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**SCHOOL OF PUBLIC HEALTH**

**Title:** Comparing patient satisfaction with Primary Health Care Services in the Free State and Gauteng Provinces.

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### **CANDIDATE'S DECLARATION**

I declare that this work is solely my effort and that any borrowed ideas are properly referenced and acknowledged. This work has not been submitted to any institution for examination. This work is submitted to the School of Public Health at the University of the Witwatersrand as a partial fulfilment for the Master of Public Health in Health Systems and Policy (Ethics Clearance Certificate Number: **M141045**).

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**DEDICATION**

I dedicate this work to the poor, the helpless and those who cannot afford quality health care.

## **ABSTRACT**

### **BACKGROUND**

Patients constitute the majority of healthcare users at the Primary Health Care level (PHC) in South Africa where these services are free at the point of entry. Patient satisfaction surveys provide information about the quality of health care services and what is needed to improve them. There is a dearth of knowledge on the factors influencing patient satisfaction with PHC clinic services.

### **OBJECTIVE**

This study compared patient satisfaction with PHC Services in the Free State and Gauteng Provinces.

### **METHODS**

Secondary data analysis was conducted on cross sectional survey data obtained from the Research on the State of Nursing Project run by the Centre for Health Policy (RESON-CHP) in 2012. Systematic random sampling was used to target 1110 adult patients attending Antiretroviral (ART), hypertension, diabetes and Tuberculosis services. Caregivers of children attending child health and well-baby clinic were also sampled. Patients completed a pre-tested satisfaction survey with questions on facility evaluation, experience with health care providers and medication received. A scoring scale was developed to measure satisfaction. Factors influencing satisfaction were measured using multiple logistic regression analysis. The data was weighted and analysed using STATA version 13.

### **RESULTS**

A total of 1096/1110 respondents responded to the patient satisfaction survey signifying a 98.8% response rate. The majority of respondents were females (over 60%) in both provinces. Over 90% of patients were satisfied with PHC services in both provinces. The factors associated with satisfaction in Gauteng and Free State were time spent waiting for consultation (OR Gauteng 4.5 CI 1.68-12.12; Free State 4.84 CI 1.01-23.1), nurses listened (OR Gauteng 6.18 CI 2.02-18.89; Free State 5.2 CI 1.15-23.64), being given information on condition (OR Gauteng 8.14 CI 3-22.08; Free State 10.17 CI 2.52-41.14) and being treated politely (OR Gauteng 22.95 CI 5.3-99.36; Free State 22.03 CI 4.6-105.31). Having privacy respected came out as a significant factor in Free State (OR 5.5 CI 1.05-28.8).

### **CONCLUSIONS**

High levels of satisfaction with PHC services were experienced by study participants in both provinces. The ongoing PHC revitalisation reforms could leverage on maintaining or improving the factors associated with patient satisfaction. Satisfied patients adhere to treatment plans and have better health seeking behaviour which translates to improved clinical outcomes. Nurses should therefore continue listening, respecting and treating their patients with politeness. We recommend that suggestion boxes be made available for patients to contribute their suggestions as this is important for channelling feedback to providers about patient centred care. There is also need to have efficient work schedules to reduce patient waiting times.

**Keywords:** Primary Health Care; Patient Satisfaction; Province; Gauteng ; Free State; South Africa

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## ACRONYMS

|       |                                  |
|-------|----------------------------------|
| CHP   | Centre for Health Policy         |
| DHS   | District Health System           |
| FS    | Free State                       |
| GP    | Gauteng Province                 |
| HREC  | Human Ethics Research Committee  |
| LMICs | Low and Middle Income Countries  |
| MDG   | Millennium Development Goals     |
| MPH   | Master in Public Health          |
| NHI   | National Health Insurance        |
| PHC   | Primary Health Care              |
| RESON | Research on the State of Nursing |
| SA    | South Africa                     |
| ZW    | Zimbabwe                         |

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## **CHAPTER ONE**

### **INTRODUCTION, LITERATURE REVIEW, AIMS AND OBJECTIVES**

#### **1.0 Introduction**

This chapter reviews patient satisfaction literature and justifies the necessity for conducting patient satisfaction studies in Primary Health Care (PHC) clinics in SA.

#### **1.1 Background**

Globally, patient satisfaction is considered an important aspect in shaping the quality of health system reforms and health care service delivery [1-3]. In Germany and France it is compulsory for facilities to conduct patient satisfaction surveys in line with their policies to assess the performance of their respective health systems [2, 4]. In Europe and the United States, patient satisfaction research has been influential in providing evidence for policy makers to improve health system performance in hospitals [4-8]. In South Africa limited research studies have focused on patient satisfaction particularly at the Primary Health Care (PHC) level [9]. PHC level refers to the first point of call in the South African health system offering basic, curative and preventative care services [9-11]. It excludes services that are complicated and require specialised care at the hospital level for example [7]. PHC refers to the essential services that are offered by health facilities in the community. They mostly focus on Integrated Management of Childhood Illnesses (IMCI), Sexually Transmitted Infections (STIs)/HIV/AIDs, tuberculosis (TB), reproductive health (ante-natal care, family planning and maternity) mental health, chronic diseases (hypertension, diabetes and asthma), trauma and injuries and disabilities [9, 12-14]. Patient surveys assist in understanding patient behaviour, mostly that patients with high levels of satisfaction are more likely to adhere to their treatment regimens as well as to follow health worker advice on improving their conditions [1, 3].

However, where patients' satisfaction research has been conducted, the literature highlights that most of these studies show a lack of agreement on the standard methodologies that can be used to measure it [4, 7, 15]. Researchers also lack agreement on the type of satisfaction that is most important for patients, whether it is their satisfaction with the health care system in general or with a particular facility [8]. Different countries have different contextual settings that could influence failure or success of a methodology to be used to assess patient satisfaction [16]. It should be understood that patient satisfaction surveys have to take into consideration contextual factors that could be privy to that area of interest to ensure clear understanding of matters [16]. Ultimately the literature highlights the importance of the different kinds of patient satisfaction where results show that quality of care and having happier patients who adhere to treatment is often the result of being satisfied with health care services [7, 8]. Using comparative research methods on patient satisfaction is important in improving the performance of the health care system, reducing costs and for the successful implementation of health system reforms such as PHC re-engineering and National Health Insurance (NHI). Policy makers are given the opportunity to make informed decisions that could be unveiled through conducting these kinds of patient satisfaction surveys that highlight differences in different provincial settings [16].

PHC re-engineering is a health sector strategy that buttresses the overall government strategy of ensuring "A long and Healthy life for all South Africans [9, 10]. It is centred on four main core outputs: increasing life expectancy, decreasing maternal child mortality, combating HIV and Aids and strengthening health system effectiveness [9, 10, 13, 17]. PHC re-engineering is pivoted around three streams of ward based outreach teams, reinforcement of school health services; and district based clinical specialist teams to improving maternal and child health [7, 9, 12]. However, these services have to be financed in a way that does not subject communities to catastrophic expenditures

[9]. The NHI was then proposed to play a pivotal role in minimising financial burden from the users as a barrier to health access [18, 19]. NHI is a proposed mandatory government insurance scheme that is meant to allow for pooling of resources so as to protect the health care users from financial catastrophes in SA [17-19]. Contributions are proposed to be collected in a way that ensures that the rich would contribute more so as to subsidise the poor whilst the benefits would be as per need [18-20]. The NHI will offer financial risk protection to the poor, increase their access to health care services and reduce inequity [18].

The South African government has reiterated the importance of PHC making services free at the point of entry and revitalising services at that level [21]. Conducting patient satisfaction surveys will provide a window of opportunity by which the quality of programmes can be evaluated and measured [22]. Patient satisfaction is an evaluation process that is subjective and relies on individual responses based on their expectations and experiences [22].

Elsewhere in Sub Saharan Africa where governments are faced with dwindling population health, patient satisfaction surveys have been conducted to elicit their views on how service delivery can be improved [23]. Patient satisfaction studies in low and middle income countries (LMICs) are gaining momentum [6, 23-27] as survey results inform better policy and practise [22]. There are many advantages to carrying out patient satisfaction surveys, they allow for the understanding of health care service delivery quality, determining the met or unmet need for services in LMICs and highlighting aspects of care that need to be improved at different levels of the health system [6, 7, 28]. Patient satisfaction surveys allow providers to know where their weaknesses lie thus helping them to improve their work in line with patient needs [27]. Patient satisfaction surveys are also relatively cheap and simple to administer [1, 12, 24, 25, 29]. Countries where patient satisfaction

surveys have been done include Zimbabwe[30], Kenya [26], Uganda [23], Malawi [23] and South Africa [23].

Some of these patient satisfaction studies have shown that individuals have to be taught about the value of health services, i.e. its importance and how people could improve their health outcomes citing that decentralisation of PHC services can improve its effectiveness and accessibility [23]. As a result health care services have become accessible at a community level in all provinces in South Africa [27]. A study conducted by Chimbindi et al [6] which focuses on disease specific tracers (HIV and TB) highlights that the majority of patients in their study were dissatisfied with the time they have to wait to be served in PHC clinics in Kwa Zulu Natal in South Africa [6]. Therefore patient satisfaction surveys are important in assessing the effectiveness of health systems for users and communities benefit [6].

PHC has been viewed and adopted as a basic service which is targeted at people including all those who live in rural areas in South Africa [31]. It is aimed at taking the services to the people thus reaching out to them regardless of their social status [31]. In line with the Millennium Development Goals (MDGs) [32], the South African PHC strategy is a cost effective solution for population health [31, 33]. Hence, patient satisfaction surveys serve as anchors for policy makers highlighting the needs and expectations of the people where health care service delivery is concerned [34].

