Health Seeking Behaviours in South Africa: A Household Perspective using the General Households Survey of 2007

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DEDICATION

I dedicate this thesis to my Heavenly Father, who gave me the strength to finish it. Thank you Father for the special grace you granted me when I was writing this dissertation. Thank you for your faithfulness, kindness and love. May your name be glorified and lifted up forever. Special thanks to my lovely family (my parents) Phethukile and Thembisa , my sister Aphelele and my brother Bongile for the support and encouragement God bless you.

DECLARATION

I declare that *Health Seeking   Behaviours in South Africa   : A household perspective using General Household survey of 2007* is my own   work , that has not been submitted for any degree or examination at any other university and that all the sources I have used or quoted have been included   and acknowledge by couple reference

Abongile Jim   November 2010

Signed………….

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ACRONYMS

GHS – General Household Survey

HSRC- Human Research Council

STATS- Statistics South Africa

UNIADS- United Nation

HIV- Human Immune Virus

Aids- Acquired Immune-Deficiency Syndrome

SASH- South African Stress and health

WHO- World Health Organisation

STD- Sexually Transmitted Disease

MRC- Medical Research Council

ANC- African National Congress

COSATU - Congress of South African Trade Unions

TB- Tuberculosis

ABSTRACT

This study is aimed at empirically examining health seeking behaviours in terms of illness response on household level at South Africa using 2007 General Household Survey and other relevant secondary sources. It provides an assessment of health seeking behaviours at the household level using individuals as unit of analysis by exploring the type of health care provider sought, the reason for delay in health seeking and the cause for not consulting. This study also assesses the extent of dissatisfaction among households using medical centres and this factor in health care utilisation is considered as the main reason for not consulting health care services. All the demographic and health seeking variables utilised in this study are controlled for medical aid cover because it is a critical variable in health care seeking. Therefore this study makes distinction on illness reporting and they type of health care consulted by medical aid holders and non medical aid holders. Statistical analyses are conducted to explore and predict the way in which demographic variables and socio economic variables affect health care seeking behaviours.

KEYWORDS:

Health, Health seeking behaviours, Health care, Health care systems , illness, , Household, Consultation, Medical Coverage, South Africa,

Contents

CHAPTER 1: INTRODUCTION

1.1 Background to the study

Health is a fundamental dimension of well-being and a key component of human capital development (Sarah *et al*., 2004). South Africa is one of the countries that are challenged with the intensity of HIV/AIDS and chronic diseases burden (Bradshaw *et al.*, 2003). The intensity of these diseases propels the prioritisation of understanding on how the populace seek medical care and the factors that determine their decision in health care consultation. Therefore, this study is concerned with the pattern of health seeking behaviours among South African households. Moreover, health seeking behaviour is generally defined as an attitude towards referring to a health care facility when affected with any illness.

The South African healthcare sector offers its services through various channels which sometimes overlap but echo a truism seen in many developing countries of the world (Ahmed *et al.,* 2000; Deverly *et al.,* 1996). The new dispensation of health care as from 1994 allows health care consumers to choose whom to consult for their health care services .Therefore South African's seek health care in different places such as spiritual healers , clinics, pharmacies, hospitals and traditional healers, psychologists, physiotherapists ,dentists ect. Hospitals and clinics can be private or public heath care sector while other health care under the private health care sector.

South Africa is ranked low in health system performance compared to other middle income countries and even some lower income countries. An address by the former President of the Republic of South Africa, Mr. Nelson Mandela in 1998 revealed that the healthcare sector is faced with inequitable human distribution and financial resources between the public and the private healthcare sector. The private healthcare sector in South Africa is only accessible to

20 % of the population but consumes more than 60 % of the healthcare budget and employs more than 70 % of the health specialists (McCoy and colleagues, 2003). Therefore, equity in healthcare provision in South Africa is a critical issue because the private healthcare sector caters for a low proportion of the entire population while the public healthcare sector is burdened with more than 60 % of the population.
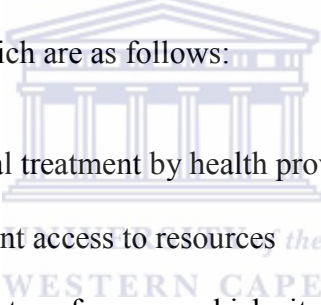
Tipping and Segall (1995) classified the approaches used in health behaviours into two: endpoint and process. The endpoint approach referred to the utilisation of the formal health systems while the process approach referred to illness response. Process approach which is especially entrenched in psychology looks at health seeking behaviours more generally by drawing out the factors which enable or prevent people from making healthy choices in either their lifestyle behaviours or their use of medical care and treatment. Hence, health seeking behaviours play a major role in the improvement of healthcare status because it informs the healthcare sector of a particular country about the conduct of the population regarding their health, and more importantly, the type of healthcare facilities households are likely to visit when they are ill. More so, health seeking behaviours assist in identification of the factors that hinder utilisation of health care services. Hence, this study is intended to shed light to policy makers and healthcare providers on where to improve the healthcare systems.

According to Weller et al., (1997), there are different factors that influence health seeking behaviours. Firstly, the predisposing factors which include age, gender, prior experiences with illness, level of education and knowledge about illness. Secondly, the enabling factors such as availability of services, financial resources to purchase them and health insurance. Lastly, the treatment factors such as home remedies, pharmacy or over the counter purchase, private medical facilities and public healthcare services. These factors as confirmed by Tipping and Segall (1995) impact the decision to consult healthcare facility and are

influenced by a variety of socio-economic variables like sex, age, social status of women, type of illness, access to services and perceived quality of the service.

Hausmann-Muela *et al.,* (2003) stated that gender inequalities affect the access of women to healthcare services. Inequality in access is associated with the findings that women have to overcome barriers to reach treatment. Ojanuga and Gilbert (1992) revealed that health providers attend to men and boys better than women and girls. The inequalities in treatment of women in healthcare facilities have been reported to play a major role in the poor quality of information which women attain and the resultant poor comprehension of action to take (WHO, 1997) and to unsatisfied women who increasingly abstain from health services. Ojanuga and Gilbert (1992) systematically classify obstacles which women face in seeking healthcare into four categories which are as follows:

- Institution barriers: unequal treatment by health providers
- Economic Barriers: different access to resources
- Cultural Barriers: social status of women which situates them into socially inferior position e.g. a male doctor attending to women with sensitive health problems.
- Education Barriers: women having less access to education.

Hausmann-Muela and colleagues (2003) explained that men are unable to explicitly demonstrate pain or emotions such as fear about illness. This ultimately hinders them from feeling psychological relieve as well as manifesting it in medical encounters. Another problem men are confronted with as regards to healthcare seeking is that they present themselves at the doctors late so as not to show their weakness or do not comply with health advice that implies a change in habits if they are considered feminised (Doyal, 2000).

Direct and indirect treatment costs are among the most commonly mentioned obstacles to adequate health seeking behaviours especially from an applied public health perspective. There is a gap that is identifiable on the issue of medical aid coverage and behaviour to health seeking in South Africa. The rate of medical aid coverage is decreasing because results of the General Household Survey of 2002 indicated a proportion of 15.2 % and coverage of 14 % in 2005. Statistics South Africa in 2008 also reported that access to medical aid coverage varies widely by population group; approximately 67 % of whites where covered by a medical aid scheme, while less than 7.5 % of blacks were covered. The impact of the medical aid coverage and its decline on the health seeking behaviours, and utilizations of healthcare facilities has not been investigated in the South Africa perspective.

The impact of the place of residence of households with relations to health behaviours has gained increased attention. The place of residence plays a major role in health seeking behaviour patterns and health service utilisation because behaviours are shaped by aggregating interacting factors encapsulated in specific geographic locations. Romanow (2002) showed that people in rural communities have poorer health status and greater needs for primary healthcare, yet they have difficulties in accessing healthcare services than those in urban areas. Behavioural patterns according to geographic areas will assist in planning and in resource allocation. The geographical areas in South Africa are highly influenced by the level of income with those in the low quintile leaving in rural areas than those in the high quintile. The issue of income inequality in South Africa is also among the factors that determine health seeking behaviours. According to the result of the General Household Survey of 1995, a proportion of 19 % of those who were ill and did not consult healthcare facilities are those in the poorest quintile.

Bindman and colleagues (1995) and Goldman and Smith (2002) conducted a study in the United States of America the findings revealed that poorly educated, impoverished households have poorer access to and lower quality of medical care. Williams (1990) confirmed that the well-educated experience better health than the poorly educated in terms of higher levels of perceived health, physical functioning and life expectancy, lower levels of disability, morbidity and mortality. This study will be carried out in the nine provinces of South Africa and the General Household Survey of 2007 will be utilized to identify health seeking behaviours within the South African populace.

1.2 Problem Statement

South Africa is in the midst of health transition that is characterized by simultaneous occurrence of epidemic infectious diseases and a rise of non-communicable diseases. Hence, determinant factors in healthcare seeking utilization need to be identified and profiled. In South Africa, access to healthcare facilities varies according to population group, area of residence, gender and level of income. One of the most important issues in healthcare access is medical aid coverage which is only made available to certain households in South Africa. This directly affects healthcare seeking behaviours resulting in unimproved health status of the country and over-utilization of public healthcare facilities. Currently, there is no statistical profile on health seeking behaviours between medical aid holders and non medical aid holders. Secondly, there is no profile of healthcare utilization in respect of provinces since highly urbanized provinces like Gauteng and Western Cape might access healthcare facilities better than provinces dominated by rural areas such as Eastern Cape and Limpopo. The satisfaction rate of households using private and public healthcare, and the waiting periods in different healthcare facilities will be evaluated in this study.

