2004). Simultaneously, the "pull factors" that wealthier countries systematically use to attract physicians include training opportunities; higher living standards; better practice conditions and more sophisticated research conditions (Hagopian et al., 2004). Research conducted by the Human Sciences Research Council (HSRC) in 2004 showed that the highly skilled medical personnel are leaving South Africa because of crime, perceptions of a high cost of living and levels of taxation as well as a perceived decline in the standard of public services, notably in health and education delivery. Simultaneously, South African professionals are eager to take advantage of attractive salary packages and career opportunities in the advanced industrialised countries such as the United States of America, the United Kingdom, New Zealand and Australia. Furthermore, McClelland (2002) notes in the *South African Health Review* that the public sector's doctor-patient ratio has declined from 21.9 physicians

per 100 000 people in 2000 to 19.8 per 100 000 in 2001. Therefore, there is a depletion of essential human resources within the public health system.

Breier (2006) also stressed the gross inequalities between private and public, and urban and rural services and found that more than 60% of the doctors who stay in South Africa work in the private sector where they serve 16% of the population and that most doctors are located in urban areas and the Western Cape and Gauteng in particular. As a result, there is a need in South Africa for doctors who are not only prepared to stay in the country but also to work in the public service, particularly in rural areas (Breier, 2006).

In reviewing the state of public health affairs in South Africa, Benatar (2004) concludes that many new clinics and the district health system are not yet adequately functional due to a lack of personnel and finances, poor administration and expanding demands. Benatar (2004) remarks that public tertiary health services have been severely eroded in that there are ineffective interactions among hierarchical levels of public health services. This is further complicated by the high rates of exposure to infection with the human immunodeficiency virus (HIV) and full-blown acquired immune deficiency syndrome (AIDS) and it widely known that South Africa has one of the fastest-growing HIV-infected populations in the world (Maskew, MacPhail, Menezes & Rubel, 2007). Rabbitts (2003) reports that occupational exposure to infected or contaminated blood is a very real problem, posing a significant risk both physically and emotionally. Maskew et al. (2007) also highlighted another problem of patients not following up on treatment due to financial difficulties, as well as administrative problems such as the loss of patient files or having incorrect contact details of patients and this amounts to poor medical care and management. Kane-Berman (1992) outlined the challenges facing South African academic hospitals in terms of a lack of or poor distribution of resources. Kane-Berman (1992) specifically highlighted problems with management, stating that many senior administrative positions tend to be filled by doctors who are not adequately skilled in this regard. Academic hospitals in particular are extraordinarily complex organisations which require a wide variety of management skills thus a need exists for experts in relevant fields of expertise to be brought into the hospital environment to manage the team of doctors, nurses and other administrators (Kane-Berman, 1992). These contextual and

community problems thus pose vast challenges for health professionals working in this context.

During the early 1990s, concerns were raised by various disciplines (such as Paediatrics, Obstetrics and Gynaecology) about the effectiveness of the system of [medical] internship training (Meintjes, 2003). In this regard, Meintjes (2003) reports that a review of the undergraduate curriculum in medicine was undertaken by the Medical and Dental Professions Board of the Health Professions Council of South Africa (HPCSA) over a number of years, while the Medical and Dental Education Committee critically reviewed the curriculum in medicine and subsequent internship training. Meintjes (2003) reports that serious questions were asked about whether or not the original goals of internship training were being achieved, namely to assist young graduates to obtain hands-on experience under supervision in 'approved' hospitals as clinical preparation for entering medical practice. Meintjes (2003) reported on the outcome of these reviews which included an extension of undergraduate education with a more integrated curriculum and focus on self-directed learning and community-based outcomes; an extension of the internship programme to ensure exposure of interns to the main domains of training; a focus on ongoing education, training and continuing professional development (CPD).

Interestingly, Meintjes (2003) refers to a group of medical students who presented a memorandum to the Minister of Health Manto Tshabalala Msimang at the time, on the 19th September 2002 to oppose the 'exploitation' of newly qualified medical practitioners. What the students meant by this 'exploitation' has yet to be unpacked. In light of the above argument, one is drawn back to the realities that face healthcare professionals and in particular, medical interns who play a pivotal role in providing much-needed quality healthcare services to the South African public.

This study thus investigates the subjective experiences of medical interns who work in state training hospitals to attain a holistic view of the medical intern's functioning as a 'public health professional in training'. The identification of stressors impacting on an intern's ability to function will provide a more complete understanding of the two-year internship programme and coping mechanisms and support structures utilised by medical interns.

RESEARCH AIMS

- The aim of this study is to gain insight into the medical internship process in South African state training hospitals by identifying areas of working life and educational experiences that contribute to stress experienced by medical interns.
- The study also aims to identify coping mechanisms employed by medical interns to deal with stress experienced during the medical internship.

RATIONALE

The medical internship programme in South Africa has been a much discussed and highly contested process. Much has been written about the role of an internship, clerkship, residency, housemanship or pre-registration year (Jaschinski & De Villiers, 2008). Furthermore, within the South African setting, Jaschinski and De Villiers (2008) note that the medical internship exposes a newly-qualified doctor to the realities of hospital practice under a degree of supervision by senior colleagues, to prepare the doctors for independent practice and it also takes place under supervision in approved hospitals and under the auspices of the Health Professions Council of South Africa (HPCSA).

Medical practice demands the highest standards of performance and conduct and involves the development of professional responsibility, hence the study and practice of medicine is stressful (The Royal College of Psychiatrists, 2003). Daugherty, Baldwin and Rowley (1998) note that there are diverse and conflicting demands placed on medical interns such as the responsibility of patient care, economic challenges, on-call schedules, patient deaths, the need for constant learning and the task of teaching, expectations of attending physicians and senior residents, as well as demands from family and in one's personal life.

Recently, much attention has been paid to the excessive hours worked by South African interns, with a commitment by the Department of Health to address this issue (Sun, Saloojee, Jansen van Rensburg, & Manning, 2008). However, there is still limited recognition of other stressors that influence the well-being and performance of

interns (Sun et al., 2008). To date there has been minimal research conducted regarding the experience of the medical internship for interns in South Africa. Studies which have been conducted utilised predominantly quantitative methodologies such as the Sun et al. (2008) study which was useful for gaining insight into certain aspects of the internship but being unable to capture the richness and trauma of the intern's experience.

The Royal College of Psychiatrists (2003) reports that studies have shown that medical students report higher levels of psychological symptoms than the general population and that levels of distress increase progressively during the course of medical studies. Furthermore, medical students are especially vulnerable to mental health problems such as anxiety, depression and substance misuse during this year. Given the high number of patient loads and depletion of essential human resources in the South African public health setting, it is critical to address the mental health needs of medical interns as they are often the patient's first port of call and often have to function independently. Against the backdrop of challenges within the public health system, minimal established support systems and few incentives to enhance medical interns' wellbeing coupled with the problem of "brain drain"; one may posit that ensuring the optimal psychological functioning of medical interns is an imperative of the Department of Health and educational systems. The medical intern's psychological wellbeing is a serious concern and Sun et al. (2008) suggested that strategies for recognising and alleviating intern stress need to be identified as an urgent priority.

The findings of this study will therefore be useful to those who are responsible for medical interns' training experience because there is a paucity of research aimed at understanding the difficulties that medical interns experience in their two-year internship in South African academic hospitals, as well as for identifying the key stress factors and essential coping techniques needed by interns to maintain healthy psychological functioning.

CHAPTER TWO: LITERATURE REVIEW

This chapter will introduce the concept of internships and more specifically explore the nature of the medical internship. It will provide an overview of the relevant literature documenting medical interns' experiences of the medical internship, and provide an overview of themes relating to stress and wellbeing in the medical internship programme from general medical literature.

2.1 NOTION OF INTERNSHIPS

Internships are practiced in a wide array of careers such as medicine, nursing, social services such as teaching and psychology, law, engineering as well as finance related careers. Internship or placement programs allows students the chance to combine theory and practice in a subject, apply theoretical concepts to a work environment, and induce new knowledge from practical activities (Garcia, 2008). Internships allow students to become responsible for their own learning. However it is necessary for professors and internship advisors to be an integral part of this process of mentoring interns effectively. Garcia (2008) notes that to ensure success during internships, a collaborative effort needs to be undertaken and that all parties need to recognise that the overarching concept of internship programs remain that they are educational, learning processes.

General research on internships covers areas such as how internships or learnerships are managed in terms of the effective delivery of a learnership programme, its outcomes and involvement of key stakeholders from the outset, role clarity and a carefully structured and monitored process of implementation (Davies & Farquharson, 2004). Since internships are utilised widely as learning tools for students to integrate academic knowledge and practice of their professions, it is important to understand which aspects of these experiences contribute to job fulfilment and learning as well as areas of dissatisfaction and stress. Such research is important to engage in as findings can assist universities, students, employers and training sites in making the developmental experience of an internship as gratifying as possible. Issa, Yussuf, Olanrewaju and Oyewole (2009) mention that because medical interns are a unique group of doctors responsible for the care of others, it is important to study aspects of

stress and coping in order to suggest better methods and thus enhance their optimal functioning.

Internships provide a context in which interns can understand the importance of applying academic knowledge in a professional setting. Internships also offer interns the opportunity to develop professional relationships by networking within a particular field and thus developing an important support structure. The comprehensive nature of the internship allows students to develop their ability to associate ideas and concepts, engage in analysis and amalgamate learning experiences (Garcia, 2008). In order to achieve this, the structure of the internship is important and Parilla and Hesser (1998) indicate that a well structured internship is necessary for optimal levels of meaningful knowledge synthesis given that the internship environment is often viewed as being foreign. This will serve as a means to guide students through the internship and encourage learning and skills development into becoming a professional doctor.

The supervisory process within an internship also constitutes an important part of the intern's learning experience. Garcia (2008) highlights the role of the supervisor as being one who guides and advises the learner, helping the learner to resolve issues or raising important questions thus the supervisor is seen as an experienced individual in the field who is able to convey knowledge, skills and attitudes necessary for becoming a professional. Through the internalization of the attitudes observed, students could follow their advisor's example and this becomes a model to be emulated (Garcia, 2008). The supervisory relationship is therefore important in ensuring a sense of accomplishment, satisfaction and motivation for the medical intern.

2.2 THE MEDICAL INTERNSHIP

Roth (1984) stated that the medical internship was first introduced as an optional form of postgraduate medical education, offering students a concentrated exposure to clinical medicine. For hospitals, internships offered a supply of relatively economical labour (Roth, 1984). According to Small, Soriano, Chietero, Quintana, Parkas & Koestler (2008) the pre-clinical years of undergraduate medical education provide educational content in a structured learning environment, whereas clerkships provide

clinical training in a more experiential manner. Fisher, Thomspson and Garcia (2007) assert that the transition from medical student to intern is a difficult one given that medical interns are required to apply learnt knowledge to "real patients" and that their level of responsibility increases exponentially. Prince, Van De Wiel, Scherpbier, Van Der Vleuten and Boshuizen (2000) use the term "professional socialization" to describe this transitional process which involves the medical students' "gradual assimilation of the values and attitudes of the medical profession". Fisher et al. (2007) indicate that during this period, interns are faced with many stressors such as long working hours, financial burdens and balancing family responsibilities with work requirements. As such, Goebert et al. (2009) note that trainees' stress during both medical school and residency training has been well documented in the general literature. However, in both the cases of physicians and medical interns, there is a dearth of literature available regarding psychological functioning and in particular with regard to medical interns in South Africa.

Internship training in medicine was first introduced in South Africa during the 1950s (Meintjes, 2003) where it was argued that such a training programme would have adverse effects on professionals lives. However the need to undergo internship training is well established today. International trends were influential in supporting the rationale for the introduction of the internship year in South Africa. The internship year would be geared towards assisting young graduates to obtain hands-on experience under supervision in 'approved' hospitals as clinical preparation for entering medical practice (Meintjes, 2003).

The previous health professions regulating body – the South African Medical and Dental Council (SAMDC) conducted research in the 1980s regarding the training of medical interns in order to evaluate the effectiveness of internship training as well as to identify possible problem areas that should receive attention when planning for the future and similar to this study but quantitative not qualitative, Brink, Slabbert and Barnes (1986) indicated that information on the activities of interns was gathered in order to gain an overall view of internship training. This information extended to subject areas chosen by interns, an analysis of the time spent by interns on their various tasks and an investigation into certain aspects of internship training such as the way in which interns were informed about their duties, responsibilities and

hospital procedures; the nature and extent of the intern's workday and the supervision and control over their work as well as the influence that the training year had on an intern's attitudes (Brink et al., 1986). Between 2000 and 2004, the Medical and Dental Professions Board of the Health Professions Council of South Africa reviewed the undergraduate curriculum in medicine and after extensive consultation and deliberations, introduced the current two-year internship programme. In 2005, research was undertaken by an independent research group consisting of doctors from training sites in Johannesburg as part of a medical student research project at the University of the Witwatersrand in order to quantitatively evaluate medical interns' experiences of the two-year internship programme after its implementation in July 2004. Much of the general literature has however focussed on the nature of the internship training rather than the actual work experience for interns on a personal level, with a minimal focus on coping and psychological aspects.

Prinsloo (2005) reports that the new internship programme includes four months each of surgery, paediatrics, obstetrics and medicine, two months each of anaesthetics, orthopaedics and orthopaedic trauma, and a four-month rotation of family practice/primary health care (PHC) with exposure to mental health. These rotations are meant to provide interns with in-service training in order to prepare them for future demands that will be placed on them within the South African healthcare system. Regarding the management of interns, Prinsloo (2005) mentions that a senior member of staff is generally assigned as an internship curator who is responsible for the administration and coordination of interns and who acts as a link between interns, institutions and the Health Professions Council of South Africa. In terms of implementation and outcomes, Prinsloo (2005) added that a joint responsibility should be undertaken with interns being responsible for their own training portfolios, that academic personnel are responsible for training and supervision, that the Department of Health oversees responsible employment and provision of posts, and that the HPCSA should ensure that the quality of training and supervision are maintained. Significantly, Prinsloo (2005) made the point that interns should not be viewed as a workforce substitute for a shortage of personnel as the main aims of the two-year internship are 'learning in practice and the improvement of overall competencies and skills' (Prinsloo, 2005, p. 3).

2.3 EXPERIENCE OF THE MEDICAL INTERNSHIP

Gome, Paltridge and Inder (2008) noted that there are many studies that assess undergraduate medical education and ongoing specialist education. However, few studies assess the experiences of interns and thus there is a limited understanding of what measures are required to assist intern development.

According to a review of literature pertaining to physicians' experiences of their internships; Daugherty et al. (1998) reported that most American physicians recalled their internship year as a valuable and exciting time as it served as a defining experience in their quest for professional competence and identity. These positive reactions appeared to be related to the fundamental skills and growth of knowledge as well as the opportunity to develop meaningful relationships in the work context. Daugherty et al. (1998) conducted a widespread national study of residency programs in the United States using a mail survey which was sent to a random sample of all second-year interns who were listed on the American Medical Association's medical research and information database. They received a 72% response rate. The objective was to provide a description of the internship year as viewed by interns and they concluded that participants reported significant problems during their internship experience, however satisfaction with the internship was enhanced by positive learning experiences and a lack of 'mistreatment' (Daugherty et al., 1998, p. 1194).

Gome et al. (2008) found that the largest source of literature pertaining to an understanding of medical interns' experiences of their internship came from the United Kingdom, with Canada and Australia soon following this trend. In 2006, the Australian Curriculum Framework (ACF) was launched to gain insight into measures that were required to assist intern development based on understandings of interns' experiences. However, Gome et al. (2008) found no published data on the assessment of subjective preparedness for the role of the intern and subsequently conducted a study on twenty-five interns based at St Vincent's Hospital in Melbourne. Self-assessed preparedness for the internship and educational experiences were evaluated using a quantitative 5-point scale and a qualitative interview. It was found that interns initially felt unprepared for some aspects of their job, particularly resuscitation and medico-legal issues however they felt adequately prepared in other domains. Interns

also related that their understanding of the intern's role was better understood than initially anticipated and they expressed that undergraduate medical courses prepared them well for their role as an intern. The manner of communicating with consultants and families was however perceived to be deficient (Gome et al., 2008). While this study adequately assessed the subjective preparedness of medical interns, it did not address the medical intern's ability to deal with the stresses of being an intern. This study thus looks at one aspect of intern development and further studies are necessary to provide a holistic account of medical interns' experiences of the medical internship.