## **1.2 Statement of the problem**

There is a dearth of patient satisfaction surveys that make comparisons between different groups of populations in South African provinces, especially in Gauteng (GAUTENG ) and Free State (FS) provinces [22]. Given renewed government commitment on health systems reform through PHC re-engineering and the impending NHI it becomes critical to have patient satisfaction surveys giving a

glimpse of the direction health policy should take [6]. It is imperative to understand how satisfied patients are in these provinces regarding the PHC services they are offered as this will create room for improving the quality of the services offered. Different factors (such as demographic data, length of time using the clinic, area of residence, cleanliness of facility, access, waiting times, health workers personal and interpersonal skills, privacy, receiving medication, satisfaction as seen by patients recommending others to use the services) may influence patient satisfaction especially in Gauteng and Free State provinces. This patient satisfaction survey can add to the body of knowledge [31] *N.B.* This was secondary data analysis based on a bigger study conducted by the Centre for Health Policy under the auspices of the Research on the State of Nursing (RESON). We did not find any studies in the literature that have examined patient satisfaction with PHC services between Gauteng and Free State in South Africa.

### **1.3 Research question**

- Are there any differences in levels of satisfaction between patients in Gauteng and those in the Free State Provinces with PHC based on secondary data collected between July-September 2012?

### **1.4 Justification**

It is important to understand the factors that influence patient satisfaction at the PHC level so as to improve service provision [27, 33, 35]. Demographic and geographical factors may influence patient satisfaction in these provinces. Analysing the differences in patient satisfaction will allow for comparison of these provinces and provide insight into factors that have to be taken into account for PHC re-engineering and NHI reforms.

### **1.5 Aim and specific objectives**

The aim of this study was to compare and contrast patient satisfaction with PHC Services in Gauteng and Free State Provinces based on the primary data collected in 2012. The objectives were to:

1. Examine the demographic characteristics of respondents in the two provinces.
2. Compare levels of patient satisfaction in the two provinces.
3. Determine what factors influence patient satisfaction in these two provinces.
4. Recommend key elements of the findings of the study to relevant stakeholders.

## **1.6 Literature review**

The Alma Ata convention asserts that governments have a responsibility for the health of their population [11]. The convention aims to foster equitable and adequate distribution of health resources between and within countries so as to fulfil the basic human right of access to health care [11]. There are however inequities in the coverage and quality of health services and inherent inequalities in how resources are distributed and historical burden of diseases indicating that provinces in SA are not at the same level of health care delivery [12]. The South African government has seen some positive impacts in the implementation of PHC in terms of increased access but challenges in implementation still reduce the success of these programs. The challenges are attributed to resource constraints, migration of health professionals and unequal distribution of personnel in public and private sectors and lack of managerial capacity [12]. Some provinces are better than others and can attract skilled manpower e.g. Gauteng is preferred by professionals as compared to Free State [36].

### **1.6.1 Differences in provinces**

South Africa has nine provinces, each with its own administration having a distinctive landscape, population, economy and climate [37]. The Provinces have different cultural backgrounds as evidenced by varied languages spoken in these provinces [37]. The population densities correlate with provinces' contribution to the country's economy i.e. the higher the population density the higher the contributions to the economy [37]. This setup has an impact on health service delivery of the provinces and may lead to differences in quality of health care offered in these provinces [24, 25, 37]. In South Africa, the District Health System (DHS) implements PHC at community level [12]. The implementation of PHC has been slow and inconsistent especially in financially constrained provinces like the Free State which have a fragmented and poorly coordinated PHC delivery system. Gauteng has well-functioning PHC system which could be attributed to good infrastructure and being highly urbanised [12]. It should be noted that Gauteng is more urbanised and developed as compared to the FS this could have an impact on the quality of PHC services in both these provinces. Some clinics in Gauteng belong to local and provincial authorities whilst all clinics in FS belong to the provincial government thus necessitating the need for comparisons.

### **1.6.2 Primary Health Care**

PHC is an essential health care service made available to people using acceptable and affordable means to take the services to the people regardless of their social, economic and political status [11, 31]. Most Sub Saharan African countries have challenges in rolling out PHC programs as the governments have to subsidise the cost of the service to enable the general populace to afford it [11]. The services are supposed to be rolled out in such a way that they address the needs of the specific communities and address challenges or problems that the communities encounter [11]. It extends beyond the curative services to cater for promotive, preventive and rehabilitative health services

[11]. PHC services are based on the foundation that encourages communities to participate and take charge of their health care [11, 25].

In the last two decades, the literature on patient satisfaction surveys has grown exponentially the world over as a critical source of information highlighting the barriers to care and quality improvement needed in healthcare facilities [1, 2, 5, 29]. Despite this, there have been very few studies highlighting the changes that come about as a result of patient satisfaction surveys, notwithstanding that the majority of these studies also show contradictions in their results [1, 2]. There is also no agreement in the literature about the standard definition of patient satisfaction in healthcare [16, 29, 38]. Therefore different studies define patient satisfaction in a way that suits the context of enquiry and that point in time [25, 29, 38]. Donabedian [39] defines patient satisfaction as a self-reported outcome measure by the patient based on the structures and processes of care [39]. The researcher would adopt this definition for the purposes of this study as it is in line with the South African context of what health care providers and patients perceive satisfaction to be all about.

A patient satisfaction survey in Turkey highlighted that patients who went to public primary health care services were marginally satisfied compared to those who sought other services [40]. Another survey that was carried out in medical wards of a referral hospital in Kenya found that the average patient satisfaction rating was 64.7 for both men and women who were hospitalized during that period [41]. A South Africa patient satisfaction survey conducted by Peltzer [42] to determine patients experiences and how they respond to health services, revealed that majority of South Africans (70%) depend on the public health sector for their health care needs [34]. In South Africa, PHC re-engineering is projected to improve service delivery while NHI is meant to improve access to quality health care services and financial risk protection against high expenditures for people

without access to private health care [13, 43]. The emphasis is therefore on targeting and strengthening the DHS, by improving population based health systems and health outcome [44]. Patients views therefore become critical in aiding policy making as health care strategies can be aligned to their needs [34, 42]. Most studies conducted in SA do not critically examine patient satisfaction in different provinces but rather opt to focus on specific disease tracers or are mostly hospital based [27]. PHC programs have been pivotal in rural areas in pointing out high levels of patient dissatisfaction with long waiting times [27]. This could cause patients to shun services thereby reducing its effectiveness [27]. However, it should be noted that where people reside could have a bearing on how they take up PHC services i.e. people from different provinces could have different perceptions or levels of satisfaction due to other provincial factors [31]. It is therefore important to understand the provincial dynamics and how they influence levels of satisfaction among patients.

### **1.6.3 Patient satisfaction**

Patients play an important role in the success of the PHC services [27, 35]. Their opinions are important in shaping up quality PHC programs [27, 35]. It is important to understand the expectations of recipients of PHC services through the use of various study methodologies [35]. Patient satisfaction has been measured by some previous studies (around the world) utilising different methodologies which combine both qualitative and quantitative methodologies. The most common ones are telephone surveys, self-administered questionnaires, focus group discussions, semi structured interviews and exit interviews [1, 3-5, 29]. These methods have enabled researchers to gather information on quality of programs (e.g. treatment and quality of care), access (availability, acceptability, affordability) and interpersonal skills (i.e. in relation to quality of care offered by health care workers) [6, 8, 45]. Most studies have utilised different methods of data analysis which include the chi squared test, student t-test and multiple regression among others.

Different studies have found different responses in as far as level of patient satisfaction is concerned [15, 46, 47]. Patient satisfaction is however a very difficult aspect to measure as it is subjective depending on methodologies employed in data collection and analysis. A series of questions have to be asked and aggregated to obtain satisfaction.

### **1.7 Ethical considerations**

Study approval for the primary study was obtained from the relevant provincial authorities. While in the field, clinic managers of the sampled clinics were asked for permission to conduct the patient satisfaction surveys in their clinics [48]. Individual consent was then obtained from all the participants before the patient satisfaction survey was conducted. For this study written permission was sought from the Principal Investigator to use primary data that was collected during the RESON study. The primary study was approved (**M101169**) by the University of the Witwatersrand Human Research Ethics Committee (HREC) [48] this ethics clearance is attached as Appendix 2. Ethics clearance for the secondary data analysis to satisfy the requirements for an MPH study was also granted (**M141045**) by the HREC of the University of Witwatersrand and is attached as Appendix 1.

## **CHAPTER TWO**

### **MATERIALS AND METHODS**

#### **2.0 Introduction**

This Chapter describes the study design that was used including study sites, study population, sampling and sample size. The Chapter further describes the data analysis techniques that were used in the study.

#### **2.1 Study design**

The study was a secondary data analysis of data obtained from a cross sectional survey on the Research on the State of Nursing (RESON) that was conducted by the Centre for Health Policy (CHP) during July to September 2012 [48]. The survey was conducted on day patients attending sampled PHC clinics representing the municipal districts in Gauteng and Free State Provinces [48].

#### **2.2 Study sites**

The study was conducted in two provinces Gauteng and Free State. Gauteng is the most populated province in South Africa with a population estimate of 11,1 million representing 22% of the South African population [48, 49]. Gauteng province is highly urbanised with 97% of its population living in urban areas and only 3% living in rural areas [49]. A large proportion of people in Gauteng (as compared to other provinces) 25% have private health insurance leaving 75% of the population relying on Government operated facilities [49]. Gauteng has an unemployment rate of 23% and 22% of its population stay in informal housing characterised by slum and squalid conditions [49]. Gauteng has a high proportion of migrants and immigrants from other provinces extending to other countries

[49]. The province has a high burden of disease both poverty related (communicable) and illness associated with life style (non-communicable diseases) [49].