1.3 General Question

How do the individual household characteristics relate with health seeking behaviour across households in South Africa. This general question is split into specific research questions work out testable hypothesis.

1.4. Specific Questions

The following research questions are investigated through this study:

- Does medical aid coverage assure that an individual will consult when ill?

- Which health care facilities are consulted by medical aid holders?

- What is the main reason for South African households not consulting? Is it expensive to consult or is it an issue of accessibility which means health services are far from households' geographic areas, or is it that households do not see the need to consult?

- What is the effect of age on health seeking behaviour patterns, i.e. do behaviours differ from age to age e.g. different patterns in adults compared to adolescents?

- What is the effect of the level of education and income levels on health seeking behaviours?

- What is the difference in utilization of private and public healthcare facilities in South Africa?

- Are there gender variations in healthcare seeking behaviours and what differences exist in the type of healthcare consulted by males and females?

- What are the effects of population group in illness reporting and does ethnicity affect the utilisation of private and public healthcare?

- Are there differences in consultation patterns according to level of education?

1.5 General Hypothesis

This study assumes that there are differentials associated with individual characteristics in terms of consulting health facility and as well as the type of health care facility. More specifically the following hypotheses will be empirical tested.

1.5 Specific Hypotheses

The specific research questions raised have generated working hypotheses. A more comprehensive conceptual framework is presented after the literature review to come. The hypotheses are listed in order to introduce the theoretical perspective of the study.

- Propensity to consult is positively influenced by the level of education. This study expects to see those with higher and tertiary education consulting more as compared with those who have no higher or tertiary education.

- Propensity to consult is positively influenced with the level of income .With households in high payment segment and middle segment consulting more as compared with those in low payments segments.

- Gender differentials exist in health care seeking behaviours. This study expects to see woman consulting more as compared to men.

- The rate of consultation is negatively influenced by the distance households have to walk to health care facilities. This study expects to see South Africa households not consulting because health care facilities are far.

- User fees such as transport costs and payment for health care service negatively influence health care utilisation.

- Medical Aid coverage positively influence consultation rate with medical Aid holders consulting more as compared with non medical Aid holders.

1.6 Overall Purpose

The main purpose of this study is to explore ways in which South African households utilize health services and why certain household's members delay or rather do not seek medical care. The study also intends to explore the relationship between health seeking behaviours and health services being offered in the country to the citizens and also the response of households in seeking help when ill. This research will shed light on the factors that influence households not to seek health services and also the healthcare facilities households visit when they are ill. The variables of interest with regards to health seeking behaviours and utilization of health services are medical coverage, type of illness, type of health institution consulted, treatment availability after diagnosis, service satisfaction, and reasons for not consulting, type of health provider, waiting time before services and satisfaction rate of health services. These variables will be correlated with demographic variables such as age, gender, level of income, ethnicity, level of education and province.

1.7 Specific Objectives

Some specific objectives of the study are:

1. To investigate utilisation of healthcare facilities in South Africa.

2. To examine the quality of healthcare services and its relationship with health seeking behaviours.

3. To examine the impact of medical aid coverage in healthcare seeking behaviours.

4. To investigate the reason for not consulting health services and the disparities in gender.

5. To evaluate the availability of treatment in healthcare services after diagnosis.

6. To identify health seeking behaviours among different ethnicity groups

7. To evaluate the relationship between income levels of households and health behaviours and utilisations of services.

8. To profile the behaviour of households across provinces

1.8 Significance of the study

There is a need to assess health seeking behaviours of households in South Africa to reduce mortality rates because if members of households are diagnosed earlier, preventative precautions can be taken early. Hence, the significance of this study is the identification of proxies on health seeking behaviours and utilization of healthcare services in improving health seeking. This study is of utmost significance in South Africa because it will assess the quality of health service delivery, assists the health department in planning interventions and above all, seeks to recommend what can be done to promote good health seeking behaviours among households.

1.9 Data and Methods

The study makes use of the data collected from the general household survey in 2007. This secondary data has been obtained upon request from Statistics South Africa. Relevant public records are also reviewed and included in this study.
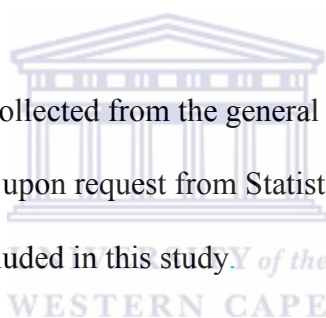
1.10 Delineation of the Study

This study uses the household as unit of observation but the analysis is conducted on individuals of all ages and all races across the nine provinces of South Africa. However, this study will not cover all the manifestations of illness but will rather adhere to the methodology used in the GHS which covers illness that occurred one month prior to the survey. This study relies on self reported statement of illness. The period of reference which is one month prior to the survey might lead to under-reporting of illness cases. The general household survey of 2007 does not cover a variable which differentiates urban and rural area, hence profiling health seeking patterns of urban and rural householders might not be possible. However, this distinction can be captured using province as a proxy. This study also does not measure the

distance to healthcare facilities in kilometres. The General Household Survey does not specify the name of the medical aid coverage as their benefits differ according to type and this might influence the type of healthcare facilities consulted.

1.11 Definition of Keywords

Health seeking behaviours: This generally includes all those actions associated with establishing and retaining a healthy state, plus the aspects of dealing with departure from that state. These are attitudes towards referring to a healthcare facility when affected with any illness. By extension, preventative attitudes such as having a medical aid may be regarded as part of health seeking behaviours.

Health: This is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.

Healthcare: This refers to treatment and prevention of illness. Healthcare is delivered by professionals in medicine, dentistry, nursing, pharmacy and allied health.

Illness: This is a state of poor health. Illness is sometimes considered a synonym for disease. Some argue that a fine distinction exists between illness and disease. Illness is also described as a subjective perception by a patient of an objectively defined disease.

Healthcare system: These are structures that are designed to meet healthcare needs of a target population. There are a wide variety of healthcare systems around the world. In some countries, healthcare system planning is distributed among market participants, whereas in others, planning is made more centrally among governments, trade unions, charities, religious, or other co-ordinated bodies to deliver planned healthcare services targeted to the populations they serve. In South Africa, healthcare system consists of a large public sector

and a smaller but fast-growing private sector. Healthcare varies from the most basic primary healthcare offered freely by the state, to highly specialise hi-tech health services available in the private sector for those who can afford it.

Medical Aid: Health insurance that provides coverage for medicine, visits to the doctor or emergency room, hospital stays and other medical expenses. Medical aid schemes differ in what they cover, payment, limits of coverage and options for treatment available to the policyholders. Medical aid can be directly purchase by an individual, or it may be provided through an employer.

Household: The household is the number of persons occupying a private dwelling. A category in which a person lives alone or a group of persons occupying the same dwelling is called the household type (Statistics South Africa). A household consists of a single person or a group of people who live together for at least four nights a week, eat together and share resources.
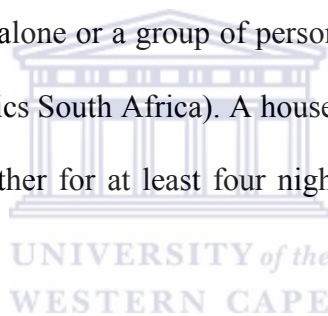
General Household Survey: This is a survey conducted by the Office of National Statistics for instance, Statistics South Africa. The General Household Survey (GHS) offers researchers method of exploring the relationship between income, housing, family, education and health. The healthcare utilisation data analyzed in this study was acquired through this survey.

South Africa: South Africa is divided into nine Provinces: Eastern Cape, Free State, Gauteng, KwaZulu Natal, Limpopo, Mpumalanga, Northern Cape, North West, and the Western Cape. Each of these Provinces has its own Legislature, Premier and Executive Council (Department of Welfare, 1998.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The overall aim of this chapter is to review existing knowledge relating to health seeking behaviours in the South African context. This chapter is organised into two major sections. The focus of the first section is on institutional dimensions of the health sector i.e. an appraisal of the South African health sector before and after the apartheid era, challenges and achievements of the health sector, and the inequalities still existing due to the former structure of South African health sector. The second section reviews differentials in the health sector; different variables that affect health seeking behaviours are evaluated.

2.2 Institutional Dimensions of the Health Sector

2.2.1 Health sector in the apartheid era

Apartheid was a system of legalised racial segregation enforced by the ruling National Party government in South Africa between 1948 and 1994, under which the rights of the majority black inhabitants of South Africa were curtailed and that of the white minority maintained (De Beer 1984). Racial segregation in South Africa began in colonial times, but apartheid as an official policy was introduced following the general election of 1948. A new legislation classified inhabitants into racial groups (black, white, coloured, and Indian); residential areas were segregated, sometimes by means of forced removals. From 1958, blacks were deprived of their citizenship, legally becoming citizens of one of ten tribal-based self-governing homelands called Bantustans, four of which became nominally-independent states (De Beer 1984). The four independent homelands were Bophuthatswana, Ciskei, Transkei and Venda, while the six self-governing territories were Gazankulu, Kangwane, KwaNdebele, Kwazulu, Lebowa and QwaQwa. The government segregated education, medical care, and other public services, thus provided black people with services inferior to those of the white minority. The

segregation and inequality in the health sector of South Africa has been in existence before the apartheid era, and has manifested itself in the form of unequal provision in the access to care; differential availability and equality; disproportionate distribution of human resources, service and facilities according to race.