Within a South African research context, there have been few studies conducted to assess medical interns' experiences of their internship. Brink et al. (1986) found that interns' patient records had little value owing to poor control and absence of feedback by supervisory staff. This was further complicated by complaints of inadequate learning opportunities as regular teaching was rare and that the total intern experience offered an explanation as to why young doctors take on their new responsibilities with enthusiasm but gradually become disillusioned during their internship and with their profession of choice. In a 2005 study, medical interns from Chris Hani Baragwanath Hospital, Charlotte Maxeke Hospital (previously known as Johannesburg General Hospital) and the Helen Joseph/Rahima Moosa Mother and Child Hospital Complex (the latter previously known as Coronation Hospital) were requested to complete an anonymous, self-administered, confidential questionnaire that assessed various aspects of their internship year. A total of 136 interns employed at the three hospitals were randomly selected and there was a 62% response rate. Sun, Saloojee, Jansen van Rensburg and Manning (2008) reported that 40% rated the internship as being 'significantly' or 'overwhelmingly' stressful due to a variety of stressors. Most interns were happy with the overall quality of teaching however, they expressed that the quantity of teaching exposure was very poor (Sun et al., 2008).

Another study was conducted in 2007 in regional hospitals in the Western Cape in order to assess medical intern's perceptions of skills training both at undergraduate level and during the intern year. Focus groups were held with 25 interns and Jaschinski and De Villiers (2008) reported that the majority of the participants found that their training at medical school prepared them adequately for the intern year. However, an obstacle to skills training at university emerged in that tertiary the hospital focussed on rare diseases and interns expressed their concern regarding a lack

of opportunities for hands-on experience. It was further reported that interns remarked on having a high level of responsibilities, however they accepted these additional responsibilities as part of the learning process and hence a sense of confidence was expressed.

There is a lack of research in other parts of the country. Such studies are important in understanding medical interns' experiences as they would enable medical schools and internship sites to ease the transition into the medical profession and thus enhance intern's experience of their internship.

2.4 STRESS AND WELLBEING IN THE MEDICAL INTERNSHIP

Manning, Jackson and Fusilier (1996) stated that stressful events have been deemed important in job stress literature for some time and that numerous studies have reported relationships between stressful work events and outcomes such as perceived stress and strain. Stress and stress-related illnesses are increasing among medical specialists (Visser, Smets, Oort & de Haes, 2007). Weiner, Swain, Wolf and Gottlieb (2001) argue that studies exploring physician functioning in the general medical literature have focused predominantly on negative behavioural indices such as divorce, suicide, mental and physical illness, marital dysfunction, drug and alcohol use, and burnout while few have assessed physician wellbeing.

The medical internship is an important period in the training of doctors as they engage in clinical practice, and excessive job stress can interfere with efficient learning as well as compromise the ability of young doctors to deliver effective patient care (Shanafelt, Bradley, Wipf & Back, 2002). As reported by researchers of the Royal College of Psychiatrists (2003) levels of distress amongst medical students increase progressively during the course of medical studies. Issa et al. (2009) further note that while a reasonable level of stress is not harmful and some stress is necessary for motivation, a high perceived level of stress is dangerous given the severity of the impact such as reduced concentration and attention and higher cognitive impairment that interns cannot afford to lose. Levey (2001) indicates that there are well-documented reports of stress during the medical internship in broader literature and Estabrook (2008) concurs with the general literature that medical school is a highly

stressful experience for students as reflected by the increased incidence of mental illness, suicide, substance abuse and burnout. Common stressors identified by Levey (2001) include those of heavy work-loads, sleep deprivation, difficulty with patients, poor learning environments, relocation issues, isolation and social problems, financial concerns, cultural and minority issues, information overload and career planning issues. It is necessary to research interns' experiences of the internship, with a focus on both stress factors and coping techniques to gain a thorough understanding of the internship in order to identify ways to improve and maintain medical intern wellbeing.

Between 2002 and 2003 Rosen, Gimotty and Bellini (2006) conducted a study to explore the relationships between sleep deprivation and the evolution of mood disturbances, empathy and burnout among a cohort of 47 interns in the internal medicine resident program at the University Of Pennsylvania School Of Medicine. They completed a number of instruments at the beginning and end of the year. These included sleep quantities, the Epworth Sleepiness Scale, the Beck Depression Inventory - Short Form, the Interpersonal Reactivity Index, and the Maslach Burnout Inventory - Human Services Survey. Results from this study indicated that there was a correlation between becoming chronically sleep-deprived and becoming depressed as the prevalence of chronic sleep deprivation, depression, and burnout increased, while levels of intern's empathy decreased during the year (Rosen et al., 2006).

Visser et al. (2007) conducted a study on stress, satisfaction and burnout among Dutch medical specialists and they investigated (a) levels of job stress and job satisfaction among medical specialists, (b) factors contributing to stress and satisfaction and (c) the effect of stress and satisfaction on burnout. A questionnaire was mailed to a random sample of 2400 Dutch medical specialists with a response rate of 63%. Of the respondents, 55% acknowledged high levels of stress and 81% reported high job satisfaction. Perceived working conditions were more important in explaining higher or lower stress levels while personal and professional expectations led to the most stress (Visser et al., 2007). When interns felt poorly managed and under-resourced, this led to a diminished job satisfaction.

In Kenya, a study was conducted by Raviola, Machoki, Mwaikambo and Good (2002) on stress amongst medical interns in a public hospital in Nairobi. The contexts in

which these interns operate in were highlighted as being challenging given a significant lack of resources and high numbers of HIV and Aids amongst patients (Raviola et al., 2002). The researchers administered a questionnaire and semi-structured interview to fifty interns in four medical specialties which examined social and emotional supports, personal and professional sources of stress, emotional numbing and disengagement from patients and peers, as well as symptoms of post-traumatic stress and depression. Raviola et al. (2002) identified factors affecting intern's wellbeing as complex, ranging from high personal expectations, low self-worth and poor communication in the work environment to a decreased sense of empathy for patients and themselves.

Issa et al. (2009) conducted a study in 2007 to describe the stress of residency training as perceived by resident doctors at a Nigerian University Teaching Hospital. They administered a structured questionnaire to seventy-three of the ninety-eight residents who met the inclusion criteria for the study. Issa et al. (2009) report that while 94.5% of interns perceived their internship program to be stressful, only 3% perceived their ability to handle stress as poor. Stress factors found in this study were similar to the general literature, with sleep deprivation and high work loads perceived as being the most stressful factors however, concerns regarding training facilities, adequacy of training and remuneration were also raised (Issa et al., 2009).

Studies (Brink et al., 1986; Jaschinski & De Villiers, 2008; Sun et al., 2008) conducted on South African doctors have yielded a range of both positive and negative responses regarding their experience of the medical internship. Recent research documented that levels of psychological distress remain high among interns in Johannesburg, despite recent initiatives to improve the work environment (Sun et al., 2008). Although South Africa has undergone political transformation, the policies and goals have not changed much as Sun et al. (2008) found that difficult working conditions, in particular long work hours and heavy workloads are still the defining features of the internship and these were predictably identified as the most important stressors. Sun et al. (2008) highlighted that HIV and Aids imposes a substantial toll on interns, both physically and psychologically while the high number of occupational exposures remains disturbing. A further significant finding of Sun et al. (2008) was that access to and provision of post-exposure prophylaxis was deemed 'satisfactory'

to 'good' by 70% of the sample, while availability of psychological support was considered to be 'poor' or 'very poor'. This is indicative of the lack of interest in the psychological wellbeing of interns given the lack of opportunities for interns to seek support services from their worksites. Roberts, Warner and Trumpower (2000) suggested that open discussions about personal health issues in the formal curriculum may help to alleviate students' fears and minimize the psychological barriers that impede medical 'student-patient's' ability to obtain optimal care, as studies have found that students' perceptions of health phenomena such as depression, substance abuse and HIV testing suggest that these fears and barriers may be significant and well founded. Through such processes, the medical internship would be able to offer a more meaningful learning experience rather than a 'fight for survival' in the profession. Physician health and the value of high-quality self-care should thus be a focus of medical student education (Roberts et al., 2008).

From the above discussion, it is evident that many factors cause stress during medical internships and disturbingly, burnout is fast becoming more prevalent amongst health professionals, including medical interns. Prins, Gazendam-Donofrio, Tubben, van der Heijden, van de Wiel and Hoekstra-Weebers (2007) relate that burnout has been described as a prolonged response to chronic emotional and interpersonal stressors on the job. Maslach and Jackson (1981) defined the concept of 'burnout' in terms of three dimensions: emotional exhaustion (a depletion of emotional resources), depersonalisation (the development of negative, cynical attitudes and feelings towards one's job and clients) and a lack of feelings of personal accomplishment. Prins et al. (2007) conducted a critical review of literature on burnout in residents and established that research conducted in this area has been scarce, which is surprising given that medical interns are relatively young and work in a demanding work environment characterised by unfavourable working hours, high patient loads, being highly dependent on the supervisor and having high levels of responsibility but low levels of autonomy as well as demanding home situations (Geurts, Rutte & Peeters, 1999). Prins et al. (2007) report that the causes of burnout are specifically related to the work context however, individual factors have also been shown to affect the level of burnout. Furthermore, the majority of studies have utilised quantitative research designs, with few incorporating a qualitative research design (Prins et al., 2007)

which is important in order to gain a more comprehensive understanding of this phenomenon.

Embriaco, Azoulay, Barrau, Kentish, Pochard, Loundou, and Papazian (2007) using the above definition of burnout, assessed that burnout could affect the quality of patient care in medical work settings. In a study conducted by Shanafelt, Bradley, Wipf and Back (2002) to determine the prevalence of burnout in medical residents and exploring its relationship to self-reported patient care practices; of the 115 responding residents, 76% met the criteria for burnout and when compared with non-burnt-out residents, burnt-out residents were significantly more likely to self-report providing at least one type of sub-optimal patient care at least monthly. A study conducted by Purdy, Lemkau, Rafferty and Rudisill (1987) revealed that there was a positive relationship between those experiencing a more intense need to distance themselves from their patients and becoming more burnt out.

Peltzer, Mashego and Mabebe (2003) conducted a postal survey on 402 South African medical practitioners out of 1200, to identify job stress and burnout symptoms using the Job Stress Survey (JSS) and Maslach Burnout Inventory (MBI). Results showed that the overall job stress was high among the doctors, with high levels of burnout (emotional exhaustion and depersonalization) being prevalent (Peltzer et al., 2003). Peltzer et al. (2003) reported that job stress predicted emotional exhaustion and depersonalization but not personal accomplishment while an interesting gender difference indicated that emotional exhaustion was associated with female doctors and personal accomplishment was significantly related to male doctors. While this study assessed burnout in medical practitioners, there is a dearth of local literature regarding burnout in medical interns.

Interestingly, Bakker, Demerouti and Euwema (2005) found in their study among 1,000 employees of a large institute for higher education that work overload, among other stressors, did not result in high levels of burnout if employees experienced autonomy, received feedback, had social support, or had a high-quality relationship with their supervisor. Estabrook (2008) suggested that early action to promote healthy students could result in healthier doctors and as such, benefit patients through better physician patient care practices. The findings from this study thus serve as a means for improving medical intern resources by maintaining and promoting their wellbeing.

Professional relationships

An often neglected but important aspect of the medical internship deals with the relationships between interns and superiors as well as between interns and other colleagues such as fellow interns and nursing staff.

Willcock, Daly, Tennant and Allard (2004) contend that the internship year has historically been seen as a 'trial of spirit and stamina' as well as a 'primary initiation rite' representing an initiation into a challenging career where a stoic work ethic is the dominant culture and personal needs are secondary to the needs of both patients and employers. Michels, Probst, Godenick and Palesch (2003) similarly note that the belittling of residents may be an accepted salutary rite of passage. This attitude becomes problematic in the healthcare profession where medical students seek positive appraisal and feedback from supervisors to the extent of neglecting personal health and wellbeing. Lack and Cartmill (2005) hence refer to the important role that seniors can play in influencing the intern's experience, in that interns work under supervisors who are usually registrars and given the degree of contact between them, behavioural characteristics of registrars have the potential to affect the quality of interns' clinical training and experience as a whole. Furthermore, interns' exposure to registrars as role models may have significant consequences for their own effectiveness as future supervisors (Lack & Cartmill, 2005). Depending on the nature of relationships with superiors and level of support obtained from them; such circumstances can potentially weaken or enhance a sense of personal growth which, according to Levine et al. (2006) is a critical component of one's psychological wellbeing. More recent studies have not adequately assessed the supervisor-intern relationship and thus research remains scarce in this area.

In terms of other important relationships that need to be nurtured, the doctor-nurse relationship has often been neglected, especially in the South African context and this is evidenced by the lack of literature in examining such working relationships. This relationship would appear to be highly important in the context of medical internships as medical interns and nursing staff attend to patients as a first port of call. In a study conducted by Rosenstein (2002), an analysis of 1,200 responses from nurses, physicians and hospital executives revealed that daily interactions between nurses and physicians strongly influence nurses' morale and respondents expressed concern with the significance of nurse-physician relationships and the atmosphere that they created.

Sutcliffe, Lewton and Rosenthal (2004) declare that patient management involves complex investigation and coordination of care by a myriad of medical specialists since clinical medical practice necessitates that critical information be effectively communicated. Sutcliffe et al. (2004) theorised in this regard that complex systems are made up of individuals at different hierarchical levels who must constantly interrelate as such structures exude a powerful influence on whether and how critical information is effectively communicated. Thus, the cases of communication failures are complex and relate to hierarchical differences, concerns with upward influence, conflicting roles and role ambiguity as well as interpersonal power and conflict (Sutcliffe et al., 2004). In the context of medical settings, Sutcliffe et al. (2004) assert that a clearer understanding of these dynamics is needed to highlight the possibility for appropriate interventions in medical education and in health care organisations in order to improve patient care. It is also important to consider such relations and communications as the effect on the working environment can be damaging.

In the recent study conducted by Sun et al. (2008), it was found that South African interns rated the performance of their fellow interns positively and were content with nursing staff. Furthermore, despite prolonged working hours and the additional demands that HIV and Aids imposed, more interns in this study (91%) than the cohort of 1986 (66%) claimed to be coping with their internship. Sun et al. (2008) assert that this should reassure South African universities that their programmes are better preparing graduates for the rigours and demands of internship.

With regards to the previous internship programme in South Africa, Meintjes (2003) noted that critical questions were asked about whether or not the original goals of internship training were being achieved, and it is important that these questions are followed through to evaluate the present medical internship programme with a strong emphasis on the overall experience of internship including aspects such as personal growth and job satisfaction and not solely on training imperatives to be achieved. A holistic view of the medical intern within the public health system will hopefully ensure better outcomes in terms of service delivery and patient-care, as well as higher levels of job satisfaction amongst interns.

Medical intern wellbeing

In terms of physician wellbeing, Weiner et al. (2001) highlighted that there is little information delineating specific wellness practices amongst physicians that promote successful life adjustment. Levey (2001) suggested that good mental health is necessary for the development and maintenance of gratifying qualities of medical professionalism. These include compassion and empathy for patients, altruism, and dedication to the rigorous aspects of medicine. Levey (2001) reflected that medical student wellbeing represents a critical aspect of medical training given that it is a precursor to becoming a physician. Dunn, Hammond and Roberts (2009) therefore found a disconcerting result regarding intern care-seeking practices when conducting a study between 2001 and 2002 on 155 of 217 residents from the Health Sciences Center at the University of New Mexico. Residents were surveyed regarding avoidance or postponement of obtaining necessary health care and perceptions of jeopardy to their training status if a supervisor learned of a specific condition (Dunn et al., 2009). It was concluded that residents at times postponed or avoided seeking care while time and scheduling difficulties influenced the ability to obtain care (Dunn et al., 2009). It is critical that such attitudes are explored and unpacked as doctor and patient safety as well as patient care becomes compromised. There is a dearth of research examining these aspects in a local context.

In terms of coping techniques and wellness practices employed by medical interns, many gaps exist in the literature on medical student wellness (Estabrook, 2008) and significantly more research is needed to further define and measure wellness (Eckleberry-Hunt, Lick, Boura, Hunt, Balasubramaniam, Mulhem & Fisher, 2009).

Weiner et al. (2001) conducted a qualitative study to delineate specific practices that physicians use to promote their own well-being. The researchers mailed an 8-page survey to all 614 members of the Wisconsin Research Network (WReN) with a medical degree. Of the 614 members, 130 participants responded to an open-ended survey item regarding personal wellness-promotion practices (Weiner et al., 2001). Five themes were derived from a thematic content analysis of these responses and these included "relationships," "religion or spirituality," "self-care," "work," and "approaches to life" (Weiner et al., 2001, p. 19). To elaborate, "relationships" included spending time with family, friends, colleagues or other community

involvement; religion or spirituality" included praying, Bible reading, attending church services, and being involved in church activities; "self-care" included wellness-promotion practices such as reading, good nutrition intake, avoiding use of substances such as alcohol or drugs, getting professional counselling and engaging in various self-care activities such as taking vacations, aerobic exercise, hobbies and meditation; "work" referred to choosing a certain type of medical practice, limiting one's practice and deriving satisfaction and/or meaning from one's work; and finally "approaches to life" entailed general philosophical outlooks such as being positive, focusing on success and maintaining a balance in life (Weiner et al., 2009).