Free State is largely a rural and agricultural province with an estimated population of about 2.8 million people [50]. Of this population only 13% have private health insurance meaning the remaining 87% rely on government operated facilities for their health care needs [50]. The province is under developed when compared to the Gauteng [50]. The province has fewer migrants and immigrants as compared to Gauteng [49, 50].

### **2.3 Study population**

The primary study population consisted of patients visiting eight-hour-day clinics in each province [48]. Eight hour clinics are defined as those clinics which offer services during the day for five days a week [6, 48]. The primary study focused on adult chronic patients (receiving Antiretroviral (ART), hypertension, diabetes and Tuberculosis (TB) services) in these PHC clinics [48]. These programs are run by the Government in South Africa and they are offered for free at PHC clinics [27]. The inclusion criteria was patients who had a history with the clinic and were in possession of a patient retained record [48]. Survey questionnaires were also given to caregivers of children attending child health and well-baby clinics. Respondents were supposed to have a Road to Health Chart for the child in order to be eligible for the study [48]. Patients not meeting the above criteria were excluded from the primary study [48]. The secondary data analysis also focussed on the study population, described above and obtained from the primary research.

### **2.4 Sample size and data collection**

Considering that this study was based on secondary data analysis, I found that the methods followed by the RESON researchers in the sample size calculation were appropriate. A two stage sampling technique was followed:

The first step involved generating a list of the eight-hour clinics in each province. These were categorised according to ownership i.e. local and provincial authority. Proportional random sampling according to the number of districts in each municipality was done [48]. The sample was calculated by assuming the number of satisfied PHC nursing managers managing individual clinics. This was pegged at 50% with an assumed 10% precision. The significance level was set at 5% with a confidence interval of 95% (calculated using EpiInfo, Version 6, Centre for Disease Control and Prevention, Atlanta, GA, USA). The desired sample size was 96 clinics. Fifteen PHC clinics were added to the total sample in case of refusals or other reasons. Ultimately, 111 clinics (Gauteng 60%, n=67 and Free State 40%, n=44) constituted the total study sample.

The second step of the sampling involved patients. Patients were selected using systematic random sampling to obtain five adults and five children from each clinic [48]. All the patients who were visiting the clinics for the first time and those who did not have clinic visit records were excluded from the study [48]. In a small clinic the primary researchers would find out the number of patients seen per day e.g. 200. In such a scenario numbers would be mixed in a hat from 1-5 and a number picked from the hat at random. If for instance number 3 was picked the primary researchers would start counting every third person until they get five adults and repeating the procedure to get five children [48]. A total of 1096 respondents were obtained against the 1110 targeted resulting in a response rate of 98.8%. There were 627 from Gauteng and 469 from Free State [48]. Fourteen respondents were excluded because they did not meet the study selection recruitment criteria.

A structured questionnaire was used in the primary study [48]. Questions were asked in stages. First while the patient was waiting for their medical consultation with the clinic staff, secondly after the consultations and thirdly before exiting the clinic with additional questions asking patients to comment on the PHC services given generally [48]. These were face to face interviews conducted on patients mainly in English language [48]. In cases where respondents had challenges in understanding English, trained data collectors would interview the patient in his / her language of choice [48]. The patient satisfaction survey was piloted in three clinics similar to the study sample and no adjustments were made [48].

## **2.5 Measurement**

From the secondary data set, demographic and other variables relating to patients' satisfaction with PHC services were selected for analysis. These variables included, province, sex, length of clinic usage, cleanliness of facility, time spent, privacy, availability of prescribed medicines, treatment (respect), encouraging others to visit clinic, happiness with personnel and availability of support services. Patient satisfaction was analysed as a set of variables selected from the questionnaire that was used by the primary researchers [Refer to Appendix 4]. A scoring scale was developed to measure levels of patient satisfaction. The questions that were used in the primary survey were mainly binary (Yes and No) responses which were aggregated to generate the scores Yes=1 and No=0. A patient satisfaction score based on the category the patients falls into, in the case of this study ART patients, hypertensive, diabetic, TB and children were presented and summarised as a bar graph to illustrate patterns and proportions [36]. Three categories were developed and categorised into satisfied, indifferent and dissatisfied based on the number of yeses obtained for questions 10-26. These questions were asking respondents on facility evaluation, experience with health care

providers and medication received. If a respondent got between 0-6 yeses for these questions they were classified as dissatisfied, if they scored between 7-11 the respondent would be indifferent, whilst if they obtained between 12-17 they were classified as satisfied.

## **2.6 Data analysis**

### **2.6.1 Data management**

Data was available in an Excel spread sheet and was then imported into STATA Version 13 for analysis. The data was cleaned and checked for completeness and errors such as omission of crucial information. Some variables (sex, clinic usage, and mode of transport to get to clinic, payment of transport, and cleanliness of facilities to name just a few) had missing information. Those variables were captured to be missing information during analysis and were presented in the results under missing information category. The data was checked for internal consistency using the Cronbach scale and a value 0.938 was obtained symbolising 93.8% reliability.

### **2.6.2 Analysis**

$\chi^2$  tests were conducted to determine whether there was significant difference on the distribution of respondents under these three categories within and between the two provinces and between sectors (provincial or local authority) [33]. Weighting of the data was done to accommodate provincial differentiation using the Kruskal Wallis commands of weighting on STATA.

Cross tabulations were done to ascertain how different factors affected satisfaction using “willingness to encourage friends and family to use the clinics” as a proxy of being satisfied with the services offered. Multiple regressions were performed to examine relationships between multiple factors and their effect on patient satisfaction using “willingness to refer their friends and family to

the same clinic they were attended to” as a proxy for satisfaction [51]. The logistic multiple regressions were conducted in a series of preliminary steps. Firstly variables were tested in the bivariate analysis for significant association with the outcome variable i.e. “respondents encouraging friends and family members to use the same clinic they attended”. Variables having a p-value of 0.2 or less in this test were selected for inclusion in the model (it is standard practice to use a greater p value during the initial selection stages so that factors are not lost early during the building of the model as it goes through a series of steps). Forward selection was then used to build the final multiple regression model. The final model had only variables which remained with a p-value of less than 0.05 ( $p < 0.05$ ) in the forward model. This enabled comparison of factors within provinces and between provinces to establish whether or not there are differences in factors influencing patient satisfaction with PHC services offered in these two provinces [51].

## CHAPTER THREE

### RESULTS

#### 3.0 Introduction

This chapter summarises the findings of this study according to objectives. The data is presented in tables and pie charts in accordance with the study objectives. Analysis was conducted to test associations using the relevant statistical tools in STATA version 13.

#### 3.1 Demographic characteristics in Free State and Gauteng provinces

##### 3.1.1 Examining demographic characteristics in Free State and Gauteng Provinces

[Refer to Table 1, 2 and 3]

A total of 1096/1110 respondents responded to the patient satisfaction survey, with 627 of these respondents from Gauteng and 469 from Free State. There were more females than males in this sample for both provinces (Gauteng 66% n=627; Free State 70% n=469) (Refer to table 2 below). During the period under review i.e. July to September 2012 a large percentage in FS on average (87%) walked to their facilities as compared to Gauteng (65%). Patients in FS utilised about 1 rand on average on transport whilst in Gauteng the average amount paid for transport was 3.6 Rands. During this period the rand was trading at 8.16 to 8.31 to the United States Dollars.

**Table 1: Summary of distribution of respondents by Province**

| Province n (%)      |            |
|---------------------|------------|
| Gauteng Province    | 627 (57.2) |
| Free State Province | 469 (42.8) |
| Total               | 1096       |

Table 2: Respondents Demographics and Clinic accessibility and utilisation

|                              | Gauteng |            | Free State |            |
|------------------------------|---------|------------|------------|------------|
| Sex                          |         |            |            |            |
|                              | Number  | Percentage | Number     | Percentage |
| Male                         | 231     | 36.8       | 158        | 33.7       |
| Female                       | 393     | 62.7       | 311        | 66.3       |
| Missing                      | 3       | 0.5        | 0          | 0          |
| Total                        | 627     | 100        | 469        | 100        |
| First time to use the clinic |         |            |            |            |
| Yes                          | 51      | 8.1        | 16         | 3.4        |
| No                           | 570     | 90.9       | 448        | 95.5       |
| Missing                      | 6       | 1          | 5          | 1.1        |
| Total                        | 627     | 100        | 469        | 100        |
| Get to the clinic            |         |            |            |            |
| Walk                         | 398     | 63.48      | 392        | 83.6       |
| Taxi                         | 138     | 22         | 44         | 9.4        |
| Lift with family members     | 19      | 3          | 11         | 2.3        |
| Own car                      | 49      | 7.8        | 16         | 3.4        |
| Others                       | 22      | 3.5        | 6          | 1.3        |
| Missing                      | 1       | 0.2        | 0          | 0          |
| Total                        | 627     | 100        | 469        | 100        |
| Pay for transport            |         |            |            |            |
| Yes                          | 155     | 24.7       | 53         | 11.3       |