During apartheid era, there were two developments which were shown to be detrimental to the healthcare of the country: the racial fragmentation of health services and the deregulation of the health sector (Yach *et al.,* 1993).The health system was fragmented between fourteen different departments of health: ten homelands departments, three own affairs departments and one general affairs department. This resulted in systems which were not cost effective, lacked coordination, decreased access and provided differential quality of care for different population groups (Chetty, 2007). Moreover, the health system was racially segregated, as confirmed by the Minister of Health in 1990 in her budget speech in which she stated that black hospitals were overcrowded and understaffed while white hospitals were under-used and overstaffed (Venter, 1990). The former homelands, townships and informal settlements were systematically underfunded as a result of apartheid policy.

During apartheid era, the government lacked coherent primary healthcare strategy. The healthcare system was based towards curative services with only 11 % of total public sector expenditure devoted to non-hospital primary healthcare services (McIntyre *et al.,* 1995). There was a strong emphasis on privatization of health which promoted an increase in inequities in health because the private sector was mainly accessible to the white population group and a small minority of black people who could afford it. In 1987, South Africa spent 5.8 % of its gross domestic product (GDP) on healthcare; 44 % of this was spent in the health sector which only cared for 20 % of the population, 56 % was spend on care of 80 % of the population which were dependent on the public healthcare sector (McIntyre *et al.,* 1995).

Under the apartheid regime, healthcare was allocated not in terms of need but in terms of access to power as healthcare professionals were trained, deployed and remunerated according to their skin colour and health services were unevenly distributed (De Beers 1984). During apartheid era, three vital developments made contributions to the actualization, expansion and strengthening of the South African healthcare: firstly, the scrapping of homelands policy and the creation of ten additional departments of health; secondly, the nationalization of the mission hospitals and their transfer to homelands governments and thirdly, the creation of tricameral parliament and own affairs department of health for whites, coloureds and Indians.

2.2.3 Homelands health care inequities

There were substantial inequities in homelands healthcare system compared to the rest of South Africa. There were disparities in healthcare expenditure, inequities in provision of beds, iniquities in provision of medical services and inequalities in nursing services. The homelands displayed massive inequalities, disparities and backlogs with respect to healthcare; these inequalities as displayed by the 1983/84 per capital provincial expenditure for curative care ranged between a high of R127 in Cape Provinces to as low as R79 in the Orange Free State and in the homelands, a high of R45 in Ciskei and a low of R16 in Lebowa (De Beers *et al.,* 1988). In 1986, the hospital bed to population ratio for white South Africans was 8.2 for every 1000 and for the blacks, 4.2 for every 1000 while the average ratio for blacks in the homelands was 2.4 for every 1000 population in 1990. The provision of healthcare hospital beds in 1986 in the homelands is as varied as shown in the Table 2.1 (Pillay *et al.,* 1984).

Table 2.1: Hospital beds per 1000 population in the homelands in 1986

Homelands	Hospital beds per 1000 of population
KwaNdebele	1.0
Bophuthatswana	1.53
KwaNgwane	1.75
KwaZulu	1.86
Transkei	1.9
Lebowa	2.0
Venda	2.6
Gazankhulu	3.6
Ciskie	3.7
QwaQwa	4.2

Source: Department of National Health and Population Development 1988 and United Nations 1986

In 1962, only 232 (2.8 %) doctors of the total 8248 in South Africa practiced in full-time capacity in the homelands, while the same number from white areas rendered part-time medical services in the homelands (Cooper *et al.* 1984*).* More so, during the same year, 5 % of all South African doctors served 14 million people approximately 40 % of the South African population that lived in the homelands. During the next decade, the situation deteriorated further with only 3 % of South African doctors were practicing in the homelands in the early 1980s and by then 50 % of South African population resided in the homelands (De Beer *et al.*,1988). In 1986, the overall doctor: population ratio of South Africa was 1:1351 to 1:685 in the private sector and 1:3030 in the public sector, compared to combined ratio for all the homelands of 1:8333 and it was worse in the case of KwaNdebele with the ratio being 1:500000 and far better in Bophuthatswana with the ratio of 1:2703 (Van Rensburg and Mans *et al.*, 1992)

In 1987, the number of dentists for each person in the white population was 1:2000, while for blacks it was 1:2000000 (Naylor, 1988). In 1990, the doctor to patient ratio in urban areas was 1:900, while in rural areas it was 1:4100. Black people were prevented from training as doctors or dentists at white universities, and black doctors and nurses were not allowed to supervise white nurses even if they were more qualified (Gardee,1977). The apartheid government spent less money on healthcare for black people. Government figures illustrated that the spending for black South Africans increased by just 19 % between 1985 and 1987, while spending on individual whites increased by over 1000 % during this period. By 1987, there was a R460 difference in the amount allocated to black South Africans and white individuals for healthcare, with whites being allocated the higher amount Van Rensburg *et al,*. (1992).

The apartheid era left a distinct mark on the South African healthcare sector that is still not entirely eradicated till today. These inequalities still reflects even today and affects health seeking behaviours of South Africa households. Disparities still exists in healthcare utilization between urban and rural settings and that of ethnic groups; the white population easily accessing healthcare services as compared to the black population and also the urban population utilising healthcare as compared to the rural population.

2.1.3 Health sector reform in South Africa

The health sector in South Africa has undergone fundamental changes over the years. During the 1970s, the health sector gradually swung away from health provision to privatization meaning individuals where increasingly placed in a position where they had to take greater personal and financial responsibilities for their own health. The Soweto riots of 1976 culminated in the government being put under pressure to reform, and then a new act in 1977 was formulated to bring fundamental reforms in South Africa healthcare (De Beer *et al*.,

1988). The new act was aimed at overcoming the uncoordinated division of responsibility and functions among the different health authorities be it national, provincial or at local level. The escalating degree of division, the lack of uniform national health policy and the predominant emphasis on curative services at the expense of prevention were all the hallmarks of the healthcare sector in the 70s (Department of health 1977).

In the 1980s, there were initiatives that were aimed at reforming the health sector: among those were the National Health Services Facilities Plan (1980), the constitutional changes reform (1983), the National Health Plan (1986), and the Browne Commission (1986) (Cooper *et al* .1987). These initiatives where aimed at strengthening the privatization of healthcare and the introduction of the primary healthcare. There were more concealed motives behind privatization campaign namely the despoliation of healthcare by transfer of criteria differentials, inequality and discrimination from race to class, or from skin colour to purchasing power (Copper *et al*., 1987).Another ulterior motive was the desegregation of healthcare by encapsulation of non-white elites into the non-segregated care facilities of the private sector. During the reformation of the health sector, major disparities illustrated by the infant mortality rate, which ranged from 13 per 1000 live births in whites to 82 in blacks; infectious diseases accounted for 12.9 % of all deaths in blacks in 1988 as compared with 2.2 % of deaths in whites; and life expectancy at birth in the 1980s was 55 years and 62 years for black males and females respectively, while it is 67 years and 74 years for white males and females respectively (Bentaar 1995). These above-mentioned reforms failed to penetrate the core larger structural problems in the South African health sector because they were dictated by the larger framework of apartheid.

In 1990, imperative developments were made in the health sector in South Africa. It is the starting point of a fundamental socio-political transition and the first step which paved the

way into a democratic, non racial, unitary and equitable dispensation. Four principles were reconfirmed by the Health Act 116 in 1990 with the individual taking responsibility for own health and well-being, cost recovery for medical treatment, provision of comprehensive health service and encouragement of the private sector to provide health services (Bentaar 1995). The National Health Service delivery of plan of 1991 priority was to establish an affordable plan for a comprehensive health services. Between 1990-1995, the aforementioned plan was to effectively provide for the priority needs of the entire population and contribute to progressive improvement of health status and quality of life of all the people of South Africa (Department of health 1996).

The National Health Plan was presented to the South African public in 1994. Specifically, it sought to eliminate the fragmentation and duplication of services by integrating all the health services under a single Ministry of Health; to decentralise the organisation and management of health services through a well-coordinated district health system; and to make comprehensive, community-based health care accessible to all South Africans by establishing primary health centres (Gilson *et al.,* 1997). The achievements of the health sector decentralisation in the last 10 years are as follows:

- The creation of new provincial administrations and governance structures that can enable wider health system change
- Movement towards the adoption of an enabling and co-ordinating role by the National Health Department
- The consolidation of effective national-provincial co-ordination structures and the development of a trusting relations between these two spheres of governance

- The development of structures, approaches and some informal relationships as means of co-ordinating and supporting service delivery throughout the country

- The emergence of willingness, even in newly formed municipalities to assume responsibilities for health service provision.

However, two main problems have been experienced in decentralization of health care sector. First, there are persistent geographical inequalities in health system resource allocations, indicating gross inequities in the distribution of human resources and physical infrastructure between and within provinces (Gilson *et al.*, 1997). Secondly, only a limited degree of decentralization in health sector management has actually been achieved (Gilson *et al.,* 1997). As a result, the promises of the early achievements of decentralization development have been hard to sustain and build on. The uneven distribution of health system resource has an influence in health seeking behaviours of South Africa population according to province. Decentralisation of the health sector does not necessary mean equal access to healthcare. Therefore, the main focal point in decentralisation should be on equal distribution of resources which will help to minimize the disparities of healthcare access and improve healthcare utilisation rate.

Immediately following the election of the Government of National Unity in 1994, a range of pro-equity policies and programmes were initiated throughout the public sector, many of which were elements of the Reconstruction and Development Programme (Mc Coy *et al* ,.1998) In addition to a dynamic building programme for primary healthcare facilities, the RDP also introduced free maternal and child healthcare and later free primary healthcare for all; comprehensive extension of social welfare grants to previously disadvantaged populations; and a national school nutrition programme (McCoy *et al*., 1998).