Engel, Rosenthal and Sutcliffe (2006) conducted a similar study to Weiner et al. (2003) in terms of identifying coping practices; however they used a sample of medical residents and limited their study within a setting of medical mishaps. Engel et al. (2006) reported that residents identified several different strategies for coping with emotions that they experienced in response to medical errors; of these the most common coping mechanism was talking with either medical colleagues or family members. Research however remains scarce in identifying coping mechanisms used by medical interns during their internship.

In a local context, Sun et al. (2008) found that medical intern's primary means of relieving their stress was through taking vacations and having the support of family and friends. They also found that alcohol use was relatively widespread but it ranked low as a stress reliever and the consumption of cigarettes and drugs as stress relief mechanisms was infrequent. There still remains little insight into specific coping mechanisms employed by South African interns during their internship and a significant lack of qualitative research in this area.

There is also lack of clarification around what support structures are currently in place for medical interns in academic training hospitals. Sun et al. (2008) points to the lack of psychological support networks for interns. Establishing a good relationship with registrars was measured in terms of academic support gained rather than the level of psychosocial support provided (Sun et al., 2008). According to Levine et al. (2006), in a recent study of physicians' emotional reactions to patient death, interns reported the

greatest need for emotional support in comparison with attending physicians and residents. This shows the need to support interns at an emotional level.

Personal Growth

The importance of personal and professional development in medical education is widely recognised (Gordon, 2003). Kern, Wright, Carrese, Lipkin, Simmons, Novack, Kalet and Frankel (2001) noted that it has been well cited that physicians' conscious and unconscious attitudes, beliefs, previous life experiences, emotions, and psychological and cultural background influence their care of patients and by being aware of and being able to manage these factors, physicians can better serve the needs of both patients and themselves. A lack of personal awareness in doctors may therefore adversely affect patient care and given the critical role of interns in caring for patients, it is important to encourage the process of personal growth in an internship programme.

There is a large gap in local literature assessing the personal growth of interns after the internship experience. Levine et al. (2006) defines personal growth as being conscious of one's thoughts, feelings, prejudices and judgments, and using this personal knowledge to act with mindfulness and in greater accordance with personal values and potential. A conceptual model was designed by Levine et al. (2006) to describe the process of personal growth of interns in terms of "triggers" and "facilitators". "Triggers" refer to emotionally intense experiences that create opportunities for growth by challenging or emphasising interns' beliefs, attitudes or actions; and when support, reflection and a consideration of core values occurs in association with a powerful emotional trigger, then a greater level of personal awareness is fostered and personal growth is more likely to occur (Levine et al., 2006). Conversely, if the same triggers manifest themselves at a time when barriers outweigh facilitators, the potential for personal growth is less (Levine et al., 2006).

In their study, Levine et al. (2006) found that triggers for intern personal growth included caring for critically ill or dying patients, receiving feedback, witnessing unprofessional behavior, experiencing personal problems and dealing with the increased responsibility of internship; while facilitators of personal growth included supportive relationships, reflection and commitment to core values. Fatigue, a lack of

personal time and overwhelming work were barriers to personal growth. The balance between facilitators and barriers may dictate the extent to which personal growth occurs (Levine et al., 2006). It is thus important for supervisors and medical schools to emphasise a holistic approach to the medical internship by also emphasising personal growth and providing interns with necessary support and feedback to facilitate this. In advancing the personal growth of students, it was suggested by researchers of the Royal College of Psychiatrists (2003) that students should be helped to identify their interests, strengths, weaknesses and personal circumstances so that they can consider job and career options that will be more personally appropriate and fulfilling. Levine et al. (2006) concluded that physicians who are more reflective in their practice of medicine may provide more compassionate, effective, patient-centered care and they may be more satisfied with their work and personal lives.

Sun et al. (2008) suggested that a demonstrably more humane and caring attitude towards junior staff should be an important performance indicator for senior doctors, hospital administrators and clinical units hoping to entice junior staff to stay on after their internship and community service year. It is essential to prioritise improvements in both learning and supportive environments, as well as offering reflective opportunities which may offer the best prospects for reducing stress, creating enthusiasm for learning, encouraging compassion for patients and promoting future well-being (Sun et al., 2008). Finally, Roberts et al. (2008) suggest that data regarding medical student healthcare issues may inform medical school policy, thereby providing better supportive opportunities for medical students and interns.

2.5 STRESS AND COPING MODELS

The 'job demands-resources model' (JD-R) proposed by Bakker and Demerouti (2007) may be useful in understanding the impact of stress on interns and wellbeing. They suggest that at its core lies the assumption that whereas every occupation may have its own specific risk factors associated with job stress, these factors can be classified into two general categories namely 'job demands' and 'job resources', thus constituting an overarching model that may be applied to various occupational settings. Bakker and

Demerouti (2007) define 'job demands' as physical, psychological, social or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills. These are therefore associated with certain physiological and/or psychological costs such as high work pressure, poor working environments and emotionally demanding interactions with clients (Bakker & Demerouti, 2007). They further define 'job resources' in terms of physical, psychological, social or organizational aspects of the job that are either functional in achieving work goals, reduce job demands and stimulate personal growth, learning, and development (Bakker & Demerouti, 2007). This model aptly fits the working conditions of medical interns given that interactions between job demands and resources is important for the development of job strain and motivation. An important validator of the JD-R model is that job resources particularly influence motivation or work engagement when job demands are high. Psychologically speaking, different processes may have been responsible for these interaction effects (Bakker & Demerouti, 2007) and regarding wellbeing and coping mechanisms among medical interns in this study, similar results can be expected.

Dunn, Iglewicz and Moutier (2008) proposed a conceptual model of medical student wellbeing known as the "coping reservoir" in which an array of inputs, both positive (filling or replenishing the reservoir) and negative (draining the reservoir), combined with the structure of the reservoir itself can lead to positive or negative outcomes, including resilience and enhanced mental health, or burnout and cynicism. Dunn et al. (2008) explain that the internal structure of the reservoir refers to students' personal traits, temperament and coping style, which either replenish or drain the reservoir depending on the use of adaptive or maladaptive coping strategies. While negative inputs have been identified as stress, internal conflict, time and energy demands (Dunn et al, 2008), currently it is important to identify replenishing factors and determine how the reservoir becomes replenished in medical interns.

In summary, this chapter reviewed literature regarding medical intern's experiences of their internship, identified stress factors and engaged with aspects of coping and support for interns with specific reference to medical internships in South Africa. It has thus provided a context in which to understand what medical internships entail and provided insight into medical interns' experiences of the medical internship

process. It has been identified from this literature review that there is a paucity of national research into the above aspects, specifically from the framework of a qualitative research design.

CHAPTER THREE: RESEARCH METHODS

It is imperative that South African interns' voices are heard given their crucial role within the public health system in the country. As this study aimed to gain insight into the two-year medical internship by exploring post-medical interns' experiences of their internship; the researcher believed that the nature and richness of these experiences would best be accessed by utilising research methods in line with these aims. This chapter will outline various aspects of the research process as it was engaged with from the outset to deriving the themes in relation to the research questions. As such it will cover areas relating to the research design, description and selection of participants, data gathering procedure, data analysis as well as the ethical considerations pertaining to this study.

3.1 RESEARCH DESIGN

The nature of this study was exploratory and adhered to an interpretive paradigm. Charmaz (1996) believes that interpretive research seeks to describe, explain and understand the lived experience of a group of people and developing this understanding from the inside. As the participants were post-medical interns having undergone the entire process personally, their reflections have provided a thorough understanding of the 'lived experience' and thus generated understanding from the inside.

A qualitative research design was used in this research endeavour. Terre Blanche and Durrheim (1999) declare that qualitative research is more commonly used to inductively explore phenomena and provide 'thick' descriptions thereof. The focus in this study was to therefore gain insight into each participant's experiences, identifying common themes or emerging patterns. Kelly (1999a) views qualitative methodology as an interpretive turn which sees it shifting towards contextual research which is less concerned with unearthing universal law like patterns of human behaviour and instead

more concerned with making sense of human experience from within the context and perspective of human experience. Kelly (1999a) also indicates that this form of research methodology is gaining acceptance in social science research, suggesting that there is validity to research findings of the qualitative methodology. Within the context of this study, using a qualitative methodology within an interpretative paradigm helped to unpack areas relating to stress and wellbeing during the two-year medical internship thus enabling a more nuanced study.

3.2 RESEARCH QUESTIONS

- How did post-medical interns experience the medical internship programme?
- What are the sources of stress during the medical internship programme?
- What coping mechanisms were employed by post-medical interns to deal with psychological distress during the internship programme?

3.3 PARTICIPANTS

The participants selected for this study were from the population of professionals working in the public health sector in South Africa. Participant criterion included the recent completion of the two-year medical internship programme in one of the three major academic training hospitals within the Johannesburg area in the Gauteng Province, South Africa. Thus participation entailed having completed the medical internship up to a maximum of eight months in order to allow for experiences to be more accurately reflected as opposed to a lengthier time, after which it is assumed that the responses thereof would have reduced the quality of the data. The study consisted of ten participants - five male and five female doctors who completed their internship programme at one of the three state academic hospitals in Johannesburg, South Africa; this being the Chris Hani Baragwanath Hospital, the Charlotte Maxeke Johannesburg Academic Hospital (formerly Johannesburg General Hospital) and the joint unit of the Helen Joseph Hospital and Rahima Moosa Mother and Child Hospital (formerly Coronation Hospital) as training conditions were similar. A purposive sampling strategy was thus employed as the researcher intentionally selected participants in line with the research aims. In the actual recruitment of participants, the strategy of snowball sampling was employed. Gray, Williamson, Karp and

Dalphin (2007) suggest that this strategy is helpful when access to appropriate subjects for interviewing and observation is difficult; and in initiating a snowball sampling plan, one might locate an individual with the needed characteristics and ask that person whether they know of another person who might be interested in participation.

3.4 DATA GATHERING PROCEDURE

The instrument utilised in the data-gathering procedure of this study was compiled by the researcher in the form of a semi-structured interview (Appendix E). The advantage of this type of interview is that it allows the researcher to adapt the questions to each participant however the researcher should remain cautious of leading the participant and thus affecting the validity of the research (Whitley, 2002). After obtaining contact details of potential participants, personal phone calls were made to each of the post-medical interns by the researcher who invited them to participate in the study. The researcher informed them of the study and set up an interview time with those who conveyed interest. Before the interview commenced, participants were briefed once more regarding the research area and interview procedure. Participants were requested to sign the consent form and were provided with a participant information sheet containing further information. Face-to-face interviews were conducted at a location of their choice, such as participants' homes or workplaces at a time which suited both the participant and the researcher. The interview lasted approximately forty-five minutes. While care was taken in ensuring a setting that was both conducive to interviewing purposes and comfortable for the participant; it must be noted that interviews that took place in hospital settings were at times disrupted by other staff members, thus it became difficult to locate a place conducive for recording purposes. It was important for the researcher to create a favourable impression in order for participants to feel comfortable in engaging in the research process, thus the researcher respected time constraints and attempted to be flexible to suit interview conditions. The researcher also took care to create an environment that was comfortable for participants to share their experiences and feelings. During interviews, the researcher conveyed an interest in the participants' experiences by remaining attuned to both verbal and non-verbal cues as well as utilising open-ended questions where possible in order for participants to elaborate on

their experience; however at times more direct questions were asked in order to clarify what had been shared. All interviews were conducted in English and recorded for accuracy. The interviews were transcribed verbatim by the researcher. Transcribed interviews were stored and utilised for analysis, interpretation and for accuracy. This information will be destroyed or retained by the University of the Witwatersrand for safe-keeping once it has served the purposes of this study.

3.5 DATA ANALYSIS

The transcribed interviews were analysed using a thematic content analysis method. Braun and Clarke (2006) note that this is a method for identifying, analysing and reporting patterns (themes) within data. A thematic content analysis is concerned with the systematic coding of data gathered during the data collection phase, resulting in an identification of core themes which are present within the data. According to Braun and Clarke (2006), a theme encapsulates significant aspects of the data in relation to the research question and it reflects some degree of shared meaning across the data gathered. In order to execute the data analysis process, the researcher took the role of the primary interpretative instrument by drawing on the subjective interpretations of participants while considering the scientific principles guiding the systematic coding process. The thematic content analysis method was employed to analyse the entire body of transcripts with the expectation that the results yielded was a description of the most salient themes and patterns emerging from the data.

The process of carrying out a thematic content analysis is laborious, with the analysis occurring over a number of phases. The steps outlining the data analysis process involved a number of phases as adapted from Braun & Clarke (2006). In order to familiarise herself with the data, the researcher transcribed the ten interviews herself, signalling the beginning of the data analysis process by which she was able to become immersed in the data. Interviews were transcribed verbatim in order for the researcher to be able to use direct quotations as part of the writing up as well as for accuracy in identifying themes. The researcher read through the transcribed data several times while noting initial ideas that emerged from each of the texts, hence these initial ideas were influenced to a certain extent by the research questions posed as well as literature in the field. The researcher thus made use of a deductive or 'top down'

approach (Braun & Clarke, 2006). Following this phase, the researcher generated a coding system based on the repetition of patterns or themes that emerged from the analysis of the data set by highlighting interesting features across the data set. Thus, a bottom-up approach was employed as categories were derived from the data itself. For example, categories from the data included *family support*, *spiritual motivation*, *exercising* and so forth. In searching for themes within the data set, codes were collated and placed in a separate document as potential themes while data was gathered relevant to each theme. An initial thematic map was hence designed to show the main themes which emerged, for instance the above categories were condensed under a theme of '*coping and support*'. These themes were then reviewed by reading the collated extracts in order to assess the relevance to each theme. These themes were further refined through ongoing analysis in order to establish the final themes and these themes were then given clear titles. Finally, the researcher selected some of the most vivid and compelling extracts which were used in the interpretation in relation to the research questions and literature.

3.6 ETHICAL CONSIDERATIONS

Ethical approval for the study was obtained from the ethics committee at the University of the Witwatersrand. The ethical issues of informed consent, confidentiality, anonymity and voluntary participation were considered. All participants were informed of the purpose of this research, procedure of data collection and consequence of participation prior to data collection. Participants received detailed participant information sheets (Appendix B (1)) concerning the purpose of the study and data gathering procedure. They were informed of entering into the study voluntarily with an assurance that they were free to withdraw at any time without being disadvantaged in any way. Participation was thus voluntary and the process entailed participants signing consent forms to be interviewed, recorded as well as consenting to the inclusion of direct quotations in the write-up of this report. To ensure anonymity, no identifying information was included and participants were encouraged to use pseudonyms. The researcher transcribed all interviews personally and altered any references made to participants in the report. To ensure confidentiality, all data collected was not disclosed to any person other than within the supervisory process. The recorded interviews and transcripts are safely kept by the

researcher. Once it has served the purposes of this research, the data will be destroyed. Participants were provided with contact details for relevant counselling services (Appendix B (2)) should any undue distress arise after participation, however it was considered unlikely that the study would pose a potential risk to participants.

CHAPTER FOUR: RESULTS

This section presents the results which were derived from the thematic content analysis of the interview transcripts. Several direct quotes have been included in order to substantiate and represent the themes and general findings that have emerged from the data analysis. The first research question related to how medical interns experienced the two-year medical internship in state training hospitals. One theme emerged with regards to this question, in terms of the subjective experience of the internship which uncovered aspects of subjective preparedness and the overall experience of the internship. The second research question aimed to explore sources of stress in the medical internship. Various sources and contributing factors of stress were found in this regard, with the impact of these stressors being important to highlight. The third research question aimed to explore what coping mechanisms were employed by post-medical interns to deal with stress during their internship. Two themes emerged with regards to this question: the first theme related to adaptive and maladaptive coping mechanisms, and the second theme related to personal growth. These two themes will be discussed under one overarching theme.

4.1 SUBJECTIVE EXPERIENCE OF THE MEDICAL INTERNSHIP

This study aimed to gain insight into the medical internship as experienced by medical interns. Thus an important theme emerged relating to the subjective emotional experiences of medical interns during the medical internship. Participants expressed both positive and negative sentiments regarding their experience of the two-year medical internship. While the medical internship was experienced as being challenging and stressful, there were also some rewarding elements.

In this context, it is important to distinguish what interns describe as being challenging and stressful. The experience of the internship as being challenging refers

to the actual job mandate of interns and excludes the effect of external influences. For instance, this included the complex nature of medical practice, fast-paced critical decision-making processes and the emotional experience that an intern goes through. Stress in this context refers to the negative physical and emotional strain that interns may experience due to unreasonable working conditions. The following example is provided in order to distinguish between the two terms: Having to work long hours was experienced as being challenging up to a certain point, however when working hours exceeded this point, such as undertaking twenty-four hour calls, interns experienced this as being stressful.