|                                    |     |      |     |      |
|------------------------------------|-----|------|-----|------|
| No                                 | 418 | 66.7 | 341 | 72.7 |
| Missing                            | 54  | 8.6  | 75  | 16   |
| Total                              | 627 | 100  | 469 | 100  |
| <b>Stay in this catchment area</b> |     |      |     |      |
| Yes                                | 548 | 87.4 | 439 | 93.6 |
| No                                 | 72  | 11.5 | 27  | 5.8  |
| Missing                            | 7   | 1.1  | 3   | 0.6  |
| Total                              | 627 | 100  | 469 | 100  |
| <b>Work in this area</b>           |     |      |     |      |
| Yes                                | 138 | 22   | 102 | 21.7 |
| No                                 | 475 | 75.8 | 365 | 77.8 |
| Missing                            | 14  | 2.2  | 2   | 0.4  |
| Total                              | 627 | 100  | 469 | 100  |
| <b>Clinic clean</b>                |     |      |     |      |
| Yes                                | 556 | 88.7 | 426 | 90.8 |
| No                                 | 65  | 10.4 | 38  | 8.1  |
| Missing                            | 6   | 1    | 5   | 1.1  |
| Total                              | 627 | 100  | 469 | 100  |
| <b>Toilets clean</b>               |     |      |     |      |
| Yes                                | 434 | 69.2 | 370 | 78.9 |
| No                                 | 129 | 20.6 | 79  | 16.8 |
| Missing                            | 64  | 10.2 | 20  | 4.3  |
| Total                              | 627 | 100  | 469 | 100  |
| <b>Ease to find way in clinic</b>  |     |      |     |      |
| Yes                                | 578 | 92.2 | 445 | 94.9 |
| No                                 | 40  | 6.4  | 22  | 4.7  |
| Missing                            | 9   | 1.4  | 2   | 0.4  |
| Total                              | 627 | 100  | 469 | 100  |

| <b>Opening hours convenient</b> |     |      |     |      |
|---------------------------------|-----|------|-----|------|
| Yes                             | 526 | 83.9 | 415 | 88.5 |
| No                              | 92  | 14.7 | 51  | 10.9 |
| Missing                         | 9   | 1.4  | 3   | 0.6  |
| Total                           | 627 | 100  | 469 | 100  |
| <b>Water available to drink</b> |     |      |     |      |
| Yes                             | 563 | 89.8 | 432 | 92.1 |
| No                              | 54  | 8.6  | 37  | 7.9  |
| Missing                         | 10  | 1.6  | 0   | 0    |
| Total                           | 627 | 100  | 469 | 100  |
| <b>Bench to sit on</b>          |     |      |     |      |
| Yes                             | 608 | 97   | 454 | 96.8 |
| No                              | 15  | 2.4  | 12  | 2.6  |
| Missing                         | 4   | 0.6  | 3   | 0.6  |
| Total                           | 627 | 100  | 469 | 100  |
| <b>Noise acceptable</b>         |     |      |     |      |
| Yes                             | 522 | 83.3 | 353 | 75.3 |
| No                              | 102 | 16.3 | 115 | 24.5 |
| Missing                         | 3   | 0.5  | 1   | 0.2  |
| Total                           | 627 | 100  | 469 | 100  |

Table 3: Amount paid for transport and time taken to get to clinics

| <b>Amount paid for transport</b> |                |                   |
|----------------------------------|----------------|-------------------|
|                                  | <b>Gauteng</b> | <b>Free State</b> |
| Mean                             | 3.59           | 1.06              |

|                                 |         |         |
|---------------------------------|---------|---------|
| Standard deviation              | 7.65    | 3.61    |
| <b>Minutes to get to clinic</b> |         |         |
| Median                          | 15      | 25      |
| IQR                             | 10 — 30 | 10 — 30 |
| <b>Hours to get to clinic</b>   |         |         |
| Median                          | 1       | 1       |
| IQR                             | 1 — 1   | 1 — 2   |
| <b>Months using this clinic</b> |         |         |
| Median                          | 3.5     | 5.5     |
| IQR                             | 2 — 6   | 3 — 7   |
| <b>Years using this clinic</b>  |         |         |
| Median                          | 4       | 9.5     |
| IQR                             | 2 — 10  | 2 — 20  |

### 3.1.2 Outcome of service received from clinics

Table 4 highlights the results of the outcome of services received from clinics, 265 out of 627 (42.3%) respondents in Gauteng indicated that the amount of time spent at the clinic was too much. In FS 181 out of 469 (38.6%) cited the same i.e. they spent too much time at the clinics. In both provinces about 40% of the respondents indicated they spent too much time at the clinic. These findings are presented in below:

Table 4: Comparison of services offered to respondents in the Gauteng and Free State provinces

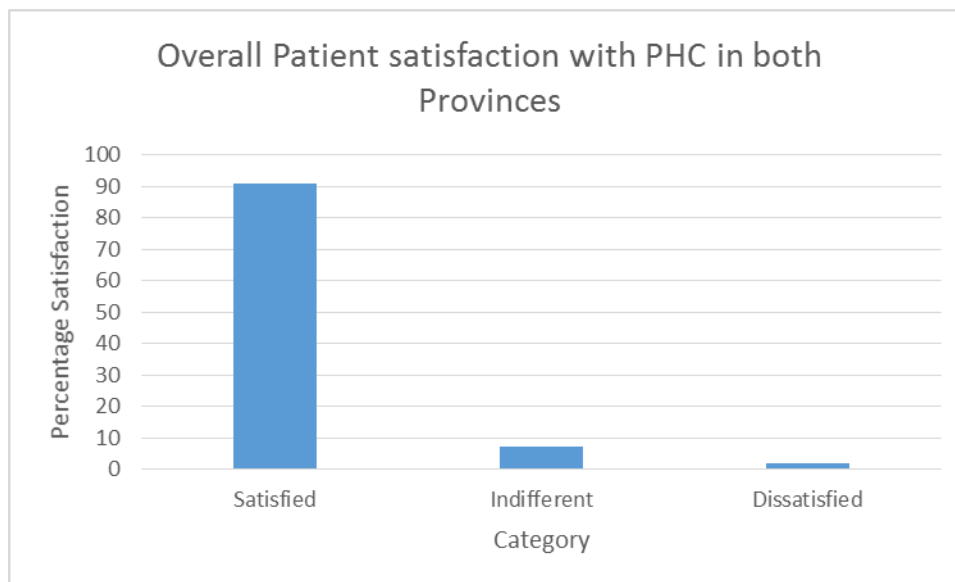
|                                    | Gauteng n=627 |             | Free State n=469 |             |
|------------------------------------|---------------|-------------|------------------|-------------|
| Patient agreed to be interviewed   |               |             |                  |             |
|                                    | Number        | Percentages | Number           | Percentages |
| Yes                                | 627           | 98.4        | 469              | 99.2        |
| No                                 | 10            | 1.6         | 4                | 0.8         |
| Total                              | 637           | 100         | 473              | 100         |
| Amount of time you spent at clinic |               |             |                  |             |
| Too much                           | 265           | 42.3        | 181              | 38.6        |
| Just right                         | 296           | 47.2        | 238              | 47.3        |
| Too short                          | 50            | 8           | 37               | 7.9         |
| Other                              | 2             | 0.3         | 5                | 1.1         |
| Missing                            | 14            | 2.2         | 8                | 1.7         |
| Total                              | 627           | 100         | 469              | 100         |
| Nurses listened                    |               |             |                  |             |
| Yes                                | 582           | 92.8        | 437              | 93.2        |
| No                                 | 30            | 4.8         | 24               | 5.1         |
| Missing                            | 15            | 2.4         | 8                | 1.7         |
| Total                              | 627           | 100         | 469              | 100         |
| Name of the nurse attended to you  |               |             |                  |             |
| Yes                                | 285           | 45.5        | 349              | 74.4        |
| No                                 | 327           | 52.2        | 113              | 24.1        |
| Missing                            | 15            | 2.4         | 7                | 1.5         |
| Total                              | 627           | 100         | 469              | 100         |
| Privacy respected                  |               |             |                  |             |
| Yes                                | 580           | 92.5        | 447              | 95.3        |
| No                                 | 27            | 4.3         | 19               | 4.1         |
| Missing                            | 20            | 3.2         | 3                | 0.6         |
| Total                              | 627           | 100         | 469              | 100         |
| Information given about condition  |               |             |                  |             |
| Yes                                | 571           | 91.1        | 427              | 68.1        |
| No                                 | 40            | 6.4         | 32               | 6.8         |
| Missing                            | 16            | 2.5         | 10               | 2.1         |
| Total                              | 627           | 100         | 469              | 100         |
| Medicines prescribed given         |               |             |                  |             |
| Yes                                | 530           | 84.5        | 417              | 88.9        |
| No                                 | 76            | 12.1        | 41               | 8.7         |
| Missing                            | 21            | 4.5         | 11               | 2.3         |
| Total                              | 627           | 100         | 469              | 100         |
| Treated politely                   |               |             |                  |             |
| Yes                                | 593           | 94.6        | 442              | 94.2        |
| No                                 | 20            | 3.2         | 19               | 4.1         |
| Missing                            | 14            | 2.2         | 8                | 1.7         |
| Total                              | 627           | 100         | 469              | 100         |
| Encourage friend or relative       |               |             |                  |             |

|         |     |      |     |      |
|---------|-----|------|-----|------|
| Yes     | 566 | 90.3 | 433 | 92.3 |
| No      | 45  | 7.2  | 26  | 5.5  |
| Missing | 16  | 2.6  | 10  | 2.1  |
| Total   | 627 | 100  | 469 | 100  |

### 3.2 Patient Satisfaction in Gauteng and Free State Provinces

#### 3.2.1 Overall Patient Satisfaction

Ninety-one percent (n=1096) of the respondents reported that they were satisfied with the services offered at the clinic. Seven percent were indifferent and two percent were dissatisfied with the clinic they attended. These findings are shown in figure 1 below.