Under the direction of the National Department of Health, a team of officials from each of the nine newly established provinces drafted a detailed implementation strategy for the development of a decentralised, district-based health system as contained in the white paper on Transformation of the Healthcare System (Department of health, 1995). The articles of the white paper which was formally endorsed by the parliament in 1997 are as follows:

- The health sector must contribute to promoting equality and development of a unitary health system

- The health system must be centred on the districts and utilize the approach of primary healthcare

- Government, NGOs and private sector must find ways to work for common objectives

- The national, provincial and district levels must have different but complementary roles

- A package of basic services, which were essential and free of charge, will be available to the whole population at first contact level.

Efforts to decentralise and build the district-based primary healthcare system were not easy. The development of the district-based health system assisted in local-level control of public health services and, a standardised and coordinated basic health services around the country ensured healthcare is affordable and accessible to everyone. Therefore, the district-based health services and removal of user fees in basic health services were aimed at increasing access to healthcare and as a result, health seeking behaviour patterns of the population were influenced positively by this restructuring.

The restructuring of the National Health Service exceeded the slower pace at which local and provincial health restructuring occurred. Since 1994, more than 700 clinics have been built or

upgraded, 2298 clinics upgraded and given new equipment, and 125 new mobile clinics introduced (South Africa info 2004).There are now more than 3500 clinics in the public sector. Free healthcare for children under six, and for pregnant or breastfeeding mothers was also available in clinics (South Africa info 2004). The transformation of the health sector also fought the shortage of doctors in rural areas with 450 foreign doctors, mainly from Cuba, were employed. The government has also made it easier for other foreign doctors to register here. Newly graduating South African doctors and pharmacists now complete a year of compulsory community service in understaffed hospitals and clinics. This reconstruction in healthcare sector increased access in health care of South African households (Wadee *et al.*, 2003).

2.1.4 Structure of the health sector

South Africa's health sector even today still consists of a large public sector and smaller but fast-growing private sector (South Africa info 2004) .Local governments are responsible for environmental health services, and also historically, have provided some facility-based primary care services. Public health care is largely funded from nationally collected taxes, with small amounts derived from local government revenue and user fees.

The private sector comprises a wide range of generalist and specialist practitioners, pharmacies, a large number of private hospitals, and traditional healers (but few non-governmental health care providers). Healthcare varies from the most basic primary healthcare offered free by the state, to highly specialize hi-tech health services available in the private sector for those who can afford it. The public sector is under-resourced and over-used, while the rapidly increasing private sector, run largely on commercial lines, caters for middle- and high-income earners who tend to be members of medical schemes (18 % of the population), and to foreigners looking for top-quality surgical procedures at relatively

affordable prices. The private sector also attracts most of the country's health professionals (South African.info 2010). There are different forms of health care facilities and they perfume different functions: district hospitals and clinics. The functions of a district hospital are elaborated below.

2.1.4.1 Functions of district hospitals

District hospitals usually provide 24-hour care and are integrated into the district health system to provide and support a range of services. The World Health Organization recommends that services include curative and chronic care for patients referred from health centres, laboratory services, counselling, and rehabilitation (Debas *et al*., 2006). District hospitals play a central role in such programs as Safe Motherhood and the Integrated Management of Childhood Illness where the role of the hospital is clearly in saving lives and reducing the burden of disease. These hospitals are also important for basic trauma care and show promise of caring for acutely-ill newborns. Care for simple surgical conditions such as cataracts, hernias, clubfoot, and ear infections can also significantly improve patients' quality of life. In addition, outpatient clinics at district hospitals can provide such primary care services as immunizations as well as coordinate the information and supplies needed in other parts of the primary care system (English *et al.,* 2006).

2.1.5 Challenges facing the South African Health Sector

A review conducted by AfriMap and Open Society Foundation, South Africa showed public health challenges are directly linked to poverty, tuberculosis, sexually transmitted diseases, malaria, HIV/AIDS, diarrhoea and pneumonia. It was further revealed that South Africa's life expectancy rate has been declining in the last decade and a half: from 61.1 years in 1990 to 49.2 years in 2003 to 47 in 2004. Above all, life expectancy varies according to sex and race. The life expectancy for white women is 73.7 years but for African women, it is 50.4 years,

and similar discrepancies were found between white and African men. More so, it was stated that infant mortality rate was racially skewed as well. In 2002, the infant mortality rate per 1000 live births was 67 for Africans, 24 for coloureds, 11 for Indians and 7 for whites (Randera, 2005).The discrepancies in the health indicators clearly show the differences in healthcare utilization of different ethnic groups in South Africa and further display the uneven distribution of healthcare resources among the population of South Africa. Life expectancy is generally affected by the infrastructure present and how that infrastructure is distributed according to place of residence and ethnicity groups. The most recent health indicators in South Africa were released by Statistics South Africa (2009) and are illustrated by Table 2.2 shown below:

Table 2.2: Key health status indicators

Indicators	Indicator Value
Life expectancy at birth	53 years for females 57.2 years for female (Statistics SA, 2009)
Child Mortality	69 per 100
Maternal Mortality Ratio	400-625 per 100000
HIV/Aids prevalence (among 15-24 years old women)	217.2
HIV Incidence	1.3 %
Percentage of eligible HIV positive women initiated of ART	30 %
TB cases reported	341165
TB cure rate	64 %
TB patients with MDR –TB	2 %

Source: Statistics South Africa, 2009

However, the primary cause for the declining health status in South Africa is the high prevalence of HIV/AIDS and its accompanying opportunistic infections like tuberculosis. Statistics show that almost one in five adults is infected and only few have access to antiretroviral drug treatment (Open Society Foundation and Afrimap, 2005). In 2007, around 28 % of the people were receiving antiretroviral treatment. The HIV/Aids epidemic is adding additional demands on the health sector of South Africa. Tamiru & Haider (2010) revealed that HIV-positive patients stay in hospital four times longer than other patients. Therefore, hospitals are struggling to cope, especially in poorer provinces where there are often too few beds available. This shortage results in people being admitted only at the later stages of illness, reducing their chances of recovery.

Accordingly, the epidemic is crowding out patients suffering from other conditions that rate seemingly less severe than HIV/AIDS, and thus denying them the right to care. Russels (2000) reported that patients are turned away from hospitals due to limited beds. Cornia and colleagues (2002) indicated the epidemic impact on health systems is devastating as it created increased burden of diseases, shifted the demand for service and eroded the capacity of the health system to respond adequately, particularly as it affects the health workforce. Increased for service demand is associated with more demand for hospital beds, more demand for treatment and longer hospital stays.

The Health Economics and HIV/AIDS Research Division of the University of KwaZulu-Natal reported that HIV/AIDS in South Africa drives up the cost of health services. The division reported HIV/AIDS increase the demand of healthcare while health workers experience increased workloads leading to exhaustion, higher absenteeism and low staff morale. In addition, the strain placed on the healthcare system resulted in decreased quality of care and available services (Veenstra, 2005). The Human Sciences Research Council (HSRC)

of South Africa has called on the Department of Health to train more nurses, saying health facilities should offer better salaries, working conditions and material resources to retain staff.

2.2 Health inequalities

Health disparity is the central point of recent health policy issues in most of the developed and developing countries. A lot of studies have focus on the impact of the health on welfare and economic development of countries (Braveman, 2006; Gwatkin, 2002; Kawachi and Kennedy, 2002; Gakidou *et al.,* 2000; Marmot and Wilkinson, 1999). The effect of the disparities in socio-economic status, gender and residences in healthcare utilization has been examined in different studies. Christiana and Okojie (1994) states that the measure of health inequality has often been limited to mortality or life expectancy indicators.

Health inequalities have always been referred to as the measure of inequity or inequalities between socio-economic classes. The most widely cited definition of health inequality is that defined by Whitehead (2000) *"equity is concerned with creating equal opportunities in healthcare access and with bringing health differentials down to the lowest level possible"*. Researchers have agreed that equities in health should be reduced together with avoidable disparities in health outcomes (Braveman, 2006; Gakidou *et al.,* 2000; Murray, 1999). The effect of inequalities in accessing healthcare services is evaluated in this study because the utilization of healthcare facilities requires a minimization of differentials in the distribution of health care resources according to needs regardless of the socio-economic status. Health equality in this study is used according to the definition of Whitehead, which stated that health equality measure should represent not only the same level of health, but also reflect the equal opportunities in health access.

2.3 Differentials in the Health Sector
2.4 Income

2.4.1. Income and access

Scott (2002) showed the relationship between socio-economic status and health outcomes is one of the most persistent themes in the epidemiological literature. The strong and growing evidence that higher social and economic status and small gaps in income equality are associated with better health has led most researchers to conclude that these factors are fundamental determinants of health (Scott, 2002**).** The level of utilization or consumption is generally recognised as a measure that is superior to point measure of income.

A study was conducted to contrast inequalities in healthcare use and expenditure of eight developing countries and countries in transition, with the income levels divided into five equal–sized groups (quintiles) ranked from lowest (Q1) to the highest (Q5) per capital consumption spending (Balabanova and colleagues ,2002). The result from these countries revealed that the pattern of care seeking among the income quintiles of the wealthier population groups has a greater probability of obtaining health care when needed (Gilson, 2002). The proportion of individuals seeking healthcare and those who are seen by the doctor was quite low in Burkina Faso, but in each of the countries more than half of individuals seeking care reported being seen by doctor (Balabanova et al., 2002). Wealthier quintiles are generally likely to be seen by doctors than poor groups. Furthermore, wealthier individuals in Guatemala are more likely to receive care in hospitals, but in Kazakatan, Kyrgyzstan, Zambia and South Africa this pattern is reversed (Gilson, 2002). Therefore, this means that income influences the access of healthcare and households in lower quintile have difficulties in accessing healthcare centres and this have a negative impact on their healthcare behaviours.