The extended duration of the internship was experienced as being particularly challenging in terms of prolonged exposure to the stressful nature of the internship, which was described as being both physically and emotionally taxing. The inherent complexities associated with carrying out medical duties, as well as each new learning curve associated with added rotations in the medical internship appeared to further lend to a preference towards the previous one-year internship. Some participants indicated that the stress associated with the current medical internship was unbearable over a two-year period. Furthermore, these participants were of the opinion that if one were to specialise in future, the foundational learning phase would have to be covered again. The following participant therefore said with some frustration:

"I think two years sucks, I think two years should be scrapped and we should go back to one year" – Participant T, F [HJ/RM]

The majority of participants however indicated that despite an initial reluctance to work for two years as an intern, there was a justification in terms of rewarding elements such as the training experience that one obtains due to being exposed to a variety of disciplines; for instance anaesthetics and paediatrics. Such gains however appeared to be at the expense of interns' physical and emotional wellbeing.

"I think the two year program, although its longer, you come out of it more drained than the one year program – but because you rotate through all of the faculties and that you get really good training and that so I think its good" – Participant S, F [Bara]

The extended internship was also associated with gaining a more enriching experience in terms of medical practice as many participants indicated that they were afforded the opportunity to hone in on skills, and enhance their expertise in various fields of

medical practice. These participants further alluded to the disadvantageous nature of the one-year internship, stating that it had offered a limited exposure to various disciplines and thereby limited future career options. Thus it was expressed by these participants that they had benefitted more from the two-year internship than interns who completed the one-year internship as a result of having received foundational training in a wide array of specialities. A sense of achievement was also expressed at having completed the two-year training.

"Now that you're rotating through all the departments over a period of two years - which a lot of people will criticize - to me that is an amazing thing because you...actually rotate through most of the departments so you get a foundation build-on in all the departments and not just like in three in the previous one-year internship programme; If I just had a year of internship...I wouldn't have benefitted that much" – Participant S, M [CM/Gen]

Having rotated through many medical specialities in the two-year internship, the majority of participants said that such exposure facilitated decision-making processes regarding future specialities and career opportunities; thus serving as a justification for the extended internship period.

"I think it helps you decide what to do further in your career because you're rotating through almost everything" – Participant T, F [HJ/RM]

In terms of preparation to undertake the internship, the majority of participants said that they had been unprepared both at a level of training and psychologically. Thus, not being adequately prepared to undertake the internship posed a significant challenge to some participants. Several participants indicated that they had felt sufficiently prepared in terms of the academic knowledge that they had acquired from medical school, however they noted that there was a significant disjuncture between the theoretical knowledge gained and practical competencies which were required as an intern. One participant argued that medical schools did not teach medicine that was contextually based, implying that medical school curriculums need to be constantly reviewed in light of what the South African doctor needs to know in practice.

"There's a huge jump from sixth year and internship. I think six years of medical school doesn't even prepare you...and emotionally you're not ready. I think knowledge-wise it was good but it just lacked on the practical side" – Participant N, F [CMH]

Psychological preparation was said to have been minimal as participants related that although they had received tutorials on matters such as breaking bad news and

exposure to infectious illnesses; it had been engaged with at a very practical level as opposed to an emotional or psychological level. They had expressed the need for an emotional outlet as they had encountered such scenarios early in their internship without sufficient knowledge of how to deal with such situations which affected them. By viewing this process in terms of being mechanical, participants alluded to the general trend of medical professionals to disengage with emotional aspects of their jobs, and to focus instead on practical aspects. This mindset appeared to have extended to the way interns engaged with emotional aspects of the internship.

"...there was like one tut in med micro somewhere on exposure; it wasn't really from an emotional point of view. It was all very mechanical" – Participant N, F [CMH].

A few participants related that perceptions of the field of medicine as a whole appear to be misleading, especially in light of the psychological impact; and that a more realistic portrayal of medicine as it is practiced in South Africa may inform students more thoroughly and hence better prepare them for the medical internship and future endeavours within the field.

"Psychologically I wasn't prepared. It was really like being thrown into the deep end. I think I may have had this glorified understanding of internship and what it really meant to be a doctor, I didn't really understand it until you're there alone at night and you see you can't cope and you have to do the best you can" – Participant I, F [HJ/RM]

"You know when people watch E. R., they watch Grey's Anatomy – you know it all seems very nice you know, these people look smart and you know its hectic but they seem like they're loving their jobs and all but what you don't really know...you're not in touch with the psychological aspects" – Participant A, M [HJ/RM]

The interns who studied at the University of the Witwatersrand medical school found it easier to adjust to their internships in Johannesburg as they had been exposed to the hospitals when they were students. While participants felt that this exposure did not adequately prepare them for the challenges of the medical internship, there was a sense of relief as they were familiar with the place and people in these hospitals which aided their adjustment. These participants related that they were calmer and more confident and felt that it was easier for them to integrate into the system. The adjustment to the physical setting was thus seen as being important in determining the emotional adjustment of interns during the internship.

"We're used to this place and definitely that made it easier to integrate into the system" – Participant D, M [Bara]

Interestingly, the participants who had been previously affiliated to the various working sites as students seemed to give more positive narratives than those who had not. The medical internship was perceived to be more challenging for interns who were unfamiliar with the training sites.

The majority of participants experienced their internship to be challenging in terms of certain working conditions that are an inherent part of medical internships. These include aspects such as experiencing a high patient load, working long hours, having to deal with contextual problems such as difficulties in communicating with patients due to language differences, or dealing with patients who are not educated on health matters. Participants related that these conditions were unreasonable, especially in light of the prolonged internship period. Thus, some of these challenges extended to being sources or contributing factors of stress for interns. This will be discussed in more detail with regards to the second research question.

The internship, as mentioned previously, was also experienced as being rewarding in some ways. As participants had reached the end of the internship period, it was expected that there would be more positive reflections as there was a sense of achievement at having completed the internship under challenging and stressful conditions. A large number of participants reflected that the internship was a positive experience in terms of gaining competency and confidence in the workplace. Motivations included the perception that South African doctors are well-trained as they have had to endure difficult contextual challenges due to past history, as well as contend with current difficulties. For some participants, a personal investment in the profession was another reason why the medical internship was more bearable; whereas other participants indicated that social ideals such as status and wealth attracted them to the profession and that this motivated them to complete the internship.

"South African trained doctors are some of the best doctors in the world so some of the experience, some of the hands-on sort of like work that you did...you're not gonna get it from anywhere else" – Participant A, M [HJ/RM]

Participants who experienced their internship as being rewarding did however express this with some ambiguity. While there was a significant emphasis on achievement of academic gains, there was minimal emphasis on personal gains - the latter of which is also important to attain from such a process. Some participants mentioned that one noteworthy advantage of undertaking an internship in an academic hospital is that there are registrars and some superiors whom one could count on in terms of assistance which was related to training. This view was generally expressed by interns who completed their internship at Charlotte Maxeke Hospital however there were a few participants from the other two training sites who expressed similar views in this regard. The Chris Hani Baragwanath Hospital was cited as an internship site that was too challenging, and one which was avoided by students where possible due to the large patient load. However, it was also cited by others as being an internship site that offered the most rewarding experience in terms of training and serving disadvantaged communities. Some participants related that it was rewarding to be able to help large numbers of people on a daily basis and that this served as personal satisfaction and motivation throughout their internship.

Many participants however found it difficult to delineate specific positive aspects of the internship, indicating that the internship is not meeting its goals adequately.

The participants' experience of the medical internship appeared to have been influential in determining future career trends. There were a few negative responses which included elements of doubt and regret to a certain extent at having made the decision to continue with medical studies rather than branching off into a less challenging profession, as participants indicated that their current profession did not appear to meet their expectations of becoming a doctor.

"Initially you tell yourself 'why the hell did I get myself into this, I could do anything else, I should have done anything else, I studied six years for this, do I need this crap in my life' – Participant J, M [Bara]"

A number of participants expressed that they were unhappy about working in the public health sector as a result of their challenging internship experience. Motivations to work in the public healthcare sector stemmed from the desire to specialise further. The majority of participants related that they did not have intentions of emigrating and that they would be willing to work in the public healthcare sector provided that

certain conditions are met. Such conditions include being granted a higher salary, improved working environments and less bureaucracy within the healthcare system. One participant mentioned that she is emigrating to Canada in search of better economic opportunities, while another participant mentioned that he is leaving the profession to engage in business opportunities. Others mentioned that they intended to make the move to private sectors, while one female participant related that she would like to get married and become a home-maker.

The way in which the internship was experienced thus appeared to strongly influenced interns' future endeavours.

4.2 STRESSORS AND IMPACT ON MEDICAL INTERNS

An important aim of this research was to explore what are the sources of stress in the medical internship. Participants appeared to readily identify certain sources and contributing factors of stress during the medical internship and further engaged in meaningful discussion regarding the impact of these stressors in their lives, both at a physical and psychological level. While many sources of stress were identified in terms of interns' working conditions, it was the extent to which these working conditions became unreasonable that led to such identification. There were various environmental factors which were also identified as being sources of stress or significant contributors to stress as experienced by medical interns during their internship.

High patient loads were identified as being a significant source of stress in the internship. With regards to high patient loads, participants had varied responses depending on which hospital they had completed their internship at. Encountering high patient loads was particularly stressful for those participants who completed their internships at the Chris Hani Baragwanath Hospital and Helen Joseph Hospital. These participants expressed that they had to tend to large numbers of patients in a day, and this became an unrealistic capacity to deal with as an intern. There was an uneven distribution of patients between the three training hospitals and working as an intern at Baragwanath Hospital was noted by many participants to be very difficult, as the

hospital does not have the resources and capacity to deal with such large patient numbers.

"The things you really struggle with are patient numbers. It's (sighs) ridiculous...ridiculous. I don't think anybody can fathom how many people really really come and what you can deal with as a human being more than anything else" – Participant J, M [Bara]

As Baragwanath Hospital is situated on the periphery of major townships in which the majority of disadvantaged communities reside, it serves a larger number of people while the other two hospitals are situated close to the city centre and therefore served a smaller population. The participants who completed their internships at Charlotte Maxeke Hospital however expressed some relief at the lower patient numbers, stating that Baragwanath Hospital had very high patient loads. Some participants were therefore unenthusiastic about working at Bara because of the large number of patients and there was a personal sense of not being adequately prepared to work with such conditions.

"The hospital's (Charlotte Maxeke Hospital) not that busy. I refused to work at Bara (laughs) - it's very busy! I've heard horrific stories so I was just like I don't know if I'm ready for Bara" – Participant S, M [CM/Gen]

The majority of participants felt that they could not engage with patients on an interpersonal level as a result of the high patient load, thus patients soon became viewed in terms of numbers and diagnoses. So much so that patient deaths were viewed as mere statistics which brought on a sense of relief at times in that the intern could spend time assisting other patients in need. As a consequence of this way of viewing patients, meaningful doctor-patient relationships could not be fostered and interpersonal contact became negatively compromised. Participants revealed that interpersonal interactions with patients were few as they seldom had the time to explain procedures to patients, reassure patients, and empathise with patients if necessary. This attitude also extended towards the patients' families as interns could not take time out to discuss certain matters with family members, nor debrief families adequately as there were too many patients to attend to. Thus, some element of humanity within the medical intern appeared to have been lost as a result of their internship experience.

I try and do my best to interact as well as I can but as far as interpersonal relationships with the patients goes there's a pretty minimal...I would say, to non-existent here in Bara, because literally, I don't know the names of my

patients – any of them. I know them by diagnosis. You literally don't spend more than three minutes with each patient" – Participant D, M [Bara]

One participant in particular mentioned the importance of bedside manner and of interacting with patients on a more personal level. This was deemed to be possible due to the lower patient load at the Charlotte Maxeke Hospital where the intern completed his internship and thus patients were offered a better quality of treatment.

Long working hours, particularly twenty-four hour calls, was specifically highlighted by all the participants as being highly unreasonable and a major source of stress for interns working at the designated training hospitals in Johannesburg. As participants described working through these long hours, various themes relating to both the physical and emotional impact on the intern emerged. Participants indicated that there has been a normalisation process in which working long hours during the internship was considered to be a normal part of the job description of an intern. However, this notion was perceived to be detrimental as interns' physical and psychological wellbeing was severely compromised, and their level of competency was often questionable. Furthermore, mistakes which were said to occur under such working conditions were interpreted as being hazardous and even fatal, thus patient care was negatively compromised. Participants strongly felt that having to work such long hours at a time was unacceptable and that institutions should be held accountable for this.

"I think if I had to mention one thing which actually does cause someone to actually basically die a little everyday...those 24-hour intakes. They really should not be accepted in any sort of institution because doctors make mistakes. People are dying right now because of it and in the future because of it"- Participant M, M [Bara]

Participants raised the concern regarding their state of health due to working long hours without having sufficient opportunities to eat or rest. Long working hours have contributed to a reduction in the intern's ability to remain alert, as both physical and mental exhaustion occurs.

"I felt overwhelmed uhm because there were times when I was even questioning my level of competency when it was maybe two o clock in the morning and I was already on call for 24-hours, I was really tired and it was a challenge to still maintain your optimal level of functioning – Participant I, F [HJ/RM]

Participants related accounts of having been unintentionally negligent due to being exhausted and thus being unable to concentrate on even basic procedures. For some, this led to the weakening of their immune systems and participants were worried about their increased vulnerability to diseases and infections, particularly HIV infection.

"I can tell you stories about things that I've messed up post-call that any second year medical student would never even dream of doing but sometimes – you literally are just too exhausted to think at the time so I definitely think patient care does go down" – Participant D, M [Bara]

"I remember times when I'd find myself examining a patient, just trying to sit down having the patient on the bed and asking a question and then waking up to realise that you know I had dozed off and obviously it becomes risky...in terms of you're trying to stitch up a patient at those hours, if you're not even concentrating while you're talking to the patient it means you're at risk of pricking yourself uhm and having those risks associated with HIV and Hepatitis and all those diseases that you can get from needle-pricks" – Participant A, M [HJ/RM]

Participants also acknowledged the mental health risks associated with working under these stressful conditions. The majority of participants related that they experienced more anger and frustration when working under these conditions and that this often led to a decrease in concern for patients, who at the end experienced a poorer quality of treatment.

"The hours you're working puts you at risk...not only because of how many people you got to deal with but because of the state of mind you're going to be in" – Participant J, M [Bara]

Participants reflected that as the intern is the first port of call in the hospital, it is necessary for internship sites to ensure that their physical and psychological needs are being adequately met; however this was seldom the case. One participant related an experience which encapsulates what medical interns have to endure during their medical internship at their training sites. Her reflection highlighted the severity of the physical impact of stress on an intern after having worked long hours at the hospital. It also highlighted the potential danger towards patients in terms of sub-optimal patient care practices as patients are attended to by an intern who is clearly not in a position to carry out duties in a responsible manner. The consequences of such actions could be perilous and even fatal. This was further complicated by the lack of institutional support for medical interns.

"I was in casualty from morning till the night...I hadn't eaten the whole day and then I got a rice cake on the way to the theatre, back in theatre the whole night, early hours of the morning. It was about three in the morning we were doing an atopic pregnancy in theatre and uhm I felt like fainting. I never ever felt like fainting before and I said to the doctor you know 'I feel so lightheaded, I'm actually gonna faint'. I put down all my equipment and I fainted...and they waited for me to get up and I got up a few minutes later and we carried on. And I didn't get a chance to eat or go to the toilet and I saw all my patients the next day and went home that afternoon" – Participant C, F [CM/Gen]

Participants expressed that the emotional impact on an intern is severe as it is sustained over a two-year period and has potential long-term consequences. They noted that it is thus important to promote mental health functioning amongst health professionals. Both male and female participants related that they had experienced several psychological problems such as depression, anxiety and mood swings during their internship. Feelings of anger and frustration were identified as being the most common emotional reactions, followed closely by feelings of low worth. Medical interns often displaced their anger onto other people and most often onto patients as they were identified as being easier targets. According to participants, this was most likely to be in the form of impatience, hostility and relating detachedly towards patients. Participants related that this happened mostly when they experienced exhaustion, and due to a lack of support from seniors and others in the workplace, this was often their only emotional outlet. Many participants related that patient care therefore became increasingly neglected and interns began to display cynical attitudes. Thus, some participants experienced a loss of affect to a certain extent.