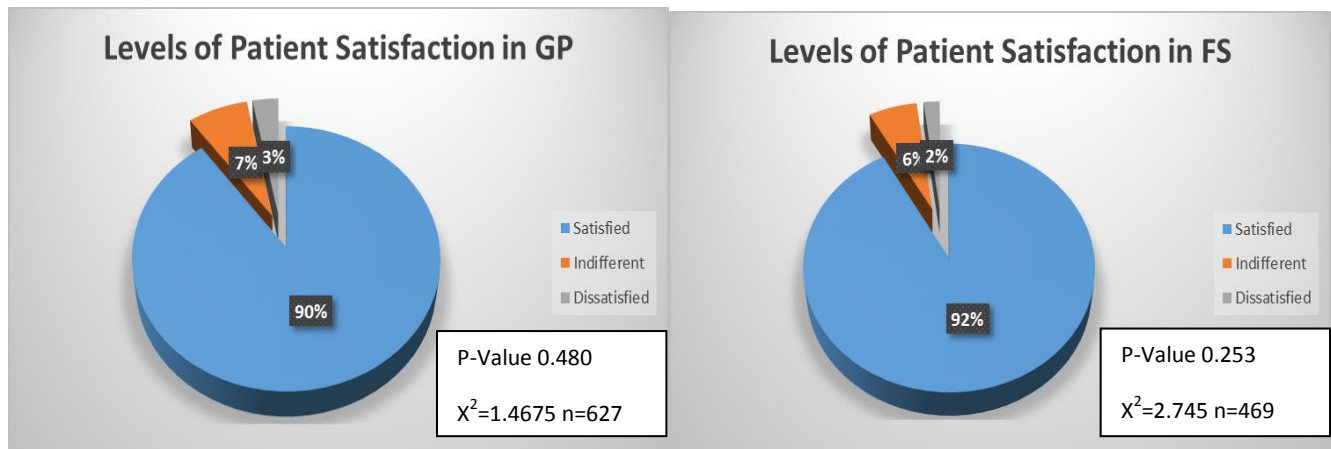


**Figure 1: Overall patient satisfaction with PHC in both provinces**

#### 3.2.2 Patient satisfaction by province

Ninety percent of respondents in clinics in Gauteng were satisfied with the clinic they attended. In Free State ninety-two percent were satisfied with the clinic they attended. Chi squared Tests ( $\chi^2$ ) were performed to ascertain whether or not there was difference between the provinces. There was difference in levels of patient satisfaction between the two provinces. Since the p- values are greater

than 0.05 it was concluded that there was difference in levels of patient satisfaction between the two provinces. The findings are summarised in figure 2 below.



**Figure 2: Levels of patient satisfaction with PHC in Gauteng and Free State**

### 3.3 Factors Influencing Patient Satisfaction

#### 3.3.1 Cross- tabulation (outcome = encouragement of friend or relative to visit clinic)

##### 3.3.1.1 Overall cross tabulations

Of the nine variables cross tabulated with this outcome (sex, how they got to clinic, time spent at the facilities, being listened to by nurses, knowing the name of nurse, having their privacy respected, being given information on condition, having medicines prescribed and being treated politely), six (time spent at the facilities, being listened to by nurses, knowing the name of nurse, having their privacy respected, being given information on condition being treated politely) were significantly associated with the outcome at a p-value less than 0.05. Majority of males and females reported that they would encourage their friends to visit the clinics, 94% and 93% respectively. These percentages were not significantly different as the p-value (0.868) was greater than 0.05. The findings are presented in Table 5 below.

**Table 5: Overall Cross Tabulations**

| Outcome = encourage friend or relative |           |            |         |
|----------------------------------------|-----------|------------|---------|
|                                        | No        | Yes        | P-value |
| <b>Sex</b>                             |           |            |         |
| Male                                   | 24 (6.4)  | 352 (93.6) | 0.868   |
| Female                                 | 46 (6.7)  | 646 (93.4) |         |
| Total                                  | 70        | 998        |         |
| <b>Get to clinic</b>                   |           |            |         |
| Walk                                   | 55 (7.1)  | 720 (92.9) | 0.127   |
| Taxi                                   | 10 (5.7)  | 167 (94.4) |         |
| Lift with family members               | 4 (13.3)  | 26 (86.7)  |         |
| Own car                                | 0         | 62 (100)   |         |
| Other                                  | 2 (7.7)   | 24 (92.3)  |         |
| Total                                  | 71        | 999        |         |
| <b>Time spent</b>                      |           |            |         |
| Too much                               | 59 (13.3) | 386 (86.7) | <0.0001 |
| Just right                             | 12 (2.3)  | 521 (97.8) |         |
| Too short                              | 0         | 85 (100)   |         |
| Other                                  | 0         | 7 (100)    |         |
| Total                                  | 71        | 999        |         |
| <b>Nurses listened</b>                 |           |            |         |
| Yes                                    | 37 (3.7)  | 977 (96.4) | <0.0001 |
| No                                     | 34 (63)   | 20 (37)    |         |
| Total                                  | 71        | 997        |         |
| <b>Name of nurse</b>                   |           |            |         |
| Yes                                    | 29 (4.6)  | 603 (95.4) | 0.001   |
| No                                     | 42 (9.6)  | 395 (90.4) |         |
| Total                                  | 71        | 998        |         |
| <b>Privacy respected</b>               |           |            |         |
| Yes                                    | 54 (5.3)  | 968 (94.7) | <0.0001 |
| No                                     | 16 (39)   | 25 (61)    |         |
| Total                                  | 70        | 993        |         |
| <b>Information on condition</b>        |           |            |         |
| Yes                                    | 33 (3.3)  | 961 (96.7) | <0.0001 |
| No                                     | 37 (51.4) | 35 (48.6)  |         |
| Total                                  | 70        | 996        |         |
| <b>Medicines prescribed</b>            |           |            |         |
| Yes                                    | 56 (5.9)  | 888 (94.1) | 0.067   |
| No                                     | 12 (10.3) | 104 (89.7) |         |
| Total                                  | 68        | 992        |         |
| <b>Treated politely</b>                |           |            |         |
| Yes                                    | 40 (3.9)  | 991 (96.1) | <0.0001 |
| No                                     | 31 (79.5) | 8 (20.5)   |         |
| Total                                  | 71        | 999        |         |

### 3.3.1.2 Cross tabulations per province

Of the nine variables cross tabulated with this outcome (sex, how they got to clinic, time spent at the facilities, being listened to by nurses, knowing the name of nurse, having their privacy respected, being given information on condition, having medicines prescribed and being treated politely), in Gauteng seven were significantly associated with the outcome at a p-value less than 0.05 (how they got to clinic, time spent at the facilities, being listened to by nurses, knowing the name of nurse, having their privacy respected, being given information on condition and being treated politely), and in FS five were significantly associated with the outcome at p-value less than 0.05 (time spent at the facilities, having their privacy respected, being given information on condition, having medicines prescribed and being treated politely). Majority of males (94%) and females (92%) in Gauteng reported that they would encourage their friends to visit the clinics. These percentages were not significantly different as the p-value (0.549) was greater than 0.05. Similarly in FS majority of males (94%) and females (95%) reported that they would encourage their friends to visit the clinics. These findings are shown on Table 6 below.

**Table 6: Cross Tabulations by Province**

| Encourage friend or relative |              |            |              |            |
|------------------------------|--------------|------------|--------------|------------|
|                              | Gauteng      |            | Free-State   |            |
|                              | No           | Yes        | No           | Yes        |
| <b>Sex</b>                   |              |            |              |            |
| Male                         | 14 (6.3)     | 208 (93.7) | 10 (6.5)     | 144 (93.5) |
| Female                       | 30 (7.8)     | 357 (92.3) | 16 (5.3)     | 289 (94.8) |
| Total                        | 44           | 565        | 26           | 433        |
| <b>P-value</b>               | <b>0.507</b> |            | <b>0.585</b> |            |
| <b>Get to clinic</b>         |              |            |              |            |
| Walk                         | 32 (8.3)     | 356 (91.7) | 23 (5.9)     | 364 (94.1) |
| Taxi                         | 7 (5.2)      | 128 (94.8) | 3 (7.1)      | 39 (92.9)  |
| Lift with family members     | 4 (21.1)     | 15 (78.9)  | 0            | 11 (100)   |
| Own car                      | 0            | 48 (100)   | 0            | 14 (100)   |