2.4.2 Income and Choice of Curative Care

A study conducted in South Africa comparing the inequity between private and public healthcare systems, showed there was a greater tendency to use private facilities within the wealthier groups (quintile 5) than among the poorer groups (quintile 1) (Wadee *et al.,* 2003). However, utilization of public facilities, and the decision not to seek healthcare from any healthcare institution was greater among the poorer groups. Overall, the proportion of people who went to traditional healers for treatment of illness was equivalent across the lower four income quintiles; lower utilization by the highest quintile is likely to be explained by its composition of predominantly white households (Wadee et al., 2003). Table 2.3 below demonstrates the finding of the impact of income and the choice of curative care.

Table 2.3: Utilization pattern by income quintiles 1995

Income quintile	Public %	Private %	Traditional/spiritual healer %	Did not seek healthcare %
1	57.4	15.4	3.2	24.0
2	54.5	22.3	3.2	20.0
3	54.0	25.3	3.5	17.2
4	46.9	31.5	3.2	18.4
5	32.5	49.0	1.9	16.6
TOTAL	48.6	29.3	3.0	19.2

Source: Household survey (Statistics South Africa, 1995)

A similar study conducted in Uganda confirmed the wealthiest are more likely to choose private and non-governmental providers, while the poorest are more likely to self-treat (Hutchison *et.al.,* 1999). Accordingly, individuals in the lowest income quartile are more

likely to choose some self care than those in the highest quartile. The study reported two types of self care: no medical attention and no medical use, and home treatment. Hutchison and colleagues (1999) demonstrated that in 1992-93, 44.9 % of those in the lowest income quartile chose self care compared with the 33.4 % of those in the highest income groups. In 1993-94, nearly 50 % of those in the lowest income group chose self-care compared with 21.85 % in the highest income quartile. A significant proportion of ill individuals in the lowest income quartile who chose to do nothing have been increasing over those three years in Uganda (Hutchinson et al., 1999). Hence, this implies that the level of income influences the choice of curative care of households, with the lower income quintile households utilizing public healthcare and upper income quintiles making use of the private sector because they can afford to pay for healthcare services offered by the private sector. The income levels also affect the non-consulting rate of South Africa households; lower income quintile households consulting less as compared with high income quintile households.
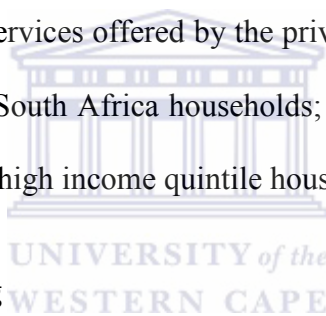
2.4.3 Income and health seeking

A study conducted in South Africa showed a vast majority of those who reported an illness or injury (i.e. perceived illness) did seek some form of care (Wadee *et al.,* 2003). The 1995 OHS indicated that of the 19 % of those perceiving themselves to be ill and who did not seek care, those in the poorest income quintile were 1.4 times more likely not to seek care than those in the richest quintile (24 % vs. 17 %).In contrast to the OHS and GHS, disparities in non-use between socio-economic groups widened over time and the proportion of those not using any healthcare rose across all socio-economic groups between 1993 and 1998 (from 16 % to 21 % in the highest deprivation quintile, and from 18 % to 30 % in the lowest quintile)(Stats SA,1998) These results are confirmed by a study conducted in Uganda in 1992-1996 which showed higher income quartiles were more likely to seek care when ill than the lower income quartiles(Hutchison *et.al.,* 1999). However, this study showed a significant increase in health

seeking from 1993-1994 and 1995-1996 in the lowest income quartile group, but argued these changes may be as a result of health education and increased media exposure (Hutchinson et al., 1999)

2.5 Gender
2.5.1 Gender and healthcare access

Studies in gender and health-seeking behaviour mainly centre on the differences in access to healthcare between men and women due to gender inequalities (Hausmann-Muela *et al*., 2003). To a higher or lesser extent, inequalities exist in all societies and social classes, but in developing countries and among the poor, they are assumed to have more negative impact on women's health. There are many questions asked with regards to gender and they access to health care facilities: to what extent do women have autonomy over decision regarding their own health (Hausmann-Muela *et al*., 2003)? Do they have their own financial resources or can they access household financial resources when necessary for using health services. Do they have time to use health services and do they have awareness of their health needs?

In many regions especially in developing countries, the lower social status of women is a key underlying social determinant of health: gender-based differences in access to health and in mortality and morbidity have been found in many studies((Hausmann-Muela *et al*., 2003)). Socio-economic factors including education, poverty, income, income inequality, and occupation are some of the strongest and most consistent predictors of health and mortality. Moss (2002) observed gender differences, combined with socio-economic inequality, together form a powerful explanatory framework for variations in women's health. Therefore, women's status is a composite indicator of the educational, cultural, economic, legal and political position of women in a given society. Women's status affects their access to health services by directly affecting their decision to seek healthcare (Christiana *et al.,* 1994).

The difference in healthcare utilization by gender is also a complex issue. Cleary *et al.,* 1982 and Verbrugge, 1982 showed women are likely to have more consultation and higher pharmaceuticals consumption. Johnnson and colleagues(2006) observed women are more health-conscious, are more often employed in the healthcare sector, and usually take responsibility for healthcare within the family. It was further stated that the healthcare system may be poorly adapted to the needs and conditions of women (Cleary *et al.,* 1982). In this case, higher utilization by women reflects frustration over inadequate treatment and ineffective care. The use of the ambulatory services and pharmaceutical is higher in women but it also demonstrates the women's lower access to specific services. The utilization of health services depends on a behavioural phenomenon which is affected by factors such as availability, distance, costs, quality of care, social structure and health beliefs. Many of these factors are intertwined with gender inequality, reflected in women's lower status in the society.
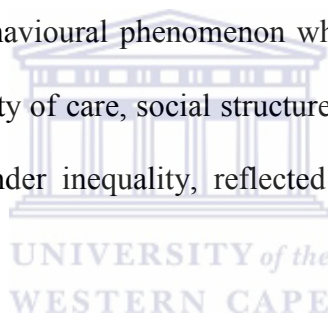
The effects of gender inequalities can be evidently seen in access of women to both preventive and therapeutic measures (Ojanuga and Gilbert, 1992). Different studies show an increased number of male patients who attend medical services in areas where disease rates are practically the same for both sexes (WHO, 1997). In general, inequality in access is associated with the finding that women have to overcome more obstacles to reach treatment, and not forgetting the unequal treatment received from health personnel. Ojanuga and Gilbert (1992) reported health providers attend to men and boys better than women and girls. This behaviour is the extreme consequence of sexism among many physicians who tend to treat women's problems as less important, with the exception of reproductive health, an area which is increasingly medicalised. The often disrespectful treatment and the poor quality of information women receive lead to poor comprehension of actions to take (WHO, 1997) and

to unsatisfied women who increasingly abstain from health services (Vlassoff, 1994). Hence, health seeking behaviour patterns vary according to gender with woman consulting more than males, and on the other hand, have lesser chances to access healthcare facilities compared to men because of their low status in the society.

2.5.2 Gender and health financing

Bonilla & Rodriguez (1993) states that women in general have limited access to cash which is needed for coping with illness costs as compared to men. Furthermore, they pointed out that women are mainly engaged in the private sphere while men work in the public sphere. Therefore, the decisions which economically affect the household lie with the breadwinner who is mostly male, making women dependent on men for accessing health services for themselves and their children. Numerous studies have pointed to the paradox that while women as the main caretakers are the first in perceiving illness in their children, they often lack the means to adequately act because they depend on the men who control the funds (Vlassoff *et al.,* 1995; Mwenesi, 1993; UNICEF, 1990).

Hutchinson and colleagues showed that an ill individual with a higher income are better to afford the use of services. The likehoodly of using health services will be a reflection of how an individual or households values, both in time and money, health relative to other goods and services. Emphasis has also been placed on the nature of women's work and its impact on access to treatment. The triple burden of household chores, childcare and agricultural work limits time for women to attend healthcare facilities, which often implies long travelling and waiting times. Added to this is the limited access to transportation, for example bicycles or costly public transport. In conclusion, men are able to finance their healthcare cost compared to women because women in most cases are seen as caregivers in the society and they participate less in the labour force as compared to men thereby they end up not having

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money for their health needs or they need to first consult their husband for healthcare seeking.