"You're unfriendly to patients, you don't care anymore about patients, you don't care if you don't do the right things sometimes you know you put things off till the next day, so it makes you not yourself... You never really actually think about yourself and how you – until you become this really ugly person and you really don't like it and you're ok this is not right, something's wrong " – Participant T, F [HJ/RM]

For some participants, such experiences affected them in such a way that it became difficult for them to understand their own behaviour and feelings. Participants related that they had begun to feel unlike themselves as they were unable to relate to the person that they had become. A sense of depersonalisation was thus apparent and pointed to the likelihood of interns being burnt-out. Some participants mentioned that the internship had affected their self-esteem as they often experienced feelings of low

self-worth due to being unable to work in a decent work environment under reasonable working conditions. They also questioned their level of competency and hence expressed feelings of despondency. As a result, participants expressed how they had begun to feel as though they were becoming bad and uncaring doctors.

"It was not good for someone's self-esteem to actually go through that. That's the truth, I feel like I'm becoming a bad doctor and I don't care anymore" – Participant M, M [Bara]

Another major source of stress for interns was the high risk of contracting HIV and Aids or other infectious illnesses, particularly through exposure to needle-stick injuries.

"The challenge of the needle-stick injuries and the risk of getting HIV, it's quite a big challenge..." – Participant I, F [HJ/RM]

For new doctors, HIV and Aids has become a major challenge to deal with in South African hospitals; and with increased exposure to this illness and other associated life-threatening illnesses, there is a need to support medical interns as they enter into the public health setting. Participants' responses reflected the intensity of emotion associated with the risks of contracting an infectious illness and they further highlighted the lack of acknowledgement of the impact of HIV and Aids in the country.

"...might get you know like needle-stick injuries, got to go on ARV's...there's just so much emotion... there's so much HIV and Aids. HIV and Aids really impacted on our country in a way that I don't think people understand " – Participant J, M [Bara]

Most participants recalled being in a state of hypervigilance when working with patients, however such precautionary attempts were soon experienced as being unsustainable given the fast-paced nature of a medical intern's job as well as the hardened attitude which governs the medical profession. Thus, negligent behaviours were displayed whereby some participants who had experienced needle-stick injuries were slow to adhere to the protocol of having to retrieve starter-packs to aid them in reducing the risk of infection as they became emotionally detached from the situation and also found it burdensome to adhere to basic protocols when they had many other patients to attend to. Participants expressed that these experiences were often very stressful to deal with, however there was a lack of support services available to

medical interns who experienced needle-stick injuries. Participants also mentioned that there was a significant lack of debriefing opportunities, a response which was common across all three training sites. This indicates that there is little opportunity for interns to express the intense build-up of negative emotions experienced as a result of needle-stick injuries or other infectious exposure. Participants noted that there was a lack of assistance from superiors during such incidences as there was seldom a supervisor available to oversee the situation or to draw blood from the patient while the intern regained composure. Thus, interns often had to cope alone with the added stress of returning to see to patients in a sub-optimal state of functioning due to being traumatised by the event, and the possibility of contracting an infectious illness.

"You're like all freaked out that you just have this needle stick and then you just have to carry on getting back to you know, work...the first time you're like freaked out like you just don't want to carry on and I think the worst is going back to that patient because you're trying to find someone who's going to take this patient's blood for you – and then there's no-one..." – Participant N, F [CM/Gen]

Breaking bad news to patients and their families or dealing with patient deaths was described as being a contributing factor to the stress that interns experienced during their internships. With a lack of support and debriefing opportunities for interns to deal with such issues, thus emotions were often unprocessed, leaving interns vulnerable to increasing psychological stress in forms of anxiety and depression. Female participants related that they found it particularly difficult to deal with patient deaths and the breaking of bad news, which often resulted in "emotional breakdowns".

"At times I did have emotional breakdowns...when we were called on ward rounds to certify people who had died it really affected me" – Participant I, F [HJ/RM]

"The first time when you have to tell a family that their family member died, I think that's like really hard...all of us had special rooms, I had the gynae room and I know a friend had the pharm room where you just cry, and you just close that door and you cry, cry, cry and then you wipe your tears and you open the door and you just carry on" – Participant N, F [CM/Gen]

Male interns however experienced these processes very differently, in that they would suppress emotions and model stereotypical male attributes of being 'in control'. As male and female interns undergo the same training and work under the same conditions, the gender disparity is not an indication of any feature of training and it

thus appears that patriarchal ideologies and structures still permeate the medical profession.

"I keep telling myself that – you got to be professional about it. You've got to go there, get things done and that's how it is. And I guess in that way it is a cold approach to life; but how do you survive otherwise? I can't see myself coming home crying in my pillow and saying 'damn' (smiles)...I can't see that, I don't think I'd survive" – Participant J, M [Bara]

Male participants did however acknowledge that psychological services were notably neglected as a means of help-seeking until it was a last resort. Males preferred to engage with psychological problems from a biomedical perspective. Cultural biases and stigma against men seeking mental health assistance are still highly influential and male interns often ignored mental health concerns by medicalising problems or dismissing them altogether.

"A lot of people regardless of whatever field they're in always feel that they don't need psychological help until you...really can't deal with it anymore" – Participant A, M [HJ/RM]

"Your dad will be like what kind of nonsense is this you learn to deal with it, you're a man" – Participant A, M [HJ/RM]

Those participants who attempted to seek psychological help while doing their internship were met with negative attitudes and a lack of support from those within the profession. Participants expressed that this was the rite of passage and a normalisation to the internship process however it is also indicative of a lack of humanism on the account of superiors.

"I think its part of the whole school of you're a doctor, you'll deal with it. And I think it's the people who still teach us are still very old-school and they believe you know 'I learnt the hard way therefore everyone else will learn the hard way and look where I am now, I still survived therefore you're all gonna survive' " – Participant A, M [HJ/RM]

"The attitude is the same that you know this is just a rite of passage and you need to get it done" – Participant S, F [Bara]

While participants understood the necessity for psychological services for interns, the majority stated that such services were severely lacking or very poor across all three hospitals and that psychological services were severely undermined by medical professionals. Debriefing and counselling opportunities and related services were desired by interns who indicated that patients were offered such opportunities but

when the intern becomes a patient there is no such service afforded to them. Participants felt that such services should be incorporated into the medical internship programme in order to assist interns in a holistic manner.

"Stress is quite a significant fact in the life of an intern. One should address it to avoid the serious consequences which might manifest and people should make use of psychological services, its quite a valuable asset that people undermine in the medical profession thinking that 'oh we'll cope with it and it'll be good and its there its out there for the patients' but we need it as well and nobody admits it there should be that facility available and we should be well-informed about it. It should be structured in the program" – Participant I, F [HJ/RM]

The lack of recognition for psychological services however spans far as one participant declared that even if services were available, they were often very difficult to access and those who managed to access this avenue of healthcare were further shunned within the profession.

"There's still a problem with accessing treatment for interns, specifically psychological treatment. I know a friend who was doing their internship here who tried to access the whole system where he was actually quite down about you know patients dying and he felt like he needed help and he found it very very difficult to get information about who to talk to and eventually when he did uhm it just sort of the referral system out because obviously we're not allowed to see our psychologists uhm so I think its quite difficult to access from that one uhm experience that I know of, I haven't personally gone out seeking it uhm but you know he came back and he was like quite disappointed because you know he had reached the point where he thought uhm he was at his wits end and he couldn't access any help" - Participant A, M [HJ/RM]

The lack of supervisory input into the internship process as a whole was also identified as being a major contributing factor of stress for medical interns. Medical interns are often left to work independently and participants admitted to feelings of anxiety at having to assess their own level of competency, as well as being left alone to make crucial life-threatening decisions and judgement calls.

"You're also left on your own quite a lot so during that time its very stressful; you have to make decisions, is this person for resusc, am I gonna try and resusc this person or is it too far advanced with HIV or – so you're on your own making those decisions and its very stressful" – Participant T, F [HJ/RM]

The roles and responsibilities which interns undertook were also not clearly defined as the majority of the participants expressed that they were expected to perform as professionals rather than as learners being initiated into this process. Some participants accepted these roles and tried to live up to supervisors' expectations by

taking on responsibilities that were unreasonable and justifying it by stating that it was the only way to learn and function.

"The only way you'll actually learn is to actually do work there and actually look after patients yourself, with 100% responsibility" – Participant M, M [Bara]

Participants however noted that a supervised working experience was lacking during their internships as they were expected to work independently and thus they did not engage in incremental learning processes under supervision. Participants reflected that they had minimal opportunities to learn from seniors and resorted to being taught various medical procedures by fellow interns or by referring to textbooks when the need arose. Not having an adequate supervised work experience during the internship is thus concerning, as applying medical knowledge in practice may have severe consequences for both interns and patients.

"I was pretty much the doctor in charge there and whatever I didn't know I was looking up in textbooks or referring and I didn't really learn much from that. In fact I think my knowledge declined, so I was very upset about that" – Participant C, F [CM/Gen]

"Procedures aren't really being taught to us by the registrars, they're being taught to us by other interns – which is a bit of a problem because I'd prefer registrars who teach well, who know what they're doing" – Participant M, M [Bara]

Participants mentioned that staff shortages added to the inability of supervisors to train and monitor interns during the internship, and that interns were therefore being increasingly relied upon to fill in posts and run clinics independently.

"They'd put us into the wards and we had just done four months of medicine and we were supposed to be in clinics but they were short-staffed in the wards" – Participant C, M [CM/Gen]

"I can remember myself running a full clinic alone...and you're just an intern but you got to do it because you're on call, your registrar has to be somewhere else, the consultant's got to be somewhere else whether he's doing surgery or not" – Participant J, M [Bara]

Participants expressed some frustration at the lack of availability of senior staff members during their internship experience, indicating that it had been difficult to cultivate professional relationships which are an important component of any internship experience as interns begin integrating into the professional community. Participants also experienced a lack of recognition from consultants and other staff

members, thus adding to the stressful experience the internship. Participants related that there were numerous difficulties with superiors and with nursing staff in particular in terms of being taken advantage of and managing unreasonable expectations. As the intern enters the system on an unequal footing due to the hierarchical system inherent in a structure such as the medical field; the graduation from medical school sees the intern as being at the top of the medical school hierarchy yet at the bottom of the public health system hierarchy. This transition appeared to have been a difficult one for participants to make. However, participants mentioned that there was no other choice but to accept their mediocre position.

"When you start out there you're at the bottom of the food chain so you're going to be taken advantage of you know you just got to have to deal with things, bite your lip and go ahead" – Participant J, M [Bara]

Participants mentioned that despite their lowered status within the system, a greater effort was required by the intern in order to be recognised by superiors and achieve harmonious relationships with the nursing staff. Participants who completed their internships at the Charlotte Maxeke Hospital expressed some difficulty in trying to foster healthy professional relationships, stating that staff members were seldom approachable due to the strong hierarchical structure at the hospital. For those who completed internships at the Baragwanath Hospital and Helen Joseph Hospital, the experience was less intimidating due to the approachability of supervisors and a less significant emphasis on the hierarchy system. Participants from all three hospitals however expressed positive sentiments regarding relationships with registrars in particular who were commended on their strong sense of responsibility towards interns, particularly those who completed their internships at the Baragwanath Hospital. Certain senior members were also respected by participants as a result of their aspirations and academic rigour which inspired interns to achieve in the same manner. The role that seniors played in shaping and modelling the behaviours of interns is thus important to recognise.

"Good relationships with your registrars and nurses don't just happen; you have to put the effort you have to be interested, you remember names you have to put the effort in you know to make a good impression and so on" – Participant D, M [Bara]

The recognition of the difficult working conditions faced by nursing staff in particular appeared to be important if interns' expected respect within the system. One

participant mentioned that just as interns are viewed to be overworked and underpaid in the public health setting, so too are nurses; however some participants felt that a few nursing departments were poorly skilled and that this became stressful for interns as the bulk of the work fell onto them. Importantly, the acknowledgement of the role of nurses in the greater community appeared to enhance respect for nurses, while the perceptions of doctors being better were being engaged with in an effort to understand the doctor-nurse relationship as being more collaborative and taking on a multidisciplinary approach to work. The power struggle, as one participant mentioned is however an ongoing problem which is important to engage with in order to achieve common working goals.

"Nurses...it depends on which department it is. They actually do quite a bit, without them we couldn't do our job. But I think in medicine, the nurses were a bit lacking, were very poor skills-wise and poor in the amount of work they did. But we can't blame them, its understandable, in medicine they're overloaded. How we feel is exactly how they feel also and they have to continue for much longer so I don't blame them" – Participant M, M [Bara]

A lack of support and understanding from significant others as well as various expectations placed upon participants were also contributing factors of stress for interns during the two-year internship. Participants expressed that expectations from significant others placed them under a lot of stress, particularly being married, female and coming from a community-orientated cultural background. Participants related that as a significant amount of time was spent at the hospital, they were left with little time for other responsibilities and activities. While their families were generally supportive of participants throughout the process, participants often found that this support was not unconditional and at times the responsibilities and expectations became unbearable. Some participants expressed that their personal expectations were sometimes too high and as a result, there were increasing doubts about their personal abilities, which resulted in feelings of depression and anxiety. According to some participants, family and socio-cultural expectations were at times problematic and contributed to interns' stress.

Gender expectations in particular were prevalent in participants' responses and it is clear that there are many gender-related stereotypes which further complicates an intern's experience. Some male participants were expected to uphold a more 'macho' attitude and cope with work independently while females related that there were

expectations to uphold marital responsibilities stereotypically associated with being female, such as buying groceries and cooking. Cultural expectations of male participants as being present for family functions and providing for the family also emerged, while cultural expectations of getting married rather than pursuing a career was expressed.

"I had less time to go out with my friends, and I actually noticed this on my birthday recently when I actually got two phone calls from my friends and I used to have a lot more friends than that! I just don't have time to put in the effort. I mean my husband does really take strain sometimes...I'm hardly at home and I don't have time to get the groceries" – Participant C, F [CM/Gen]

"As a female working such long hours, questions from the greater community – why are you not married...I've delayed a lot of things for internship but not intentionally...it's a challenge just to put career before other things and to put things on hold because of a career" – Participant S, F [Bara]

One of the most significant sources of stress identified by medical interns was located at a level of hospital administration and management. Participants were of the opinion that there was sufficient funding available for resources, however, inefficiencies regarding the management and distribution of resources in the public health setting caused immense stress for interns as they were unable to engage in effective service delivery. Participants related that this greatly hampered their work and patient care was negatively compromised, yet there was no follow-up within the system in order to deal with issues which negatively impacted an intern's ability to engage in quality medical training. Participants voiced their frustrations in this regard and called for superiors to take more responsibility in ensuring that critical resources such as drips, protective gloves and needles are managed properly. One participant highlighted the extent to which a lack of resources and poor distribution of resources can be detrimental to an intern's ability to carry out their duties, with the impact on patient care being particularly worrying as much-needed treatment could not be administered.

"Even now in the ward we don't have head blinds, we don't have syringes uhm we don't have the right needles, uhm we don't have endo-tubes, we're borrowing from different wards and there's been times when there's been no electricity and no steaming in theatres so we can't do our babies in theatre... so ja resources are a problem and there were times in obs and gynae when we ran out of antibiotics, in family medicine in the clinic inside, we didn't have any SET medicine anymore because we had so many foreign patients coming" – Participant C, F [CM/Gen]

Participants reflected that there is a sufficient amount of funds being allocated to the public healthcare sector but that these budgets were being seriously misused. Hospitals are not being adequately upgraded; much-needed equipment is not being repaired and essential resources are not being purchased or adequately distributed. There was also a sense of despondency from participants as they mentioned that there was a lack of accountability from people in senior positions, thus it became a frustrating environment to work in and provided reason for healthcare professionals to leave public hospitals.

"Government giving us budgets...people misusing the budget completely. We're in the stock-room - look at this equipment, it's from the 1980s! From the 1970s, '60s! I mean look at that machine – that's probably older than both you and I, our ages put together! But its just you don't get the support from your seniors...there's no stock. You want a drug and there's no stock, you want a drip and there's no needles, its very frustrating in that kind of sense that your superintendents and your higher up who are running the place...ja so that's why everybody is leaving" – Participant D, M [Bara]

Participants also raised concerns regarding a lack of basic facilities for themselves. Much needed facilities such as basic sleeping facilities were noted to be very poor, with particular concerns relating to poor hygienic conditions. As medical interns work long hours and spend a majority of their time at their worksites, it becomes important that basic sleeping quarters, eating facilities and equipment are made available to them. However, participants mentioned that basic provisions for interns were poor, thus increasing feelings of dissatisfaction in the work environment.

"Our call room was a bed...on the floor. We had to sleep on the floor! You know how there's cockroaches and everything! We were like its okay I'll sit in a chair all night" – Participant N, F [CM/Gen]

"...making sure that our sleeping rooms – when we do have those few minutes to sleep are comfortable, cleaned everyday, there's a fridge in there where I can put my supper or my lunch in there you know...just the small little things that actually make the work a little bit more pleasant, as I said small little things that probably don't even need that much of money in terms of application for money for the government to give on a more national level. If you look at it on a provincial level and say you know 'lets just make things a little more pleasant here' you know" – Participant A, M [HJ/RM]

4.3. COPING, SUPPORT AND PERSONAL GROWTH

An important aim of this study was to delineate what coping mechanisms were employed by post-medical interns to deal with stress during their internship.