|                          |           |            |           |            |
|--------------------------|-----------|------------|-----------|------------|
| Other                    | 2 (9.5)   | 19 (90.5)  | 0         | 5 (100)    |
| Total                    | 45        | 566        | 26        | 433        |
| P-value                  | 0.032     |            | 0.730     |            |
| Time spent               |           |            |           |            |
| Too much                 | 36 (13.6) | 228 (86.4) | 23 (12.7) | 158 (87.3) |
| Just right               | 9 (3)     | 287 (97)   | 3 (1.3)   | 234 (98.7) |
| Too short                | 0         | 49 (100)   | 0         | 36 (100)   |
| Other                    | 0         | 2 (100)    | 0         | 5 (100)    |
| Total                    | 45        | 566        | 26        | 433        |
| P-value                  | <0.0001   |            | <0.0001   |            |
| Nurses listened          |           |            |           |            |
| No                       | 19 (63.3) | 11 (36.7)  | 15 (62.5) | 9 (37.5)   |
| Yes                      | 26 (4.5)  | 554 (95.5) | 11 (2.5)  | 423 (97.5) |
| Total                    | 45        | 565        | 26        | 432        |
| P-value                  | <0.0001   |            | <0.0001   |            |
| Name of nurse            |           |            |           |            |
| No                       | 33 (10.2) | 292 (89.8) | 9 (8)     | 103 (92)   |
| Yes                      | 12 (4.2)  | 273 (95.8) | 17 (4.9)  | 330 (95.1) |
| Total                    | 45        | 565        | 26        | 433        |
| P-value                  | 0.005     |            | 0.212     |            |
| Privacy respected        |           |            |           |            |
| No                       | 9 (33.3)  | 18 (66.7)  | 7 (50)    | 7 (50)     |
| Yes                      | 35 (6.1)  | 543 (93.9) | 19 (4.3)  | 425 (95.7) |
| Total                    | 44        | 561        | 26        | 432        |
| P-value                  | <0.0001   |            | <0.0001   |            |
| Information on condition |           |            |           |            |
| No                       | 21 (52.5) | 19 (47.5)  | 16 (50)   | 16 (50)    |
| Yes                      | 23 (4)    | 546 (96)   | 10 (2.4)  | 415 (97.6) |
| Total                    | 44        | 565        | 26        | 431        |
| P-value                  | <0.0001   |            | <0.0001   |            |
| Medicines prescribed     |           |            |           |            |
| No                       | 7 (9.3)   | 68 (90.7)  | 5 (12.2)  | 36 (87.8)  |
| Yes                      | 36 (6.8)  | 493 (93.2) | 20 (4.8)  | 395 (95.2) |
| Total                    | 43        | 561        | 25        | 431        |
| P-value                  | 0.426     |            | 0.048     |            |
| Treated politely         |           |            |           |            |
| No                       | 17 (85)   | 3 (15)     | 14 (73.7) | 5 (26.3)   |
| Yes                      | 28 (4.7)  | 563(95.3)  | 12 (2.7)  | 428 (97.3) |
| Total                    | 45        | 566        | 26        | 433        |
| P-value                  | <0.0001   |            | <0.0001   |            |

### 3.3.2 Multiple regression (outcome = encouragement of friend or relative to visit clinic)

#### 3.3.2.1 Overall outcome

Firstly, nine variables were tested in the bivariate analysis for significant association with outcome variable. They include: 1) Sex 2)Get to clinic 3)Time spent 4)Nurses listened 5)Name of nurse 6)Privacy respected 7)Information on condition 8)Medicines prescribed and 9)Treated politely. Secondly, of the nine variables, eight had a p-value of 0.2 or less in the bi-variate analysis and were selected for inclusion in the model. The eight include: Get to clinic, time spent, nurses listened, name of nurse, privacy respected, and information on condition, medicines prescribed and treated politely. Thirdly, using the eight variables, forward selection was used to build the final model. The final model contained five variables which remained significant ( $p < 0.05$ ) in the model and they were: Time spent, Nurses listened, privacy respected, information on condition and treated politely. Respondents who indicated that the amount of time spent at the clinic today was just right were about five times (OR 4.67 CI 2.05-10.64) more likely to encourage a friend or relative that was sick to come to this clinic compared to those that replied that the time was too much. The results are presented on table 6 below.

**Table 7: Overall Multiple Logistic Regressions**

|                                 |            | OR    | 95% CI       | p-value |
|---------------------------------|------------|-------|--------------|---------|
| <b>Time spent</b>               | Too much   | 1     | *            | *       |
|                                 | Just right | 4.67  | 2.05 — 10.64 | <0.0001 |
|                                 | Too short  | *     | *            | *       |
|                                 | Other      | *     | *            | *       |
| <b>Nurses listened</b>          | No         | 1     | *            | *       |
|                                 | Yes        | 5.4   | 2.2 — 13.17  | <0.0001 |
| <b>Privacy respected</b>        | No         | 1     | *            | *       |
|                                 | Yes        | 3.2   | 1.13 — 9.16  | 0.029   |
| <b>Information on condition</b> | No         | 1     | *            | *       |
|                                 | Yes        | 8.70  | 3.93 — 19.3  | <0.0001 |
| <b>Treated politely</b>         | No         | 1     | *            | *       |
|                                 | Yes        | 18.46 | 6.55 — 52.15 | <0.0001 |

\*No estimates (sparse data)

### 3.3.2.2 Multiple logistic regressions within the provinces

#### **3.3.2.2.1 Gauteng**

Firstly, ten variables were tested in the bivariate analysis for significant association with outcome variable. They include: 1) Sector 2) Sex 3)Get to clinic 4)Time spent 5)Nurses listened 6)Name of nurse 7)Privacy respected 8)Information on condition 9)Medicines prescribed and 10)Treated politely. Secondly, of the ten variables, seven had a p-value of 0.2 or less in the bi-variate analysis and were selected for inclusion in the model. The seven include: Get to clinic, time spent, nurses listened, name of nurse, privacy respected, and information on condition and treated politely. Thirdly, using the seven variables, forward selection was used to build the final model. The final model contained four variables which remained significant ( $p < 0.05$ ) in the model and they were: Time spent, Nurses listened, information on condition and treated politely. In Gauteng province, respondents who indicated that the amount of time spent at the clinic today was just right were about five times (OR 4.5 CI 1.68-12.12) more likely to encourage a friend or relative that was sick to come to this clinic compared to those that replied that the time was too much. These findings are presented on Table 7 below.

#### **3.3.2.2.2 Free State**

Firstly, ten variables were tested in the bivariate analysis for significant association with outcome variable. They include: 1) Sector 2) Sex 3)Get to clinic 4)Time spent 5)Nurses listened 6)Name of nurse 7)Privacy respected 8)Information on condition 9)Medicines prescribed and 10)Treated politely. Secondly, of the ten variables, seven had a p-value of 0.2 or less in the bi-variate analysis and were selected for inclusion in the model. The seven include: Sector, time spent, nurses listened, privacy respected, information on condition, medicine prescribed and treated politely. Thirdly, using

the seven variables, forward selection was used to build the final model. The final model contained five variables which remained significant ( $p < 0.05$ ) in the model and they were: Time spent, Nurses listened, privacy respected, information on condition and treated politely. Similar to Gauteng, in Free State province respondents who indicated that the amount of time spent at the clinic today was just right were about five times more likely to encourage a friend or relative that was sick to come to this clinic compared to those that replied that the time was too much. Those who had their privacy respected were about 5.5 (CI 1.05-28.8) times more likely to refer family and friends to utilise the same clinic they were attended to, this variable was not significant in Gauteng. The findings are presented on Table 7 below.

**Table 8: Provincial Multiple Logistic Regressions**

|                                 |            | <b>Gauteng</b> |              |         | <b>Free State</b> |            |         |
|---------------------------------|------------|----------------|--------------|---------|-------------------|------------|---------|
|                                 |            | OR             | 95% CI       | p-value | OR                | 95% CI     | p-value |
| <b>Time spent</b>               | Too much   | 1              | *            | *       | 1                 | *          | *       |
|                                 | Just right | 4.5            | 1.68 — 12.12 | 0.003   | 4.84              | 1.01-23.10 | 0.048   |
|                                 | Too short  | *              | *            | *       | *                 | *          | *       |
|                                 | Other      | *              | *            | *       | *                 | *          | *       |
| <b>Nurses listened</b>          | No         | 1              | *            | *       | 1                 | *          | *       |
|                                 | Yes        | 6.18           | 2.02 — 18.89 | 0.001   | 5.2               | 1.15-23.64 | 0.033   |
| <b>Information on condition</b> | No         | 1              | *            | *       | 1                 | *          | *       |
|                                 | Yes        | 8.14           | 3 — 22.08    | <0.0001 | 10.17             | 2.52-41.14 | 0.001   |
| <b>Treated politely</b>         | No         | 1              | *            | *       | 1                 | *          | *       |
|                                 | Yes        | 22.95          | 5.3 — 99.36  | <0.0001 | 22.03             | 4.6-105.31 | <0.0001 |
| <b>Privacy Respected</b>        | No         | *              | *            | *       | 1                 | *          | *       |
|                                 | Yes        | *              | *            | *       | 5.5               | 1.05-28.8  | 0.044   |

\*No estimates (sparse data)

## **CHAPTER FOUR**

### **DISCUSSION**

#### **3.0 Introduction**

This chapter seeks to validate the results on patient satisfaction obtained in Chapter Three by making reference to literature i.e. what has been observed elsewhere. Limitations of this study are highlighted and discussed in depth as to how they could have influenced the validity and reliability of this study. A thorough critique of observations made in different provinces (Gauteng and Free State) and sectors (Local Authority and Provincial Clinics) are explained and potential reasons for observed patterns of data relating to patient satisfaction stated. Differences and similarities in provincial patterns (Gauteng and Free State) on data is explained and reasons stated thereof.

#### **4.1 Limitations of this study**

This study was limited to only two provinces therefore the results cannot be generalised to other provinces. There could be patients who were not utilising the PHC services at the time of conducting the primary study who might have been dissatisfied this could have led to over estimating satisfaction. There is a possibility that patients could be satisfied with a particular facility or service on that particular day which might have led to negativity or positivity in their responses which would then not be a true reflection of how satisfied they were with PHC services. This study utilised secondary data for analysis, there was no way of rectifying the missing information on some records and variables and this could have led to some inaccurate inferences. Some variables like culture, socio economic status, age and classification on whether respondents were responding in their personal capacities or on behalf of their children could have given a wide range of factors that could have had a bearing on patient satisfaction and could influence differences and similarities in these

two provinces. These variables were not measured in the primary study. The questions in the questionnaire were easy to understand however a question on sex was too brief and could easily be misinterpreted. It should have been phrased in full as “What is your sex” other than saying “sex” only.