2.5.3 Gender and reporting illness

In general, women are more frequently ill than men but with relatively milder problems. By contrast, men feel ill less often but their illnesses and injuries are more serious (Verbrugge, 1982). The first cited cause of women's excess ill-health is related to the female biological characteristics (gynaecological and obstetrical health problems). Another reason explaining the women health status is the fact that women have higher prevalence of mild illness due to women's greater propensity to admit illness and differences in symptoms perception, evaluation and presentation (Jodi, 2010). The third explanation, considered by Annandale (1998) as consensual, is that where women's morbidity is higher than men's, this is the product of the social roles they have to play. Hence, what are the disparities in gender regarding illness reporting?
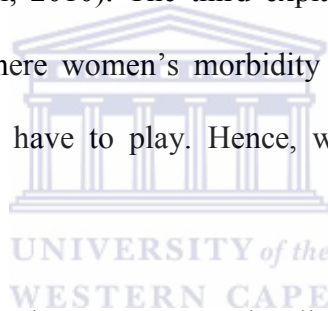
Hutchinson and colleagues showed women are only slightly more likely to report recent illness in the past 30 days than men. Results showed that between 1992-1993 and 1993-1994 approximately 25 % of women reported being ill as compared to 20 % of men. According to this study, illness reporting increased from 1995-1996 and still the gender disparities in illness reporting were still the same (Hutchinson *et al*., 1999). These results in Uganda are similar to patterns observed in households' surveys from other countries. A study conducted in Tunisia also found a difference between women and men i.e. women are more likely than men to use health centres (Jodi, 2010), health centres are utilized by 23 % of women as compared to 18 % of men. As the illness continues i.e. the symptoms not yet gone away, the government hospitals are then the preferred sources of healthcare. As the findings show, the theory of gender difference has been confirmed. Women compared to men, have a certain

type of social relation with various healthcare services. Since the status of women seems to be relatively low in the society, they interact with health centres more comfortably, while men prefer to seek healthcare from government hospitals. Women, therefore, bear the burden of illness and consult with local health authorities nearby.

Conversely, the Tunisian study (Judi, 2010) observed men sought medical treatment from government hospitals more than women. These findings are explained by the sociological idea about the social relation of women and men to the degree of healthcare profession. As expected, a popular gesture among the studied subjects was that a large number of women and men were more likely to employ a so-called lay treatment and bought medicine from drug-stores. This finding parallels a study conducted in Thailand where although a relative free healthcare service was implemented, under a "30 baht for all medical care" program, a majority of the rural poor persons still did not seek government healthcare services (Ministry of Public health, 2001).
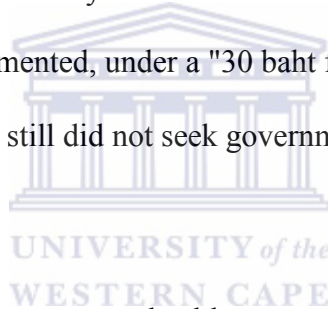
However, the analysis showed government healthcare services were preferable for seeking medical treatment, particularly for illness with a longer duration. Turning to the gender differences in seeking healthcare services, women who sought medical treatments from government health centres more than men, were characterized as married, housewives, middle aged, primary education completed, involvement in agricultural work and manual labour and not absolutely poor in their communities. They earned a moderate monthly income, around 5000-10,000 baht(Ministry of Public Health ,2001) .

2.6 Age and health service utilization

There are different patterns in healthcare utilization of different age groups. More so, there are different factors that affect the utilization of healthcare service among adults, adolescents and the elderly population. In the case of the elderly population, a number of factors were

reported in a study conducted in Nigeria to assess the determinants of health seeking behaviours among the elderly population (Aburaheem, 2007). The most common factor reported in the study is poverty (50.3 %) followed by nature of illness (25.2 %), quality of service provided (10.8 %), attitude of health caregivers (3.6 %), waiting time (3 %), availability of service (2.8 %), accessibility in terms of distance (2.3 %) and level of education (2 %) all affects the utilization patterns of the elderly population(Aburaheem,2007).

The issue of population ageing represent a major challenge for healthcare institutions due to physical, social and psychological changes that results in complex morbidity and mortality profile in the middles income countries such as South Africa. A study conducted in Mexico on 'health and ageing' showed there are differences in older adult's use of preventative health care services that relate to health insurance coverage indicating that insured older adults have better access to preventive healthcare services Gallegos-Carriloo eta al ,(2008). In the case of Bangladesh government, primary healthcare services remain under-utilized by or poorly utilized and older people often seek healthcare services too late when they are extremely ill to obtain adequate treatment (Vaugana *et al.,* 2000). More so, the Bangladeshi study showed that when older people's illness do not respond to the treatment, they tend to explain it by their old age and this affect their health seeking behaviours because these behaviours depends on the perception of health and ill health. There is a thin line between normal status of health of an older person and that of an older person suffering from an illness condition because elderly population are vulnerable health-wise compared to other age groups. The mobility and accessibly of older people is also critical in the healthcare utilization.

A study conducted in the United States of America reported that older people expressed lower expectation regarding physical and mental health ageing and this result in placing less

importance on seeking health care (Sarkisa *et al.,* 2002). Family members are also reported to plays prominent role in healthcare utilization of elderly people because they motivate them in reporting health illness (Sarkisa *et al*., 2002). In South Africa currently, there is a gap in respect to healthcare utilization of elderly population and hence, one of the specific aim of this research is to close that gap.

2.7 Education and healthcare utilization

Evans (1994) reported that health researchers and health professionals in developing and developed countries are concerned about the relationship between education and health. Education just like income, employment status and social environment are key determinants of health (Canada Health, 1999; World Bank, 1999). The well-educated experience better health than the poorly educated in terms of higher levels of perceived health, physical functioning, life expectancy and lower levels of disability, morbidity, and mortality (Mirowsky and Ross 2000; Williams and Collins 1995). Therefore, there are disparities in households with high level of education compared to those with lower level of education. According to Goldman (2001) and Lakdawalla (2001), the assumption that education and its determinants have no effect on the quality of care delivered by a given physician, surgeon, or hospital is reasonable. In other words, a patient's education will not help him when he is on the operating table, but it might help him to choose a better doctor or hospital before he enters the operating room. The meaning is that the level of education affects the choice of healthcare facilities that households uses when ill. High level educated households are more likely to use private healthcare facilities that provide them with good quality services while the lower educated households are likely to use public healthcare facilities where they wait long time before seeing healthcare provider, and as a result, this affects the utilization of healthcare facilities of lower educated households. Education is mostly linked with income and
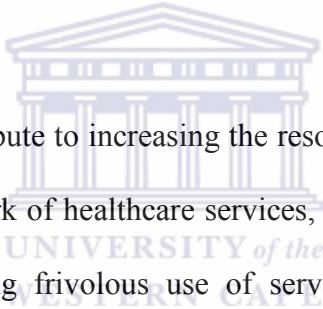
employment status meaning lower educated households have limited access to healthcare facilities because of affordability.

In developing countries, high education levels and literacy rate in the population has a positive impact, particular in women's health and children's well being (Nussbaum, 2000; Bledsoe *et al.,* 1999; Sen, 1999). Female literacy rate of mother remain one of the ten key indicators to assess women well being. Mother's level of education correlates closely with the child risk of dying before age 2 years. Developing countries that have achieved a female literacy rate ranging from 70 % to 83 % have also achieved infant mortality rate of 50 per 100000 or lower (Save children, 2000). This implies that households headed by educated people differ in health seeking behaviours patterns compared to households headed by uneducated households. Filmer (1999) observed educated women are more likely to postpone marriage and childbirth, give better healthcare to their families, send their children to school and contribute to overall economic growth. Simply , educated females ensures that members of their household have medical aid coverage or have healthcare finances so that when illness occurs, they are able to access or utilize the best healthcare facilities for better health results.

A study conducted in U.S reported women with more Grade12 years of education had a higher probability of using medical care (93 %) and ambulatory care (84 %) but lower likelihood of an impatient hospital stay (9 %) or home health service use compared to women with less than 12 years of education (Sarkisa *et al.,* 2002). Also, women with higher education (97 %) were more likely to use preventative health services than women with 12 years of education (92 %) (Sarkisa *et al.,* 2002).Therefore, this means that the higher the level of education, the greater the probability of utilizing healthcare facilities and hence, level of education affect health seeking behaviour pattern of households.

2.8 User fees in healthcare

User fees are charges to the individual for healthcare at the time of utilization. Unlike other forms of healthcare financing, such as pre-payment schemes or insurance, the timing of payment coincides with the need for healthcare. Of all cost recovery mechanisms, user fees have been viewed as the measure most amenable to immediate application and the one that would pave the way for other mechanisms. Fees are considered complementary to tax-based financing for government health services, even in countries that previously provided free public healthcare. User fees have been implemented in many countries in the 1980s. Their introduction can partly be traced to the structural adjustment policies that were initiated when many developing countries underwent severe economic recession due to the first oil crisis (Arhin-Tenkorang, 2001).

User fees were intended to contribute to increasing the resources available to governments to develop and improve their network of healthcare services, as well as reduce inefficiencies in healthcare delivery by decreasing frivolous use of services and improve the quality of services. Gilson and Rusell (1997) argued these fees were also to enhance accountability to individuals and communities. The World Bank explicitly recommended user fees in it's "'agenda for reform strategy' in 1987. User fees implemented through health sector reforms and specifically health financing reforms were aimed to improve efficiency and equity in health systems argued Braveman and Shelton (2001).

User fees in the Africa's Health sector were introduced during the late 1980s during the widespread downwards pressure on public expenditure. The insight of underfunding in health services led donors and governments to shift some responsibility for healthcare financing to the population through cost sharing. The rationale for charging user fees was set out in a World Bank document in 1987, which argued that user fees would:

- Raise substantial additional revenue for the health sector which could used to improve efficiency and equity.

- Improve targeting of resources by reducing frivolous demands

- Improve efficiency by encouraging people to use low cost primary healthcare services instead of more expensive hospital services.