Participants used a variety of coping mechanisms and made use of various support structures in order to cope with the demands of the internship. These were categorised in terms of being adaptive and maladaptive. Maladaptive coping mechanisms were important to delineate given that these may have severe consequences in the long-term. Depending on how interns coped with the challenges and stressors of the two-year medical internship, the capacity for self-growth was gauged.

Family support was highlighted by a majority of participants as being one of the most important support structures for emotional and practical support. Spousal support was also highlighted as being very important. For the majority of participants, families and spouses provided a containing space as participants were able to talk about their experiences at the worksite and therefore reduce some of the stress that they experienced. Families were also relied upon for practical support when working conditions were difficult.

"My husband now, my fiancé at the time – is super-supportive, my family as well and just speaking about all the stuff that happens at the hospital and them being there helps a lot" – Participant T, F [HJ/RM]

"Family support is very important. Very very important in the internship, helping you cope...for small things like they might pick you up one day when you're too tired to drive home, very important or give you food when you come home after intake" – Participant M, M [Bara]

Others relied on the support of fellow interns who were seen as being a major source of support. Good intern relations appeared to result in an easier adjustment process due to shared experiences of the internship. Fellow interns were relied upon to provide on-site emotional support when the internship was experienced as being very stressful such as experiencing challenges associated with calls or when requiring debriefing.

"The biggest support comes from the people [inaudible] working with, fellow interns...together you're in it, to share experience, share emotions also you know and they understand you more than anybody else" – Participant J, M [Bara]

"I had many friends who did their internship with me so...that was nice coz then like if we were having a rough call and if you knew your friends were on like maybe medicine we could go visit each other... our group was really lovely and we all pulled together" – Participant N, F [CM/Gen]

Spirituality was an important motivator and source of support for a few interns who expressed that turning to a higher power appeared to be reason enough to see the

internship through. For some, religiosity was particularly important in being able to make meaning of the internship experience and also appeared to serve as a means of rationalising the complexity of engaging in medical work. Working with ill people was viewed in terms of being a religious duty and these participants believed that a higher power provided the strength for them to cope with the demands of the internship.

"My main source of coping was turning to God" – Participant I, F [HJ/RM]

"My spiritual part of it comes into being and says you know there's something higher than us" – Participant A, M [HJ/RM]

Several participants related that self-care practices such as attending the gym and engaging in other means of physical activity appeared to be helpful, albeit being an idealistic means of coping as a result of a lack of time. Participants expressed that gym facilities at the hospital would be beneficial in improving their ability to cope. Engaging in meditating activities was cited by some participants as being useful in helping them to be more focussed and thereby enhancing their functioning in the workplace.

"I spend two hours in gym...doing yoga - that was probably one of the main things that helped me, kept me keep focussed throughout this time" – Participant S, M [CM/Gen]

"I'd try to go to gym as often as I can, just to do cardio and a bit of weights" – Participant C, F [CM/Gen]

Taking time off from work was also found to be rejuvenating and participants related that going on holidays and taking short breaks away from work really helped interns to cope with stresses during the internship as it provided an opportunity to compose themselves by forgetting about work.

"Holidays! Every single leave, break that I had I went away. You know just to forget about work" – Participant S, F [Bara]

Some participants related that various personality features and their outlook on life enhanced their ability to cope as these attributes appeared to have instilled a sense of confidence in these participants that they would make it through. Being organised, having the motivation to work hard and having a positive outlook were such factors.

"OCD and being organised – that helped. Hardworking and pushing yourself, Type A personality – that helped" – Participant S, F [Bara]

"My personality...I'm a positive person so I think that made a huge difference" – Participant S, M [CM/Gen]

While there have been generally positive means of coping, participants also appeared to make use of some maladaptive coping mechanisms. What strongly emerged from participants was that they had tended to block off or suppress their emotions in order to cope rather than attempt to deal with the stressors that faced them. A lack of time and support structures at the hospital did not permit interns from seeking the psychological help that they desired, thus denying emotional expression became the means of coping for the majority of interns. Participants related accounts of denying expression of their emotions in various ways. For instance, patients became viewed as numbers and interns were at times grateful when patients died as it meant that they could focus on other patients. Breaking bad news became an automatic procedure undertaken without sufficient attunement to patients and their families' concerns, nor to the intern's own emotional reactions to such issues. Participants use several defence mechanisms in order to assist them in coping with their daily work. While these may be useful, some may appear maladaptive when used excessively. Participants in this study appeared to display defence mechanisms such as rationalisation, displacement, denial and isolation of affect. To some degree these have assisted interns in coping, however at some points they have been maladaptive in that interns were not able to express their emotions or not allowed to for fear of being reprimanded by superiors or others within the profession. Depression is thus a likely consequence of not dealing with difficult emotions.

"You stop caring so you don't worry about it anymore. You do your job and go home" – Participant M, M [Bara]

"I think you just suppress everything, I don't think you really deal with it" – Participant N, F [CM/Gen]

Self-reflection was cited as being an important step to engage with during the internship process. While participants initially engaged in negative self-reflection through self-blame, often when patients were very ill or died; they gradually began reflecting more deeply on such issues, turning them into opportunities of learning and re-examining self-expectations. Morbidity and mortality meetings were also useful for

some interns in allowing them to engage with critical issues affecting their performance however others experienced such meetings more negatively indicating that there was a lack of constructiveness throughout the process.

A sense of valuable personal growth was seen to develop in interns who engaged in constructive self-reflexivity than in those who did not. The questioning of competency was common in reflection exercises as participants often engaged in self-doubt regarding their own abilities; however group reflection served as a means to put matters into perspective for participants.

"When you lose your first patient and you wonder why, 'maybe I could've done something more, am I a good doctor, what went wrong, should I be doing this' but you know in the reflecting with other people when you find out that you're not the only one going through that and it's a normal part of being here and you get over it" – Participant D, M [Bara]

"Self-reflectivity...it was very important, it was one of the pillars because I think if I didn't go through a process of self-reflection, I wouldn't have had meaning...I wouldn't simultaneously have added value to my work if I didn't reflect on it all the time" – Participant I, F [HJ/RM]

For some participants, the interview itself served as a meaningful reflective exercise in which their experience of the internship was validated. They mused that this type of forum is what was needed during the internship as it would be useful for them to talk to someone independent of their internship site who would be interested in their experiences, as it served as an emotional outlet.

CHAPTER FIVE: DISCUSSION AND CONCLUSIONS

The various challenges and stress experienced by post-medical interns from the two-year medical internship programme in South Africa appears to be more complex than what has been found in the general medical literature. The challenges that are present in most medical internships were found to be of a more stressful nature by South African medical interns given the extended internship year in South Africa coupled with the vast community and contextual problems within the country. The increasing prevalence of maladaptive coping mechanisms such as the denial of emotional expression and over-use of psychological defense mechanisms is a particularly worrying trend that indicates the lack of essential psychological and emotional

support available for interns. On the other hand, opportunities for personal growth were also identified as insufficient.

These findings indicate that the primary focus of the medical internship in South Africa relates to training imperatives to be achieved. Consequently there is not much focus on positive, adaptive coping skills which is important for the wellbeing and productivity of doctors in the long-term.

Davies & Farquharson (2004) indicated that internships are used as learning tools to integrate knowledge and practice within their professions. However, participants in this study view the internship as a "job" rather than a process in which meaningful learning takes place, which seems to be a particular feature of the medical internship in a South African context. The participants in this study were unable to identify with this purpose of their internship given the many challenges which compounded this important process of learning and development. Given the significant disjuncture found between theory and practice and few opportunities for integrative learning, and even less so in a supervised working context; it was expected that the internship would be perceived by interns as being unstructured and this impression provides a reason as to why interns expressed strong feelings of being unprepared. This study thus raises the concern that the medical internship is not adequately being utilised as an integrative educational tool. Meintjies (2003) mentioned that the two-year internship aimed to offer opportunities of ongoing education and training, a rationale which interns initially welcomed, however this expectation is not being adequately met for interns at the end of the two-year internship. This disjuncture of expectations to the outcomes demonstrates that while interns understand the importance of being exposed to a broader range of disciplines by acknowledging the value in terms of allowing them to make more informed career choices on completion of their internship; in contrast, criticisms were levelled towards the implementation of the extended year by some interns. These interns indicated that training expectations were seldom met given that interns were often required to fill posts due to staff shortages rather than using time to engage in meaningful learning opportunities within each four-month rotation. This was indicated in participants' narratives as some interns' related accounts of having rotations extended or reduced due to staff shortages. Thus, in the individual interviews with the researcher, some interns conveyed a sense of

despondency and hopelessness with regards to the system, with one intern sighing as he sadly indicated that the system "does not care". Since the extended year was underpinned by an educative rationale (Prinsloo, 2005), the current experience of the medical internship by interns points to various shortcomings. The comment made by Roth (1984) regarding an alternative rationale thus appears to hold some weight as he observed that interns offered hospitals a supply of relatively economical labour. Thus, interns are being seen as a "workforce substitute" (Prinsloo, 2005, p. 3) to address the shortage of medical personnel which contributes to the current situation where the main aims of the two-year internship do not appear to be adequately met.

An additional finding related to medical interns' subjective sense of preparedness to undertake the medical internship, which related to both training and mental health care aspects. These findings differed starkly in relation to the Gome et al. (2008) study as their cohort of interns felt adequately prepared in the majority of domains in their internship, while the intern's role was more clearly defined in the workplace and thus expectations were more fully met. Findings in this study concur with those found in the study by Jaschinski and De Villiers (2008), where the majority of participants are academically prepared for the internship but less prepared in terms having the necessary skills to apply their knowledge. High levels of responsibility and ambiguity of roles further complicated the experience of the internship for participants in this study, which contrasts with findings from Jaschinski and De Villiers (2008) and Gome et al. (2008) who found that interns experienced responsibilities to be an integral part of the learning process. The differences in these studies could be indicative of a lack of supportive structures and poor managerial aspects within the medical internship programmes, while the nature of the responsibilities of interns needs to be more fully integrated.

In the literature review pertaining to American physicians' experiences of their internships, Daugherty et al. (1998) established that the American cohort of physicians had very positive experiences of their internship programme because it served as a defining experience in their quest for professional competence and identity. The majority of participants in this study found it difficult to delineate specific positive aspects. While some interns were able to express that the internship offered a "rewarding" experience in terms of serving disadvantaged communities and

being exposed to a variety of learning opportunities, interns' responses alluded to the lack of personal gain and pointed out that there were few opportunities for personal development. In their present internship placements, interns have to deal with overwhelming patient loads; higher levels of exposure to infectious illnesses and the expectation to deal with patient deaths and terminal patients independently. It is these challenges that contribute to interns feeling profoundly underprepared. It is apparent that there is a significant lack of attunement from medical school staff regarding the psychological impact of these components as well as a significant lack of psychological support from the training site. Interns are thus prone to feeling anxious and depressed more often during their internship.

Interestingly, in the study by Jaschinski and De Villiers (2008), interns in Western Cape hospitals expressed a more favourable view of their internships. Participants in the current study perceived the internship programme in Gauteng hospitals to be more stressful than internships in other parts of the country, attributing this view to the shortage of resources and higher patient loads. While recent research documented that levels of psychological distress remain high among interns in Johannesburg despite initiatives to improve the work environment (Sun et al., 2008), further research needs to be conducted in order to identify why interns at the Johannesburg training circuit appear to relate more stressful accounts of their internship experience. The interns' perceptions do however raise questions with regards to resource distribution as well as resource management in South Africa's academic hospitals. It is alleged that the training hospitals in the Johannesburg area are particularly overburdened given the large population that needs to be served within a small geographical area. It is possible that resources are unequally distributed amongst hospitals, while the allocation of human resources is insufficient for this area. Interns who had completed a part of their internship at Eastern and Western Cape hospitals mentioned that hospitals in these provinces had better working conditions, such as having a better staff-patient ratio, being more fully-stocked, and having a more pleasant and relaxed working environment. It appears that these are nurturing conditions with the potential to enhance interns' experiences of their internships. Furthermore, given that the researcher is an independent researcher and not affiliated to any hospital, it is likely that interns were able to respond in a more transparent way. Previous studies that have been conducted by Jaschinski & De Villiers (2008) as well as by Sun et al. (2008)

elicited more positive accounts; however these researchers were affiliated to some degree with the hospital or with an adjacent medical school. Therefore, there is a need to conduct independent studies in other parts of the country in order to identify sources of intern stress.

In terms of stress of interns, Issa, Yussuf, Olanrewaju and Oyewole (2009) expressed the necessity for a reasonable level of stress to be present during the internship. However, they further noted that a high level of stress as perceived by interns is potentially dangerous given the severity of the impact on interns such as poor concentration and attention and higher cognitive impairments. While responses were of a highly ambiguous nature, the internship was experienced more profoundly stressful for interns in this cohort. Thus, it is critical that concepts of stress and wellbeing are more thoroughly engaged with in both medical school curricula and internship training, in particular. Given that these stressful experiences are sustained over a two-year period, it is important to thoroughly engage with interns' experiences and explore ways of improving the learning aspect of the internship and mediating the overall internship experience. It is noted that despite interns assuming much responsibility and experiencing psychosocial challenges which complicates the medical internship experience for the intern, there is little overt evidence of maladjustment amongst interns. The reason for this may be because interns appear to learn early on how to adjust to their working conditions, developing a sense of resiliency over the two-year course. This finding appeared to be consistent with findings by Sun et al. (2008) who expressed that South African universities should be reassured that their curricula are better preparing graduates for the rigours and demands of the internship. While the university curricula may be better preparing graduates, it becomes important to assess whether the internship programme provides opportunities aimed at aiding the adjustment process for interns, such as incorporating orientation activities for interns. Questions can be raised with regards to the optimal adjustment of interns in their internship programmes. While a natural process of adjustment takes place with time, the intensity of the medical internship for South African interns does not seem to allow for a favourable adjustment process. If an unfavourable adjustment process for interns occurs over a prolonged internship period, it can be argued that interns are not necessarily sufficiently well prepared for the rigours and demands after their internships.

The source of stressors prevalent in the current study of medical interns' experiences were found to be located in a context of an overburdened healthcare system in the Gauteng area, which greatly impacted on interns' ability to provide effective medical care. This study's findings with regards to stress factors concur with the findings in general medical literature in Western-based studies (Levey, 2001; Rosen et al., 2006; Visser et al., 2007), African-based studies (Issa et al., 2009; Raviola et al., 2002) as well as locally-based studies (Brink et al., 1986; Jaschinski & De Villiers, 2008; Sun et al., 2008). In terms of this study, the major stress factors identified included long working hours, sleep deprivation, obscured roles and high levels of responsibility, high personal expectations, a decreased empathy for patients, poor working relationships with nurses, and particularly poor supervisory relationships. The high risk of contracting infectious illnesses, particularly HIV and Aids was also identified as being a major source of stress, along with the shortage of resources which has a major potential to hamper service delivery. The findings from this study thus concur with findings by Raviola et al. (2002) as the cohort of participants in both studies identified that a significant lack or poor distribution of resources and a high rate of HIV and Aids in public hospitals caused a significant amount of stress for interns. In order to combat the stress, a number of the interns have developed negligent attitudes and behaviours in relation to working in this stressful environment. These findings therefore included more broad-based elements of stress for this cohort of participants than for interns in Western-based studies. Similar stress elements were found in African-based studies and recent South African-based studies. These findings contrast to Dutch interns' (Visser et al., 2007) experiences of having a low level of job satisfaction when interns feel poorly managed or under-resourced yet they have an overriding high level of job satisfaction despite their experience of stress. In contrast, the cohort of interns in this study felt 'significantly stressed', with an overall lowered level of job satisfaction. While it was unclear as to who manages resources and distribution of resources within the system, these research findings support issues raised by Kane-Berman (1992) and Benatar (2004) regarding problems with management in hospital settings and poor service-delivery. It is important to understand these challenges within the local context when reviewing interns' stress.

While interns in other studies (Raviola et al, 2002; Issa et al., 2008) expressed that financial remuneration in the internship was a significant stress factor, the majority of participants in this study did not express intense dissatisfaction with financial aspects, expressing that they were generally satisfied with the salary but not with the way they were treated. This is interesting in the context of the 'brain drain syndrome' in which monetary motivations are high. Only one participant indicated that she would be leaving the country and this was due to the dissatisfaction in treatment of interns at public hospitals rather than dissatisfaction with the salary. While these findings appear to be reassuring, it highlights the need to meet interns' needs within the internship context.