#### **4.2 Demographic characteristics of respondents in Gauteng and Free State provinces**

The study was carried out in two South African provinces, namely, Gauteng and Free State which are largely serviced by Provincial and local authority clinics respectively. In terms of geographical description, Gauteng has good local infrastructure and is highly urbanised compared to Free State which is mainly rural [12]. The results highlight that women were the majority of respondents in both provinces accounting for over 60% of the study sample. Women are the care givers in most cases and usually visit health facilities when they are not well compared to males who generally do not have good health seeking behaviour and would only visit health facilities when they are seriously ill [52, 53]. The majority of respondents (over 86%) in Free State walk to the health facilities as compared to Gauteng with about 65% of the respondents walking. Therefore more money (about 3.6 rand per trip) is spent on transport in Gauteng as compared to Free State (about 1 rand per trip) as most people would tend to walk to the health facilities in Free State and in turn utilise facilities that are closer to them i.e. from their catchment. Other authors argue that Free State is largely rural and has poor road network as compared to Gauteng prompting more patients in Free State to walk to the nearest clinics that are even 30 minutes away from their homesteads [12, 33].

#### **4.3 Comparison of levels of patient satisfaction Gauteng and Free State**

In general, respondents in Free State were happy about the cleanliness of the facilities as compared to those in Gauteng. Patients are generally satisfied with PHC services in both provinces, with 91%

being satisfied in Gauteng and 96% being satisfied in Free State. It should be noted that respondents become more satisfied with services where clinics serve a smaller proportion of the community thereby reducing waiting times and where costs of services are low and where amenities are clean [12, 16]. The majority of respondents in Free State walk to the clinics and they do not pay anything and most respondents cited that the facilities were clean. On conducting cross tabulations, the mode of transport for getting to the clinic did not affect satisfaction in Free State whilst in Gauteng it had a bearing. This is because the majority of the population in Free State does not have to worry about transport money as they walk to the nearest clinic whilst a large proportion in comparison in Gauteng have to pay for their transport to get to the clinic. Time spent at the clinics, being listened to by nurses, knowing the name of nurse, privacy being respected, being given information on the condition you are suffering from and being treated politely were significantly associated with patient satisfaction in both provinces.

These findings are well supported by Dookie [12] and other authors who found that patient interaction with staff members improves understanding of treatment plans, boost patients morale and improves chances of them abiding to treatment plans and thus better health outcomes [6, 12, 16, 29]. If these factors are not well considered they can lead to failure of health systems as patients might have unrealistic expectations which may result in defaulting of treatment through dissatisfaction [12, 29]. In Free State the variable “whether or not medicines were prescribed” had a significant influence on patient satisfaction but showed no significance in Gauteng. Patients staying away from towns would expect to get their medication in these clinics therefore if drugs are not prescribed they become dissatisfied and lose trust in the system unlike in Gauteng where individuals have a choice of pharmacies and other health facilities [54]. It might be a factor that in Free State people do not have that privilege to choose. Over 40% of respondents in both provinces cited that the time they spent in

clinics was too much; this may lead to serious dissatisfaction and cause patients to shun these clinics. Patients should not wait for longer periods to be attended to, as they have other commitments as well [6, 7]. They become impatient and dissatisfied if they spend a lot of time in clinics and would not be willing to encourage friends and family members to visit the clinics leading to poor health outcomes [6, 7]. It should be noted that the definition of too much time is subjective when it comes to waiting times, however studies have pointed out that patients should not be kept for over 30 minutes in clinics depending on staffing levels [27]. Some studies regard an average of between 15- 30 minutes as the standard time to be spent at an outpatient facility (19, 21), therefore waiting times above 30 minutes therefore becomes too much. In the primary study the exact time spent by patients in these facilities was not ascertained, this was due to the fact that this variable was categorised into three categories i.e. too much, just right and too short. Such categorisation does not give a clear picture of the time spent as it is subjective, what other respondents might consider as too much time might not be interpreted the same with other respondents.

#### **4.4 Factors that influence satisfaction in Gauteng and Free State provinces**

The variables time spent, being listened to by nurses, being given information on condition and being treated politely influenced patient satisfaction in Gauteng and Free State. Nurse patient relationships have been proven to influence significantly patient satisfaction with health care services as patients would need support and mentoring from health care workers so that they better understand their conditions and manage them adequately [55, 56]. Most patients look up to the health care workers and if the relations are strained they are bound to default treatment [57]. Staff attitudes also have a bearing on satisfaction, if the members do not treat the patients politely and with respect, patients are bound to be dissatisfied with the PHC services being offered to them [58]. In Free State in addition

to the above variables, respondents needed their privacy to be respected. Privacy is very important in rural clinics as people fear stigmatisation and they live in smaller communities where they know each other and they would like their visits to be private to minimise chances of other community members finding out about their conditions so as to avoid stigmatisation [12]. Gauteng has a larger population and has a higher proportion of immigrants. A significant proportion of respondents utilised clinics which were even not in their catchment areas and that could be a reason why having their privacy respected was not an issue as chances of the patients meeting people they know are minimised. Patients travel to any facility since Gauteng has 97% of its population in urbanised setup as compared to Free State which is largely rural and having a smaller population [12]. The findings are concurred by the study that was conducted by Chimbindi [7] in rural Kwa Zulu natal that found out that the rural populace would prefer to use clinics that are around them as compared to the urbanised populace. This was also closely related to the proxy ‘willingness to encourage friends and family to use the clinics’ as it was asked to participants after they have received their services assuming that they would have been influenced by how satisfied they were about the services.

## **CHAPTER FIVE**

### **CONCLUSIONS AND RECOMMENDATIONS**

#### **4.0 Introduction**

This chapter presents well thought conclusions that are drawn from the findings of the study. Conclusions of the study in relation to objectives are drawn and presented. Viable and realistic recommendations are drawn from the study so as to improve quality of service delivery using patient satisfaction as a feedback loop to denote quality of service being offered to respondents by these PHC clinics in Gauteng and Free State.

#### **5.1 Conclusion**

PHC still remains pivotal to the health system ensuring patients receive the necessary health care in South Africa. Majority of the patients in both provinces are satisfied with the services they receive in their facilities. A larger proportion of respondents pay for transport when going to clinics in Gauteng as compared to Free State. Most respondents in Free State were happy with the cleanliness of their facilities as compared to Gauteng and thus were more satisfied with PHC services offered as compared to Gauteng. Factors that have been identified to influence satisfaction in Gauteng were time spent in clinics, being listened to by nurses, being given information on their conditions, being treated politely. Factors that have been identified to influence satisfaction in Free State were time spent in clinics, being listened to by nurses, being given information on their conditions, being treated politely, having their privacy respected and having medicines prescribed with the last two variables not significantly associated with patient satisfaction in Gauteng. The ongoing PHC revitalisation reforms geared to strengthen the health system could leverage on maintaining or

improving the factors associated with patient satisfaction. Satisfied patients adhere to treatment plans and have better health seeking behaviour which translates to improved clinical outcomes. It is therefore imperative that the following recommendations based on the findings of this study be taken into account.

## **5.2 Recommendations**

It is important for all Health Practitioners and policy makers to be wary and considerate of contextual influences of different factors on patient satisfaction so that they are sensitive to these issues [57]. In light of the findings of this study the author recommends the following specific recommendations:

- a) Nurses should therefore continue listening, respecting and treating their patients with politeness. We recommend that suggestion boxes be made available for patients to contribute their suggestions as this is important for channelling feedback to providers about patient centred care. There is also need to have efficient work schedules to reduce patient waiting times.
- b) Health care workers should ensure that the recipients of their PHC services understand what they are entitled to. There is therefore need to strengthen health worker –patient relationships to ensure dialogue and exchange of information including mentoring of patients and being involved in community programs. This would ensure that the patients continue being satisfied with the services they receive from the PHC clinics.
- c) Efficient work schedules to ensure patients are seen over a short space of time without compromising on quality should be put in place. Long waiting times are a barrier to access and should be dealt with amicably by having efficient and effective trained staff.

- d) Good Provincial financing strategies such as the NHI should be strengthened to improve on efficiency and equity of these services. Provinces should offer the same good quality of health care regardless of provincial differentiation through financial risk protection of patients. Financing of these health facilities should be based on need not province with those provinces that are poor being given larger budgets and prioritised and ensuring that the districts are self-sufficient as well so that they improve provincial performance and have uniformity in service delivery regardless of province.
- e) Drugs should be made available to all clinics including those that are in disadvantaged populations that cannot afford transport fees to go elsewhere to seek treatment and those who sorely rely on PHC services. Therefore the issue of equity i.e. prioritising those in need should be strengthened through the DHS.
- f) Outreach programs should be planned for i.e. having mobile clinics at strategic points at certain periods of time so that more people are covered especially in rural areas where they have to walk long distance. This would reduce inequities and minimise barriers to access to PHC services such as transport costs. More people could be reached out to and poor populations who live far from PHC services reached out to.
- g) There is need to conduct more studies that are centred on patients' satisfaction regarding the challenges that they face in accessing health care i.e. economic, institutional and cultural. However there is also need that more research be carried out using questionnaires with designed Likert scales as they are able to overcome issues of subjectivity. Using mixed methods (quantitative and qualitative) could provide insights into information that could not be explained by the numbers for example what specific issues do the patients want nurses to listen to? These studies would enable individuals' levels of satisfaction to be clearly denoted

as they are scales where one would tick levels of satisfaction corresponding with the service received other than the yes and no in binary setups.

The findings of this study can also be used to inform policy makers of what factors to consider during the PHC re-engineering in South Africa.