The theory of user fees gained support on the basis that management systems will be improved and that could increase the consumption of services (Litvack and Bodart, 1993). However, the proposition did not take into account the high management costs associated with user fee systems. A retrospection of user fees showed the policy has not fulfilled its objectives. Gilson (1997) and Witter (2005) both stated the fees have raised very little additional revenue fees levels and it has been sufficiently high to suppress demand from poor people for healthcare services.
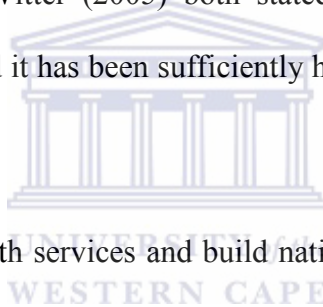
Hence, to improve access to health services and build national unity, one of the first actions of the ANC Government in South Africa after being voted into power in 1994 was the removal of healthcare user fees for: all children under 6 years, pregnant and lactating women. On the 24th of May 1994, President Nelson Mandela announced in his State of the Nation address that all healthcare for pregnant women and children under the age of 6 years would be provided free to users of public health facilities. The free care policy at primary care level was extended to all users from 1 April 2006. A national survey of health inequalities conducted in June 1994 found 12.5 % of people reported they had delayed seeking health care. Of these, two-third (64.3 %) and three-quarter (73.8 %) of Africans, cited the cost of healthcare as the main reason for delay (Hirschowitz & Orkin 1995). By 1999, 86 % of people using public healthcare facilities reported there was no healthcare fee, although half still incurred travel costs (Smith *et al.,* 1999). The initial effect on service utilisation was

dramatic, but over time settled down to a new equilibrium that was fairly well accommodated within available resources.

The introduction of user fees is often followed by a subsequent decrease in service utilization. The magnitude of this drop in utilization is often greater and occurs over a longer period for the poorer population. A study conducted by Yoder (1989**)** in Swaziland reported that those most affected by fee increase are patients who are low income earners, those needing to make multiple visits or those who decide their ailment is not serious enough to justify costs. More so, there is a notion that women's healthcare services showed women are price sensitive and that utilization has tended to drop when fees have been charged. This is supported by several studies conducted in African countries which confirmed the use of maternal health care services is affected when fees are introduced or revoked. A decline in pre-natal use was noted in Zimbabwe in the early 1990s when user fees were strongly enforced (Mujinja, 1997). A study conducted in the Nigeria reported that when user fees were introduced, maternal deaths in the Congo region rose by 56 % along with a decline of 46 % in the number of deliveries in the main hospital (Ekwempu and Maine, 1990).

Changes in the utilization pattern of healthcare centres have also been reported in Hlabisa district of Northern KwaZulu-Natal due to policy change of user fees (Wilkinson *et al.,* 1997). The study further found that whereas there was little change in the use of preventive services where utilization rates were already high, there was a large increase in the use of curative services. The survey found that the outpatient attendances increased by 77 %, however, health workers felt that the free healthcare policy imposed an additional burden on them, and it exacerbated discontent among nurses that culminated in a crippling countrywide strike in 1995. From a users' perspective, however, the policy was largely welcomed (McCoy and Khosa, 1996). As much as user fee removal has improved utilization of primary

healthcare, the impact on the demand side of the primary health needs to be assessed because the increase in demand may also lead to poor service delivery if the supply is not increased. Poor service delivery has a negative impact in utilization of primary healthcare because users are not motivated to consult.

The removal of user fees in governmental public health centre does not automatically indicate health is free to all South African citizens. The issues of accessibility to health centre needs to be looked at because they have an impact in health care utilization. The are other cost that users incurred due to illness reporting such as travelling costs and foregone earnings. In rural areas, the distances to healthcare facilities and the poor condition of roads means time, effort, and cost required to arrive at the point of delivery can be substantial.

Accessibility to healthcare centres is related to the distance patients have to travel to a facility but equally important are factors of transport availability and times of departure and arrival, and obstacles such as mountains and rivers. During times of heavy rain, roads can become impassable in rural areas. The more dense the population, the more people will be in reach of a facility if it is suitably placed, but unfortunately, many are not suitably placed so an informal settlement may have poor access. A distance of 5 km is relatively easy for a patient to cover whereas 10 km is more difficult. Emergencies such as severe trauma or a postpartum haemorrhage need help within minutes and emergency transport is needed. Mobile clinics assist in bringing services closer to people on an irregular basis which is sufficient for some services such as immunisation and growth monitoring but does not provide for acute illnesses, however these clinics are not always stationed in one area as they move from one place to another and this is the case in most rural areas especially in villages.

The National Household Survey found that most patients used taxis, buses or public transport to get to a health facility. However, in many rural areas in the Eastern Cape, there is no data

supporting this argument. In fact, from personal observation, people tend to work from village to village just to report illness or others opt for other alternatives such as using nearby traditional healers. Private cars are an uncommon mode of transport, except for urban and peri-urban areas which have only 35 % of the province's population. Therefore, this means public healthcare centres are not free to all South Africa citizens because people incur cost to utilize the free governmental health services and this leads to certain population group, which cannot afford travelling cost not being able to utilize healthcare services consequently, this also influence their health seeking behaviours. User fees in the health sector still plays a major role in households not consulting especially in rural areas of south Africa where households needs to walk long distances for healthcare.

2.9 Medical Aid Coverage in South Africa

Recently, Statistics South Africa (2008) reported the number of uninsured to be near 41 million, which approximately over 85 % of the population. However, no estimate of cost of providing health insurance for the uninsured has yet been undertaken in South Africa. Few studies related to health insurance that has been conducted point to inequalities in access. Statistics South Africa (2008) also reported that access to coverage varies widely by population group; approximately 67 % of whites were covered by a medical aid scheme, while less than 7.5 % of blacks were covered. Similarly, Myburgh (2005) reported whites are more satisfied with their healthcare possibly because they are more likely to have access to personalized care and are able to pay for it via prefunded medical aid scheme. Although health insurance coverage is slow, South Africans do have access to publicly provided healthcare and often makes use of private healthcare facilities. Despite publicly provided healthcare, South Africa ranked 160th out of 193 countries in terms of disability life adjusted expectancy according to the WHO (2000). Meanwhile, the WHO Statistical Information service (2008) point out that health expenditure as a proportion of the gross Domestic Product

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GDP was 8.7 in 2005, placing South Africa in the 33rd position. McIntyre and Gilson (2000) stated that the low health ranking combined with high expenditure propose that the mal-distribution of total available healthcare resources between the public and the private sector in South Africa.

A study conducted to examine demographic trends in medical aid access in South Africa using the GHS by Statistics South Africa over the 2002-2007 period showed medical aid access were raised widely across all population groups with the exception of blacks(www.statssa.co.za). More so it revealed that the coverage rates are generally lowest for blacks followed by coloureds then Asians and finally, whites have the highest coverage. These results showed access to medical aid scheme in the country is associated with a population group even one decade since the end of apartheid. This low access to medical aid coverage is undoubtedly associated with inequalities in healthcare facilities and the black population continues to have low access to private health facilities because of the low access to medical aid coverage. This clearly shows that a lot still need to be done by the government to bridge the gap between population groups' access to healthcare facilities.

The variations in medical aid access have an impact in healthcare utilization of the elderly population because access to private healthcare centres is limited due to limited access to medical aid coverage. Medical aid coverage in South Africa varies according to racial groups with the white population being highly covered as compared to the blacks. This causes utilization patterns of these two racial groups to differ because medical aid coverage encourages household to seek healthcare in best facilities where good service is guaranteed.

2.11 Private and public healthcare utilization

The use of healthcare services and factors influencing the choice of different services in South Africa and elsewhere has been the subject of discourse in this present review. A survey
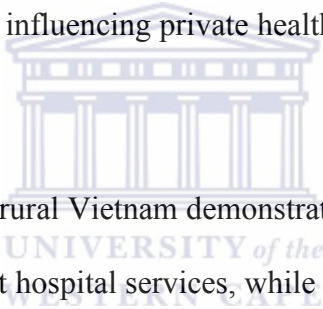
conducted in 1993 on Living Standards and Development in South Africa, found 83 % of all expenditure on health was made by the wealthiest quintile and this demonstrates a positive relationship between wealth and private healthcare use (Makinen *et al.,* 2000). When using concentration indices to measure income-related inequalities in health, it was shown that the poor were more likely to report being ill. In contrast, the 1995 and 1998 October Household Surveys showed there were more reports of illness by the wealthy (Zere and McIntyre, 2003). Geographical disparities in access to healthcare in South Africa have also been shown to be important. The poor living in rural areas were more likely to use public health services rather than private ones (Booysen, 2003; Wadee *et al.,* 2003). Disparities in access to healthcare are also due to racial divisions with the whites more likely than blacks to use private healthcare (Wadee *et al.,* 2003). Despite these findings, evidence suggests that there has been an increase over time in private-sector use, irrespective of the population group in South Africa (Wadee *et al.,* 2003).
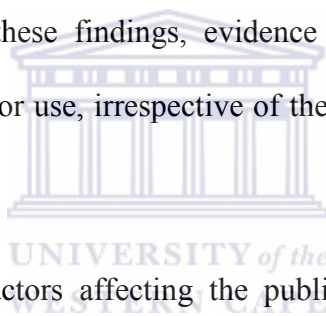
There are quite a number of factors affecting the public or private healthcare use. The increase in the size and spread of private services, a fall in the quality of public services, and the rights of those who were previously disadvantaged to use whatever services they desire may have led to an increase in the use of private services in South Africa (Wadee *et al.,* 2003). Access to insurance or medical aid has been positively influencing private healthcare usage. Males in general were more likely to seek care at a public rather than a private healthcare facility, but male household heads were more likely to seek private healthcare than female household heads (Wadee *et al.,* 2003). A study conducted in the Umkhanyakude District of Northern KwaZulu Natal publicized that patients with higher levels of education were significantly more likely to visit a private doctor than a public sector services (Case *et al.,* 2005).