The significant lack of psychological services in internships is particularly worrying as demonstrated by interns' responses in this study. This finding concurs with findings in the Sun et al. (2008) and other studies. This finding further indicates that the nature of the medical internship represents a 'fight for survival' (Robert et al., 2008) while implicit values in medical professions prevail, especially with regards to a stoic work ethic as the dominant culture, thus leading to personal needs becoming secondary to the needs of both patients and employers (Willcock et al., 2009). According to the cohort of medical interns interviewed in this study, it seems that interns have inadequate opportunities to obtain psychological services, thus the psychological adjustment to the medical internship does not appear to be an integral part of training programme. Furthermore, it is evident that prejudicial attitudes regarding mental health are still highly prevalent in the medical profession and stigmatization thus delays care-seeking practices among medical interns. The experiences of the medical interns are grounded in a greater medical discourse which points to an unsuccessful move from a medical model towards a humanistic model and it is apparent that the medical model predominates in the hospital setting and the internship program as well.

The supervisory relationship, as identified by Garcia (2008), is also notably poor and inconsistent with the role that a supervisor is meant to take on during the internship. There are few opportunities for learning and acquiring skills under the guidance of a supervisor and while participants in this cohort thus expressed that working independently becomes the norm. This is a worrying situation given that inadequate

supervised working experiences increases the amount of medical errors as found in general medical literature (Baldwin, Daugherty & Ryan, 2010). A consequence of poor supervision during the internship has been that interns routinely resort to asking other interns for assistance or consulting textbooks. While interns expressed that registrars were helpful, the staff shortages were severe and thus there could not be a reliance on registrars to offer support and supervision. This poor supervisor-supervisee relationship appears to be heavily compounded by a shortage of staff who can supervise interns. Therefore there is an inadequate ratio of supervisors to medical interns. However, there appears to be a lack of measures to overcome this problem. While it may be difficult for supervisors to offer individual supervision to interns, the possibility of offering group supervision could assist medical interns in the learning process. Although large group conferences exist, the space does not offer adequate supervisory input for interns who struggle on a day-to-day basis with matters outside of their expertise, nor do these meetings offer debriefing opportunities.

The opportunity to cultivate professional relationships is thus limited and while Lack & Cartmill (2005) point to the importance of these relationships, it is this overburdened context that highlights the work of South African interns. Some interns in this study did however, manage to identify role models and made painstaking efforts to cultivate these relationships, which if managed, provided opportunities for personal growth. It can be inferred that the participants as community service doctors presently interact with newer interns in much the same way as they experienced interactions with superiors, which points to the importance of developing effective modelling behaviours traditionally displayed by supervisors.

The doctor-nurse relationship remains a highly conflictual one and contrary to findings by Sun et al. (2008), interns in this study expressed general dissatisfaction with nurses. It can be inferred that nursing staff are also dissatisfied in their work experience given similar overbearing burdens in the public health context, possibly feeling undermined as a result of the attitudes of new doctors entering the system and thus projecting their frustrations onto nurses. Rosenstein (2002) found that physicians' strongly influence nurses' morale and respondents expressed concern with the significance of nurse-physician relationships and the atmosphere that they created. It can be inferred that communication failure amongst interns and nurses has significant

implications for patient care. Hierarchical differences, role ambiguity and interpersonal power and conflict are thus an inherent part of the internship process. However, Sutcliffe et al. (2004) indicates that a clearer understanding of these dynamics highlights the possibility for appropriate interventions in medical education and in health care organizations in order to aim to improve patient safety. Thus, a suggestion may be for orientation programmes to take place for interns and nursing staff in order for healthier relationships to be facilitated so that interns and nurses may work towards a common goal in terms of providing better patient care as well as working in a more pleasant working environment.

As a result of the above-mentioned stressors, particularly contextual factors, interns in this study are at a higher risk for burnout, concurring with views expressed by Geurts et al. (1999) who assess that causes of burnout are specifically related to the work context. While Purdy et al. (1987) identified that a distancing oneself from patients expressed a greater likelihood of being burnt-out, findings in this study are indicative of this process. The acknowledgement of sub-optimal patient care practices by the majority of medical interns in this study draws parallels to the study conducted by Shanafelt et al. (2002) and demonstrates that excessive job stress hampers effective patient care and that suboptimal patient care is associated with a higher risk of burnout in medical interns. Moreover, Peltzer et al. (2003) found that job stress predicted emotional exhaustion and depersonalisation among physicians but not personal accomplishment. For many interns in the present study, personal accomplishment was also relatively low. However, when interviewing the interns, their reports were ambiguous and hence questions regarding training outcomes can be raised given that personal accomplishment is necessary for future practice.

In accordance with the job demands-resources model (JD-R) proposed by Bakker and Demerouti (2007) it appears that interns have overwhelming job demands that require sustained physical and/or psychological (cognitive and emotional) effort or skills and few job resources which are meant to assist in achieving work goals, reduce job demands and associated physiological and psychological costs and stimulate personal growth, learning, and development. The interaction between these two concepts is notably poor in medical intern functioning as found in this study and as such has resulted in poor motivation and a high risk of burnout amongst interns. Consistent

with findings by Bakker et al. (2005), high levels of burnout was reduced if interns experienced autonomy, received feedback, had social support, or had a high-quality relationship with their supervisor however this appeared to be idealistic and difficult to achieve.

Weiner et al. (2001) found insufficient information delineating specific wellness practices amongst physicians that promote successful life adjustment. There is also a paucity of studies delineating wellness practices amongst interns. It was initially difficult for the majority of participants in this study to delineate specific coping and wellness techniques, which alluded to the sub-culture that has been created surrounding the coping ability of doctors. This further highlights the stigma against mental health which is inherent in the medical profession. Findings from this study also concur with those found by Dunn et al. (2009), albeit disconcerting, in terms of medical interns' being unable to initiate care-seeking practices in order to maintain a desirable image or due to a lack of time. In a South African context this is particularly worrying given that exposure to needle-stick injuries is very high and has potential harmful effects for patients and interns alike. Thus, a shift needs to be made within the medical profession regarding mental health functioning amongst medical professionals and healthier attitudes towards seeking psychological wellbeing needs to be cultivated.

A network of social support was highlighted as being the most important and most widely used means of coping, however, social relationships paradoxically also induced additional stress for interns during their medical internship. Findings from this study concur with findings by Engel et al. (2006) in that talking to other medical interns or family members alleviated stress in a contained manner. The sense of unity between interns was identified as being particularly important as interns provided necessary debriefing opportunities for each other, which aided them in coping with the demands of their internship. While the interns in this study appeared to be overworked, it was reassuring to find that relationships between interns can be nurtured and managed.

Despite the fact that interns appear to be coping, the nature of coping should be engaged with as many medical interns' core sense of self is most affected by the

internship experience. As such, the psychological experience cannot be invalidated or overshadowed by illusions of physical coping. The focus in general medical literature has been on more physically harmful coping mechanisms such as substance use and abuse, while the intangible emotional aspects of coping are often ignored. Given that interns are future doctors and supervisors, it is important to address their mental health and wellbeing for the sake of their patients. In terms of the model proposed by Dunn et al. (2008) it appeared that interns have both positive and negative inputs and outcomes but the concern lies in identifying replenishing factors which can enhance coping. Replenishing factors include psychosocial support, mentorship, intellectual stimulation and engagement with social activities for interns. These are required for adaptive coping. With a lack of the replenishing factors mentioned, interns were unable to make use of adaptive coping mechanisms and instead often used maladaptive coping strategies.

Various factors influence the personal growth of interns (Kern et al., 2001). The study conducted by Kern et al. (2001) identified increasing self-awareness practices amongst medical interns, which is important for personal growth. Sadly, however, opportunities for personal growth were few for interns in the current study. The nature of reflexive opportunities consisted of medically-related aspects and was aimed at enhancing professional development in the medical field. However, little attention on personal development ensued. Researchers from the Royal College of Psychiatrists (2003) suggested that students should be helped to identify their interests, strengths, weaknesses and personal circumstances so that they can consider job and career options that will be more appropriate and fulfilling. Findings from this study endorse this view that medical schools should focus on holistic selection factors and perhaps introduce more formal assessment measures in order to assess the mental health of students as well as their academic proficiency. Such steps could potentially result in interns displaying a more positive outlook on the medical internship and thus resulting in a more efficient and caring doctor. An observation was made that those interns who had trained as students in the hospitals which they did their internships at, appeared to find it easier due to the familiarity with the hospital staff and procedures. Therefore, it may be worthwhile for those in charge of intern placements to consider these factors more carefully.

CONCLUSIONS

The experience of the medical internship for South African interns seems to be of a far more complex nature than what general medical literature ascertains. Although the medical internship has been acknowledged as being stressful (The Royal College of Psychiatrists, 2003), the experience has been more profound for interns in this study. It is therefore valuable that this study located the experiences of medical interns within a particular context, as the context of an overburdened healthcare system in the Gauteng area appeared to have greatly impacted on interns' ability to provide effective medical care. While long working hours remains the defining feature of the medical internship, there are many coexisting stressors which further complicates the medical intern's functioning within the public healthcare system. The significant burden of HIV and Aids, a lack of responsibility and accountability in terms of managerial aspects regarding resource distribution, as well as poor interest in the training and wellbeing of interns have contributed to a difficult internship experience for interns. The impact of these stressors on an intern's ability to function is perplexing given that these are the future doctors of South Africa who will be treating the majority of the public. The working conditions of medical interns in South Africa thus needs to be revised, and the stressors implicit in the working environment along with its effects on medical interns' mental and physical wellbeing needs to be acknowledged and engaged with at a broader level.

While the medical interns' ability to cope with the internship signifies hope, the concept of coping is important to engage with given that interns' use a variety of maladaptive coping mechanisms which may adversely affect them. The importance of having family support and being supported by other interns was crucial in determining a more positive internship experience, demonstrating the need for good interpersonal relationships in profoundly enhancing this experience. Another important relationship to address is the relationship between interns and nursing staff. The roles and responsibilities of nurses and interns need to be clarified, along with the expectations that they have of each other. This will aid in more effective working relationships and thus enable better care of patients.

The concern regarding the neglect of psychological needs is also raised, as interns appear to be trapped within larger discourses surrounding mental health and wellbeing within the medical profession, and this is a topic requiring further debate. The supervisory process is generally tailored to enhance both the personal and professional development of medical interns and thus requires serious revisions given that interns' expectations with regards to supervision are greatly unmet. Poor supervision in turn has potentially serious implications for patient care which can become severely compromised. A more humane attitude towards interns may facilitate both their personal and professional development and thus produce psychologically healthier and more enthusiastic doctors.

The ambiguity inherent in participants' responses regarding their internship experience makes it difficult to draw broad conclusions as many factors influenced their experiences. However, the hospital at which one worked largely influenced participants' experiences. Significant differences were established in terms of the structure of the internship, with interns at the Charlotte Maxeke Hospital being trained in a more structured environment than those trained at the Chris Hani Baragwanath Hospital and to a lesser degree, those trained at the Helen Joseph/Rahima Moosa Mother and Child Hospital complex. Participants at the Baragwanath Hospital related significantly more stressful accounts of their internship and this could be attributed to the higher patient load, type of patients accessing the service as well as severe managerial problems. Hence the ability to cope better was more apparent in participants who completed their internships at the Charlotte Maxeke Hospital and Helen Joseph/Rahima Moosa Mother and Child complex. Community and contextual factors thus play an important role regarding the impact on medical interns. However, it is necessary for internship coordinators, the Department of Health and Department of Education for tertiary studies as well as relevant medical boards to review working conditions of medical interns in South Africa in order to instil a more positive outlook on the medical profession in South Africa and ensure a more gratifying internship experience for interns.

LIMITATIONS OF THE STUDY

The limitations of the study are important to consider in evaluating the results of this research and opportunities for improvement are apparent. Firstly, a limited number of participants were interviewed. This study was based on ten interviews with participants being from three major academic hospitals in Johannesburg. Although a rich corpus of data emerged, it would be an advantage to interview a larger number of participants with an equal amount of males and females from each of the academic hospitals in order to increase the generalisability of findings. Furthermore, a wider selection of training institutions may be important to include, hence being able to compare findings across institutions. Interviewing conditions can also be considered to be a limitation given that a number of participants were interviewed at their workplaces and as such, these participants appeared to be more cautious in engaging with the researcher while participants interviewed in a more neutral setting engaged more freely.

As the focus of the medical internship was on interns who had completed their two-year training, it can be noted that the depth of their experiences may have waned given the time-factor. As the study relied on medical interns' retrieval of memories of their internships, the associated emotions, mood and state of mind were bound to have an impact on the way in which they responded. Hence it may be useful to interview medical interns who are currently in their internship, with a comparison between the first and second year. This being said, one cannot underestimate the lived experience of the respondent and the interns' chose to respond in a manner which best encapsulated their experiences.

An important consideration is the role of the researcher and the degree to which interviewing style may be a limitation. As the researcher is currently in her final year of study in Psychology, there is an added attunement to emotional difficulties and the impulse to treat the participant as a client had to be carefully managed. The researcher feels that the balance between interviewing and counselling was appropriately maintained and that the effects of the interviewer were limited as far as possible however one needs to consider this aspect as a limitation. As the researcher is also the primary interpretative instrument and the process of the thematic analysis is highly

subjective, it can be understood that the researcher's own ideological frameworks will inevitably emerge in research material. Furthermore, as the researcher is female and entered into a similar experience as the participants; subjective experience will represent the way in which the data was read, understood and selected for inclusion in the research report. Results are therefore open to interpretation and discussion.

IMPLICATIONS FOR FUTURE RESEARCH

Despite the above limitations, this study provides valuable information which has implications for future research into medical interns' experiences of the medical internship. While a qualitative research design does not primarily focus on the generalisability of research results, it is important that it stimulates the way in which we think about and approach subject matter. Research on medical interns' holistic experiences of the medical internship is scarce in South Africa. Thus, this study has been able to delineate specific stress factors contributing to dissatisfaction in the experience of the two-year medical internship while delineating coping mechanisms employed by medical interns in maintaining mental health, as well as maladaptive coping mechanisms which can be interrogated in future research. This research can thus stimulate further areas of research into what could be done to preserve and promote psychological wellbeing of medical interns in more adaptive ways. Given that interns in this study perceived that their internship experience was more stressful by virtue of training in Johannesburg hospitals, it would be useful to conduct further research to establish why this is so, as well as to compare internship programmes in other parts of the country.

More innovative stress management techniques and supportive measures could be introduced and facilitated, such as providing reflexive opportunities for interns in a group setting which could enhance critical thinking and facilitate self-awareness and personal growth. Pragmatic concerns such as enhancing basic needs such as sleeping quarters can also be addressed. The importance of a good supervisory process cannot be underestimated and hence future research could identify more effective ways of overcoming this problem. It provides information for coordinators of the internship to reassess training imperatives as well as for governmental institutions to review contextual challenges which negatively impacts on health professionals' functioning

and compounds their ability to provide effective services to the general public. In future research, a mixed methods design could be employed in order to increase the reliability and validity of the research study in which comparisons and conclusions could be more effectively deduced.

WITSETD

REFERENCES

- African National Congress. (1994). *The Reconstruction and Development Programme, A Policy Framework*. Johannesburg: Umanyano Publications, 1994.
- Allen, D.M., Makubalo, L., Shisana, O. & Mbobo., L. (2000). Year 2000 Health goals, objectives and indicators for South Africa. *South African Medical Journal*, 90.
- Bakker, A.B., Demerouti, E. & Euwema, M.C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10.
- Baldwin, D. W. C., Daugherty, S. R. & Ryan, P. M. (2010). How residents view their clinical supervision: A reanalysis of classic national survey data. *Journal of Graduate Medical Education*, 2, pp. 37-45.
- Bakker, A. B. & Demerouti, E. (2007). The job demands-resources model: state of the art. *The Netherlands Journal of Managerial Psychology*, 22.
- Benatar, S. R. (2004). Health care reform and the crisis of HIV and Aids in South Africa. [*The New England Journal of Medicine*](#), 351.
- Breier, M. (2006). Global competence/local conscience: the dilemma in the education of professionals in South Africa and a case study on doctors. *Human Sciences Research Council*. Cape Town.
- Brink, A. J., Slabbert B. R., & Barnes, J. O. M. (1986). The internship year in RSA – a need to change. *South African Medical Journal* 70, 679-683.
- Charmaz, K. (1996). Grounded Theory. In J. A. Smith., R. Harre. & L. van Langenhove (Eds.), *Rethinking methods in psychology*. London: Sage.
- Daugherty, S. R., Baldwin, D. W. C. & Rowley, B. D. (1998). Learning, satisfaction, and mistreatment during medical internship: A national survey of working conditions. *Journal of the American Medical Association*, 279, 1194-1199.
- Davies, T. A. & Farquharson, F. (2004). The learnership model of workplace training and its effective management: lessons learnt from a Southern African case study. *Journal of Vocational Education and Training*, 56, 181-203.
- Dunn, L. B., Iglewicz, A., & Moutier, C. (2008). A conceptual model of medical student well-being: Promoting resilience and preventing burnout. *Academic Psychiatry*, 32.
- Dunn, L. B., Hammond, K. A. G. & Roberts, L. W. (2009). Delaying care, avoiding stigma: Residents' attitudes toward obtaining personal healthcare. *Academic Medicine*, 84.
- Eckleberry-Hunt, J., PhD, Lick, D., Boura, J., Hunt, R., Balasubramaniam, M., Mulhem, E. & Fisher, C. (2009). An exploratory study of resident burnout and wellness. *Academic Medicine*, 84.