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## APPENDICES

### Appendix 1: Ethics Clearance Certificate Secondary study.



R14/49 Mr Wilfred Njabulo Nunu

**HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)**  
**CLEARANCE CERTIFICATE NO. M141045**

**NAME:** Mr Wilfred Njabulo Nunu  
**(Principal Investigator)**

**DEPARTMENT:** School of Public Health

**PROJECT TITLE:** Comparing Patient Satisfaction with Primary Health  
Care Services in Free State and Gauteng Provinces

**DATE CONSIDERED:** 31/10/2014

**DECISION:** Approved unconditionally

**CONDITIONS:**

**SUPERVISOR:** Pascalia Munyewende

**APPROVED BY:**   
Professor Cleaton-Jones, Chairperson, HREC (Medical)

**DATE OF APPROVAL:** 05/11/2014

**This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.**

**DECLARATION OF INVESTIGATORS**

To be completed in duplicate and **ONE COPY** returned to the Secretary in Room 10004, 10th floor, Senate House, University.  
I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated, from the research protocol as approved, I/we undertake to resubmit the application to the Committee. **I agree to submit a yearly progress report.**

Principal Investigator Signature \_\_\_\_\_

Date \_\_\_\_\_

**PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES**

## Appendix 2: Ethics Clearance Certificate Primary Study

**UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG**  
Division of the Deputy Registrar (Research)

**HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)**  
R14/49 Ms Pascalia Munyewende

**CLEARANCE CERTIFICATE**

**M10M101169**

**PROJECT**

The Nature and Dynamics of Nursing Management  
in Primary Care and Hospital Setting

**INVESTIGATORS**

Ms Pascalia Munyewende.

**DEPARTMENT**

School of Public Health/Centre for Health Policy

**DATE CONSIDERED**

26/11/2010

**DECISION OF THE COMMITTEE\***

Approved unconditionally

**Unless otherwise specified this ethical clearance is valid for 5 years and may be renewed upon application.**

**DATE** 02/02/2011

**CHAIRPERSON** .....  
(Professor PE Cleaton-Jones)

\*Guidelines for written 'informed consent' attached where applicable  
cc: Supervisor : Prof L Rispel

**DECLARATION OF INVESTIGATOR(S)**

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.  
I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**  
PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES...

### Appendix 3: Analysis Plan

| Objective                                                                                   | Analysis plan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Examine the demographic characteristics of respondents in Free State and Gauteng provinces. | Frequency distribution (presented and summarised in the form of pie charts, bar graphs and graphs to illustrate patterns and proportions) then comparison of data was made between the two provinces.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Compare levels of patient satisfaction between the two provinces.                           | Three categories were developed and categorised into satisfied, indifferent and dissatisfied based on the number of yeses obtained for questions 10-26. These questions were asking respondents on facility evaluation, experience with health care providers and medication received. If a respondent got between 0-6 yeses for these questions they were classified as dissatisfied, if they got between 7-11 the respondent would be indifferent, whilst if they obtained between 12-17 they were classified as satisfied. A $\chi^2$ test was performed to ascertain whether or not there were differences between the provinces. |
| Determine what factors influence patient satisfaction                                       | Multiple logistic regressions were employed to generate relationships between multiple factors and how they influenced patient satisfaction and comparison made between the two provinces. Cross tabulations were also conducted using “willingness to refer family and friends to utilise the same clinic “as a proxy for patient satisfaction.                                                                                                                                                                                                                                                                                      |
| Recommend key elements of findings of the study to relevant stakeholders                    | A thorough comparison of the findings with literature was made. Carefully considered recommendations were made based and guided by the findings of this study.                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

Appendix 4: RESON Patient satisfaction survey

**STATEMENT OF CONSENT**

I have been given an information sheet and I understand the objectives of the study. I further understand that my responses will be kept confidential and that it is up to me whether or not to complete this questionnaire. It has been explained to me that even if I choose not to complete this questionnaire, I should still return it to the researchers and indicate so in the space below. My refusal to participate will in no way prejudice me.

I agree voluntarily to complete the questionnaire **(please tick)**. Yes [ ] No [ ]

Signature/Initial:.....

Date:.....

**For official use only**

|                                    |                                                                                                                               |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| 1. Province                        | <input type="radio"/> Gauteng 1<br><input type="radio"/> Free State 2                                                         |
| 2. Sector                          | <input type="radio"/> Provincial 1<br><input type="radio"/> Local Authority 2                                                 |
| 3. Primary Health Care Facility ID | <input type="text"/> <input type="text"/> <input type="text"/>                                                                |
| 4. Participant number              | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>                                           |
| 5. Date of interview:              | DD/MM/YY                                                                                                                      |
|                                    | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |
| 6. Was the interview completed?    | <input type="radio"/> No 0<br><input type="radio"/> Yes 1                                                                     |
| 7. Date checked:                   | DD/MM/YY                                                                                                                      |
|                                    | <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> |

**SECTION 1: QUESTIONS TO BE ASKED WHILE PATIENT IS WAITING**

|              |        |                                   |
|--------------|--------|-----------------------------------|
| For official | 1. Sex | <input type="checkbox"/> Male...1 |
|--------------|--------|-----------------------------------|

|                                      |                                                            |                                                                                                                                                                                                                |
|--------------------------------------|------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| use only<br><input type="checkbox"/> |                                                            | <input type="checkbox"/> Female...2                                                                                                                                                                            |
| <input type="checkbox"/>             | 2. Is this your first time to use this clinic?             | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 3. you get to the clinic today? How did                    | <input type="checkbox"/> Walk...1<br><input type="checkbox"/> Taxi...2<br><input type="checkbox"/> Lift with family members...3<br><input type="checkbox"/> Own car...4<br><input type="checkbox"/> Other_____ |
| <input type="checkbox"/>             | 4. for transport to get to the clinic? Did you pay         | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 5. did you pay for transport? How much                     | R_____                                                                                                                                                                                                         |
| <input type="checkbox"/>             | 6 did it take you to get here? How long                    | Mins_____<br>Hours_____                                                                                                                                                                                        |
| <input type="checkbox"/>             | 7 have you been using this clinic? How long                | Months_____<br>Years_____                                                                                                                                                                                      |
| <input type="checkbox"/>             | 8 in this catchment area? Do you stay                      | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 9 work in this area? Do you                                | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 10 clean? Is the clinic                                    | <input type="checkbox"/> Yes ...1<br><input type="checkbox"/> No...0                                                                                                                                           |
| <input type="checkbox"/>             | 11 toilets clean? Are the                                  | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 12 find your way around the clinic? Is it easy to          | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 13 opening hours of the clinic convenient for you? Are the | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 14 water available for you to drink? Was there             | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 15 bench for you to sit on in the clinic? Was there a      | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |
| <input type="checkbox"/>             | 16 Was the noise in the clinic acceptable?                 | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                                                                            |

|                                                                                                             |                                                                                                |                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                             |                                                                                                |                                                                                                                                                                   |
| <b><u>SECTION 2: QUESTIONS TO BE ASKED WHEN PATIENT HAS FINISHED CONSULTATION AND IS EXITING CLINIC</u></b> |                                                                                                |                                                                                                                                                                   |
| <input type="checkbox"/>                                                                                    | <b>17 Did the patient agree to be interviewed when exiting the clinic?</b>                     | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |
| <input type="checkbox"/>                                                                                    | <b>18 If patient refused, please state reason for refusal:</b>                                 |                                                                                                                                                                   |
| <input type="checkbox"/>                                                                                    | <b>19</b> Would you say that the amount of time you spent for your clinic visit today was      | <input type="checkbox"/> Too much...1<br><input type="checkbox"/> Just right...2<br><input type="checkbox"/> Too short...3<br><input type="checkbox"/> Other_____ |
| <input type="checkbox"/>                                                                                    | <b>20</b> Do you think the nurses listened you?                                                | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |
| <input type="checkbox"/>                                                                                    | <b>21</b> Do you know the name of the nurse who attended to you?                               | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |
| <input type="checkbox"/>                                                                                    | <b>22</b> Was your (or your child's) privacy respected?                                        | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |
| <input type="checkbox"/>                                                                                    | <b>23</b> Were you given information about your (or your child's) condition?                   | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |
| <input type="checkbox"/>                                                                                    | <b>24</b> Were you given any the medicines prescribed for you (or your child)?                 | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |
| <input type="checkbox"/>                                                                                    | <b>25</b> Were you treated politely?                                                           | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |
| <input type="checkbox"/>                                                                                    | <b>26</b> If your friend or relative was sick would you encourage them to come to this clinic? | <input type="checkbox"/> Yes...1<br><input type="checkbox"/> No...0                                                                                               |

**SECTION 3 YOUR COMMENTS:**

27 What do you think about your clinic visit today?

[illegible]

**28** What advice or suggestions do you have for clinic staff?

[illegible]

**29 Finally, please indicate how you feel about the service you received from clinic staff today on a scale of 1-10 (with 1 being Not Happy) and 10 being (Very happy):**

|    |                          | Not Happy |   |   |   |   | Very Happy |   |   |   |    | N/A |
|----|--------------------------|-----------|---|---|---|---|------------|---|---|---|----|-----|
| 1. | Nurses                   | 1         | 2 | 3 | 4 | 5 | 6          | 7 | 8 | 9 | 10 | N/A |
| 2. | Doctor                   | 1         | 2 | 3 | 4 | 5 | 6          | 7 | 8 | 9 | 10 | N/A |
| 3. | Clerks                   | 1         | 2 | 3 | 4 | 5 | 6          | 7 | 8 | 9 | 10 | N/A |
| 4. | Community Health Workers | 1         | 2 | 3 | 4 | 5 | 6          | 7 | 8 | 9 | 10 | N/A |
| 5. | Security Guards          | 1         | 2 | 3 | 4 | 5 | 6          | 7 | 8 | 9 | 10 | N/A |