Embriaco, N., Azoulay, E., Barrau, K., Kentish, N., Pochard, F., Loundou, A. & Papazian, L. (2007). High level of burnout in intensivists': Prevalence and associated factors. *American Journal of Respiratory and Critical Care Medicine*, 175.

Essential National Health Research. (2001). *Capacity Development and Equity. ENHR in South Africa*. Retrieved February 27, 2009, from www.doh.gov.za/docs/reports/2001/enhr/chapter3a.pdf

Estabrook, K. (2008). Medical student health promotion: The increasing role of medical schools. *Academic Psychiatry*, 32.

Fisher, J. W., Thompson, B. M. & Garcia, A. D. (2007). Integrative clinical experience: An innovative program to prepare for internship. *Teaching and Learning in Medicine*, 19, 302–307.

Garcia, J. G. (2008). Practice and academy, or working as learning: internship course at the Universitat de Barcelona LIS Faculty. *Challenges for the New Information Professional*.

Geurts, S., Rutte, C. & Peeters, M. (1999). Antecedents and consequences of work-home interference among medical residents. *Social Sciences Medicine*, 48.

Goebert, G., Thompson, D., Takeshita, J., Beach, C., Bryson, P., Ephgrave, K., Kent, A., Kunkel, M., Schechter, J. & Tate, J. (2009). Depressive symptoms in medical students and residents: A multischool study. *Academic Medicine*, 84.

Gome, J. J., Paltridge, D & Inder, W.J. (2008). Review of intern preparedness and education experiences in General Medicine. *Internal Medicine Journal*, 38.

Gordon, J. (2003). Fostering students' personal and professional development in medicine: a new framework for PPD. *Medical Education*, 37.

Gray, P. S., Williamson, J. B., Karp, D. A. & Dalphin, J. R. (2007). *The research imagination: An introduction to qualitative and quantitative methods*. Cambridge: Cambridge University Press.

Hagopian, A., Thompson, M., Fordyce, M., Johnson, K. & Hart, L. (2004). The migration of physicians from sub-Saharan Africa to the United States of America: measures of the African brain drain. *Human Resources for Health*, 2.

Health Systems Trust. (1996). *Health systems research in South Africa*. Department of Health: Medical Research Council.

Health Systems Trust. (1997). *South African Health Review*. Durban: South Africa.

International Development Research Centre. (2006). Private health care sector and STI quality of care and control in Southern Africa. Retrieved March 29, 2009, from http://www.idrc.ca/uploads/user-S/11571404231101939_privatehealthcare-STI.pdf.

Issa, B. A., Yussuf, A. D., Olanrewaju, G. T. & Oyewole, A. O. (2009). Stress in residency training as perceived by resident doctors in a Nigerian University teaching hospital. *European Journal of Scientific Research*, 30.

Jaschinski J. & De Villiers M. R. (2008). Factors influencing the development of practical skills of interns working in regional hospitals of the Western Cape province of South Africa. *South African Family Practice*, 50.

Kane-Berman, J. (1992). Medical professionals and hospital management. *Critical Health*, 39.

Kelly, K. (1999a). From encounter to text: collecting qualitative data for interpretive research. In M. Terre Blanche. & K. Durrheim (Eds.), *Research in practice: Applied methods for the social sciences*. Cape Town: University of Cape Town Press.

Kern, D. E., Wright, S. M., Carrese, J. A., Lipkin, M., Simmons, J. M., Novack, D. H., Kalet, A. & Frankel, R. (2001). Personal growth in medical faculty: a qualitative study. *Western Journal of Medicine*, 175.

Lack, C. S. & Cartmill, J. A. (2005). Working with registrars: a qualitative study of interns' perceptions and experiences. *Medical Journal of Australia*, 182, 70 – 72.

Levine, R. B., Haidet, P., Kern, D. E., Beasley, B. W., Bensinger, L., Brady, D. W., Gress, T., Hughes, J., Marwaha, A., Nelson, J. & Wright, S. M. (2006). Personal growth during internship: A qualitative analysis of interns' responses to key questions. *Journal of General Internal Medicine*, 21, 564–569.

Levey, R. (2001). Sources of stress for residents and recommendations for programs to assist them. *Academic Medicine*, 76, 142–150.

Manning, M. R., Jackson, C. N. & Fusilier, M. R. (1996). The occupational stress, social support, and the costs of health care. *Academy of Management Journal*, 39.

Maskew, M., MacPhail, P., Menezes, C. & Rubel, D. (2007). Lost to follow up – contributing factors and challenges in South African patients on antiretroviral therapy. *South African Medical Journal*, 97.

Maslach, C. & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behaviour*, 2, 88–113.

McClelland, C. (2002). South African brain drain costing \$5 billion — and counting. *Canadian Medical Association Journal*, 167.

Meintjes, Y. (2003). The 2-year internship training. *South African Medical Journal*, 93.

Michels, P. J. Probst, J. C., Godenick, M. T. & Palesch, Y. (2003). Anxiety and Anger among Family Practice Residents: A South Carolina Family Practice Research Consortium Study. *Academic Medicine*, 78, 69–79.

- Parilla, P. F. & Hesser, G.W. (1998). Internships and sociological perspective: Applying principles of experiential learning. *Teaching Sociology*, 26, 310-329.
- Peltzer, K., Mashego, T. & Mabeba, M. (2003). Short communication: Occupational stress and burnout among South African medical practitioners. *Stress and Health*, 19.
- Prince, K. J. A. H., Van De Wiel, M. W. J, Scherpbier, A. J. J. A., van Der Vleuten, C. P. M. & Boshuizen, H. P. A. (2000). A qualitative analysis of the transition from theory to practice in undergraduate training in a PBL-Medical School. *Advances in Health Sciences Education*, 5, 105-116.
- Prins, J.T., Gazendam-Donofrio, S.M., Tubben, B.J., van der Heijden, F.M.M.A., van de Wiel, H.B.M. & Hoekstra-Weebers, J. E.H.M. (2007). Burnout in medical residents: a review. *Medical Education*, 41.
- Prinsloo, A. (2005). A two-year internship programme for South Africa. *South African Family Practice*, 47.
- Purdy, R. R., Lemkau, J. P., Rafferty, J. P. & Rudisill, J. R. (1987). Resident physicians in family practice: who's burned out and who knows? *Family Medicine*, 19.
- Rabbitts, J. A. (2003). Occupational exposure to blood in medical students. *South African Medical Journal*, 93.
- Roberts, L.W., Warner, T. D. & Trumpower, D. (2000). Medical students' evolving perspectives on their personal health care: clinical and educational implications of a longitudinal study. *Comprehensive Psychiatry*, 41.
- Rosen, I. M., Gimotty, P. A., Shea, J. A. & Bellini, L. M. (2006). Evolution of sleep quantity, sleep deprivation, mood disturbances, empathy and burnout among interns. *Journal of Academic Medicine*, 81, 82-85.
- Rosenstein, A. H. (2002). Nurse-Physician Relationships: Impact on Nurse Satisfaction and Retention. *American Journal of Nursing*, 102, 26-34.
- Royal College of Psychiatrists. (2003). *The mental health of students in higher education*. Council Report CR112: London.
- Shanafelt, T. D., Bradley, K. A., Wipf, J.E. & Back, A. L. (2002). Burnout and self-reported patient care in an internal medicine residency programme. *Annals of Internal Medicine*, 136, 358-367.
- Small, R. M., Soriano, R. P., Chietero, M., Quintana, J., Parkas, V. & Koestler, J. (2008). Easing the transition: Medical students' perceptions of critical skills required for the clerkships. *Education for Health*, 20.
- Sun, G. R., Saloojee, H., Jansen van Rensburg, M. & Manning, D. (2008). Stress during internship at three Johannesburg hospitals. *South African Medical Journal*, 98.

Sutcliffe, K. M., Lewton, E. & Rosenthal, M. M. (2004). Communication Failures: An Insidious Contributor to Medical Mishaps. *Academic Medicine*, 79.

Visser, M. R. M., Smets, E. M. A., Oort, F. J. & de Haes, H. C. J. M. (2003). Stress, satisfaction and burnout among Dutch medical specialists. *Canadian Medical Association Journal*, 168.

Weiner, E. L., Swain, G. R., Wolf, B. & Gottlieb, M. (2001). A qualitative study of physicians' own wellness-promotion practices. *West Journal of Medicine*, 174.

Whitley, B. E. (2002). *Principles of Research and Behavioural Science*. Boston: McGraw-Hill.

Willcock, S. M., Daly, M. G., Tennant, C. C. & Allard, B. J. (2004). Burnout and psychiatric morbidity in new medical graduates. *Medical Journal of Australia*, 181, 357–360.

APPENDICES

APPENDIX A: PERMISSION TO CONDUCT RESEARCH

Faculty of Humanities - Postgraduate

Private Bag 3, Wits 2050, South Africa • Tel: +27 11 717 4002 • Fax: +27 11 717 4037 • E-mail: Julie.Poyser@wits.ac.za



Student Number: 337782

Mrs ZI Essa
P O Box 42483
Fordsburg
2033

25 May 2009

Dear Mrs Essa

APPROVAL OF PROPOSAL FOR THE DEGREE OF MASTER OF ARTS BY COURSEWORK

I am pleased to be able to advise you that the readers of the Graduate Studies Committee have approved your proposal entitled "*Post-medical interns' reflections on medical internships in South African state training hospitals*" and you have now been admitted to full candidature. I confirm that Dr V Jithoo has been appointed your supervisor in the Discipline of Psychology.

The research report is normally submitted to the Faculty Office by 15 February, if you have started the beginning of the year, and for mid-year the deadline is 15 August. All students are required to RE-REGISTER at the beginning of each year.

You are required to submit 2 bound copies and 1 CD in pdf (Adobe) format of your research report to the Faculty Office. The 2 bound copies go to the examiners and are retained by them and the 2 corrected unbound copies are eventually sent to Archives and to the Library.

Please note that should you miss the deadline of 15 February you will be required to submit an application for extension of time and register for the research report extension. Any candidate who misses the deadline of 15 February will be charged full fees for the year.

I should be glad if you keep us informed of any changes of address during the year.

Note: All MA and PhD candidates who intend graduating shortly must meet your ETD requirements at least 6 weeks after your supervisor has received the examiners reports. **Students must remain registered at the Faculty Office until graduation.**

Yours sincerely

A handwritten signature in black ink, appearing to read "Nadia Mohamed".

Nadia Mohamed (Ms)
Postgraduate Division
Faculty of Humanities
Private Bag X3
Wits, 2050
Tel: +27 11 717 4007
Fax: +27 86 553 3479

APPENDIX B (1): PARTICIPANT INFORMATION SHEET



School of Human and Community Development
Private Bag, 3, Wits 2050,
Johannesburg, South Africa
Tel: (011) 717-4500 Fax: (011) 717-4599

Good-day,

My name is Zakiyya Ismail Essa, and I am conducting research for the purposes of obtaining a Master of Arts (Psychology) degree at the University of the Witwatersrand. The public health system in South Africa has been open to much criticism and with that the increasing dissatisfaction of public health workers has been raised. My area of focus relates to reflections of post-medical interns on their experiences of the medical internship programme in South African state-training hospitals. This study aims to understand both positive and negative psychological effects on the medical intern such as sources of stress, coping strategies employed as well as the role of education and practical training in preparation for the internship. It is purely exploratory in nature. This research is being conducted under the supervision of Dr Vinitha Jithoo and we would like to invite you to participate in this study.

Participation in this research will entail being interviewed by myself, at a time and place that is convenient. The interview will last for approximately one hour. With your permission, this interview will be recorded in order to ensure accuracy. Participation is voluntary, and no person will be advantaged or disadvantaged in any way for choosing to participate or not. All of your responses will be kept confidential and no information that could identify you or others mentioned in the interview, would be included in the research report. The interview material (tapes and transcripts) will not be seen or heard by any person, at any time and will only be processed by myself and my supervisor. The use of pseudonyms as chosen by you will assist in anonymising data and responses will be processed using a coding system which will also assist in anonymising data, thereby contributing to confidentiality. You may refuse to answer any questions you would prefer not to, and you may choose to withdraw from the study at any point. If this research process causes you any undue distress, I have included the contact details of counselling services which are either free or where fees can be negotiated.

If you choose to participate in the study please fill in your details on the consent forms below. For further information I can be contacted telephonically at 083 786 4637 or via e-mail at zakiyya101@gmail.com.

Your participation in this study would be invaluable. This research will contribute both to a larger body of knowledge on the medical internship programme in a South African context and will assist in providing useful information to ensure better care of medical interns and a meaningful internship programme. A one-page summary will be provided on request.

Kind Regards,

Zakiyya Ismail Essa

APPENDIX B (2): PARTICIPANT INFORMATION SHEET



School of Human and Community Development
Private Bag, 3, Wits 2050, Johannesburg, South Africa
Tel: (011) 717-4500 Fax: (011) 717-4599

Researcher: Zakiyya Ismail Essa
Tel: 083 786 4637
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Supervisor: Dr Vinita Jithoo
Tel: (011) 717 4523
Email: vinita.jithoo@wits.ac.za

Emthonjeni Community Centre: [Negotiable]
Located at Old Education Building, East Campus, just below Oppenheimer Life Sciences Building. For further information, please visit the School of Human and Community Development at the Umthombo Building, East Campus - 1 Jan Smuts Ave, Braamfontein

Tel: (011) 717 4513

South African Depression and Anxiety Group: (SADAG) [Free]
Tel: (011) 262-6396

Lifeline Johannesburg: [Free]
Tel: (011) 728 1347

APPENDIX C: CONSENT FOR INTERVIEWS



School of Human and Community Development
Private Bag, 3, Wits 2050, Johannesburg, South Africa
Tel: (011) 717-4500 Fax: (011) 717-4599

I _____ consent to being interviewed by
Zakiyya Ismail Essa for her study on: *"Post-medical interns' reflections on medical
internships in South African state training hospitals"*..

I understand that:

- Participation in this interview is voluntary.
- I may choose a pseudonym in contributing towards anonymity.
- That I may refuse to answer any questions I would prefer not to.
- I may withdraw from the study at any time.
- My responses will be coded according to a coding system in order to anonymise data.
- I may be directly quoted in the research report.
- No information that may identify me will be included in the research report, and my responses will remain confidential.

Signed _____

APPENDIX D:

CONSENT FOR AUDIO-RECORDING AND USE OF DIRECT QUOTES



School of Human and Community Development
Private Bag, 3, Wits 2050, Johannesburg, South Africa
Tel: (011) 717-4500 Fax: (011) 717-4599

I _____ consent to my interview with Zakiyya Ismail Essa for her study on *“Post-medical interns’ reflections on medical internships in South African state training hospital”* being tape/electronically recorded and consent to the use of direct quotations for research purposes.

I understand that:

- The tapes/electronic recordings and transcripts will not be seen or heard by any person at any time, and will only be processed by the researcher.
- I may choose a pseudonym in contributing towards anonymity and any references on record will refer to the pseudonym.
- All responses taken from the tapes will be recorded via a coding system in order to anonymise data.
- All tapes/recordings will be destroyed after the research is complete.
- No identifying information will be used in the transcripts or the research report, and my responses will remain confidential.

Signed _____

APPENDIX E: SEMI-STRUCTURED INTERVIEW GUIDE



School of Human and Community Development
Private Bag, 3, Wits 2050, Johannesburg, South Africa
Tel: (011) 717-4500 Fax: (011) 717-4599

1. How did you experience the medical internship programme in your two years of training at a state hospital?
2. What are the positives that you have gained from this process?
3. How well prepared were you psychologically to undertake the medical internship?
4. What aspects of your internship were you not prepared for?
Prompt: What psychological impact did each of these experiences have on you?
5. What were some of the challenges that you faced?
6. How did you cope with these challenges?
7. How would you classify your relationships with other colleagues, patients and supervisors?
8. How have you changed, if at all, by your internship experience?
9. If you knew before your internship what you know now, would you still go ahead with the internship? How come?