The private and public healthcare mix varies depending on a country's healthcare policies, therefore direct comparison between South Africa and other countries need to be carefully made. In the case of Egypt, private healthcare has been reported as being by far the more popular choice for those who are ill (Nandakumar *et al.,* 1999) despite the fact that public healthcare centres do not charge for health services or just a smallest fee is paid for such services. These findings were confirmed by a study conducted in semi-urban Guatemala, which were explained by the poor attitudes of staff and the limited access to drugs (Van der Stuyft *et al.,* 1997). The perception that private services are of a better quality was given as a reason for the choice of private services in Egypt (Nandakumar *et al.,* 1999). These findings were also supported by evidence from Bangladesh and India, where cost and accessibility to services were identified as factors influencing private healthcare use (Ager and Pepper, 2005; Andaleeb, 2000).

Interesting findings in the case of rural Vietnam demonstrated that those with higher levels of education were more likely to visit hospital services, while those with lower levels were more likely to visit private healthcare facilities (Giang and Allebeck, 2003). A national survey in Vietnam found that gender, place of residence and education were not related to private healthcare use (Thi Hong Ha *et al.,* 2002) and income did not seem to affect the use of health services. Private sector services were found to play the greatest role by far in health service provision (Giang & Allebeck, 2003; Thi Hong Ha *et al.,* 2002). The study conducted in Egypt showed no observed difference between those who sought private and public care, but there were differences between those who seek care and those who do not. Seeking care for a reported illness was positively associated with being married, and having more income, higher education and access to medical aid (Nandakumar et al., 1999). Conversely, it was negatively associated with coming from a large household, living in a rural area and increased age. The results of this study indicated improved education and access to facilities

had a greater impact on healthcare use than on increase in income (Nandakumar *et al.,* 1999).

Gender was not found to determine healthcare use in rural Vietnam. However, it was found that those with higher levels of education were more likely to visit hospital services, while those with lower levels were more likely to visit private healthcare facilities (Giang and Allebeck, 2003). A national survey in Vietnam found gender, place of residence and education was not related to private healthcare use. Income did not seem to affect the use of health services (Thi Hong Ha et al., 2002; Giang and Allebeck, 2003).

2.12 User satisfaction in the Health Care Services

Currently, the health services market has been transformed from sellers market to a buyer's market where the customer (patient) is an essential aspect (Myburgh *et al.,* 2005; Nair, 2004). This therefore means that the contentment of patients with the services rendered to him/her increases the chances of continuity of the healthcare facility. Myburgh *et al.,* (2005) and Nair (2004) argued that health facilities have to develop technologically in order to achieve patient satisfaction, and also there must be an awareness that the community do not just flock to health facilities because it is cheap, but because of its good name and good image as well as the interpersonal dynamics between patient and health provider. Patients gets to interact with everybody from the receptionist, admission staff, doctors, nurses, ambulance, personnel, billing staff among others. Interaction with all these service points is an essential factor in determining the patient's satisfaction levels. That satisfaction level then determines whether the patient would choose the same health service again. Van Zyl (2004) emphasized professionalism as a prime importance to patient welfare and social justice. Therefore, health providers are encouraged to be professional, competent, and honest with patients, keeping confidentiality and maintaining appropriate relations with patients.

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The United States of America and Europe have started to introduce strategies aimed at improving services quality (Maycock and Hall, 2005). These strategies are for quality management as a prerequisite for funding programmes that will ensure delivery of quality service (Maycock and Hall, 2005). The issues pertaining to service delivery in South Africa's Health sector is still one of the reasons why people do not report when ill or do not make use of the governmental health services that are put in place for them.

There are numerous factors that lead to poor quality health service provision in South Africa. The government have identified major factors contributing to unsatisfactory healthcare usage in the country to include communication, laziness, personnel geographical location, economic circumstances and poor quality product provision (Dlamini, 2009). Despite the change of policy in the health sector in South Africa, patients are still not satisfied with the service they receive from healthcare facilities. Van Zyl (2004) stated that there are four pillars of patient satisfaction namely implementation of policies regarding health provision, training of health personnel on how to provide good service, support and usage of health equipment and technology in pursue of better service. Therefore, the rate of being unsatisfied by users in South Africa is directly linked with these pillars.

More so, the public healthcare provider in South Africa are known to display a 'do not care attitude' to their patients as work to rule appears to be the order of the day (Mthebuli, 2007). Majority of public health workers always claim overwork and unfavourable working conditions hence, the Department of Health decided as from 2007 to improve on health workers salaries particularly nurses and improve on their working conditions (Department of Health, 2008). However, despite also these initiatives by the Health Department, there is still high unsatisfactory rate in South African's public sector with the main issue being the supply of healthcare services not meeting the demand, leading to over-exhaustion of staff because

they have to serve a large amount of clients on daily basis and also with limited infrastructure like beds and required medication for patients. On the contrary, private healthcare providers who depended on the income from consumers provide excellent service to their patients (de Jager and du Plooy, 2009). Delivering great service for private health service providers has therefore been the goal of many successful service organizations. Sarei and Mamorsteyn (1999) argued that flawless service is believed to generate high levels of satisfaction and loyalty that yield positive results.

An argument was presented on SAFM during the afternoon talk show by presenter Thabiso Sikwane that poor communication by a service provider is a barrier to patient satisfaction (Dlamini, 2007). The language used by the service provider if misunderstood by the service recipient may result in dissatisfied patients. This is a situation that prevailed in a district of Makhado in Mpumalanga where patients from diverse backgrounds with the majority being uneducated (Mukhola, 2006). In addition, Mukhola (2000) argued that the use of foreign language in conversation with the patients may result in communication breakdown and ultimately, unhappy patients. The afternoon talk show also suggested seemingly intrinsic acts such as a smile by a service provider contributing to patient satisfaction (Dlamini, 2007). In concurrence, Nair (2004) asserted that health service patients need a variety of amenities not necessarily associated with their needs for reasonable good quality medical care but also want smiling, emphatic nurses and staff and a quick response to their call. In essence, it is therefore critical to make patients feel they are important when in need of a service provider. Patient's satisfaction in health sector is a major hindrance in the utilization of healthcare services in South Africa because this determines the continuity of the healthcare facility by households and hence, should be the focal point. The South African health sector needs to review customer satisfaction because this affects the healthcare seeking behavioural patterns of households.

2.13 Conceptual Framework

This section focuses on the development of a conceptual framework drawn from theoretical and empirical literature that has been previously undertaken. The conceptual framework can be summarised in a diagrammatic framework using institutional variables, household's variables and outcomes. Institutional variables are divided in to three variables: type of healthcare, quality of service and cost recovering. Type of healthcare consulted is categorized according to private and public healthcare centres. Quality of services consists of waiting time, attitude of personnel and availability of health equipment and cost recovering comprise of direct and indirect costs incurred by the health seeker for health services. Household's variables are age, gender, income, education, employment status and medical aid coverage. Then, outcome is utilization of healthcare services which impact health seeking behaviours.

A great interest has been shown in understanding links between income inequality and health. Wilson (1996) argued greater income equality is associated with better health in a given population. Therefore, a relationship exists between health and income meaning there is a correlation between health seeking behaviours and income. In this relationship, healthcare behaviours are measured by the population utilizing healthcare services. Inequalities are recorded in the literature with regards to gender and health seeking behaviours. Gender inequalities are based on the status of a woman and that of a man in the society. Health seeking behaviours are influenced by gender because the social status of a woman in the society affects healthcare seeking. If the status of the woman in the society is low, this may affect her decision regarding healthcare seeking because she has to overcome certain barriers in accessing healthcare, which might impact on her health seeking behaviours in a negative way.

Satisfaction in the quality of healthcare is a significant variable of health seeking behaviours because it increases the chances of continuity of healthcare facilities by patients.

Dissatisfaction in healthcare services is influenced by number of factors that has been highlighted in the literature review of this study. Patient's satisfaction rate is dependent on the attitude of healthcare personnel, availability of healthcare equipment and technology, waiting period in healthcare facilities and implementation of policies regarding health provision (Van Zyl, 2004). Therefore, health seeking behaviours are dependent on patient's satisfaction while patient's satisfaction is dependent on variables such as attitude of healthcare personnel, availability of healthcare equipment, waiting periods in healthcare facilities and implementations of policies regarding health provision.

User fees in health seeking behaviour studies is of vital significance due to direct cost incurred by the patients at the time of utilization. This simply means that without these fees it is difficult to utilize certain healthcare services. The literature recorded that in the case of South Africa, free health policies at primary healthcare was extended to all users in 2006 (Burger et al., 2006). However, there are other costs directly linked to healthcare utilization such as transport costs and their effect on health seeking behaviours of households. Therefore, user fees are an independent variable of healthcare utilization affecting healthcare seeking behaviours.

Medical aid coverage is an important factor in health financing because with good medical aid, health seekers are more likely to access personalised care and are able to pay for it. However, the literature recorded variations in inequalities according to racial groups with regards to medical aid coverage in South Africa. This directly influences the healthcare seeking behaviours of racial groups in South Africa. Age in health seeking behaviour is one of the determining factors of healthcare utilization because patterns of behaviours differ from age to age. Age is an independent variable of health utilization and the dependence of this variable is influenced by certain variables such as type of healthcare centre and type of illness, which are control variables.

Education is a significant variable in health according to the literature reviewed households with better education more likely to have good health and this variable affects health seeking behavioural patterns of households. Educational levels are also linked with income levels with households who have better education also having greater probability of having better income levels. Based on the hypotheses stated in Chapter 1 of this study a diagrammatic conceptual framework was developed as depicted in table 2.3 below.

Figure 2.3 Conceptual Framework

Institutional Variables   **Households Variables**   **Outcome**
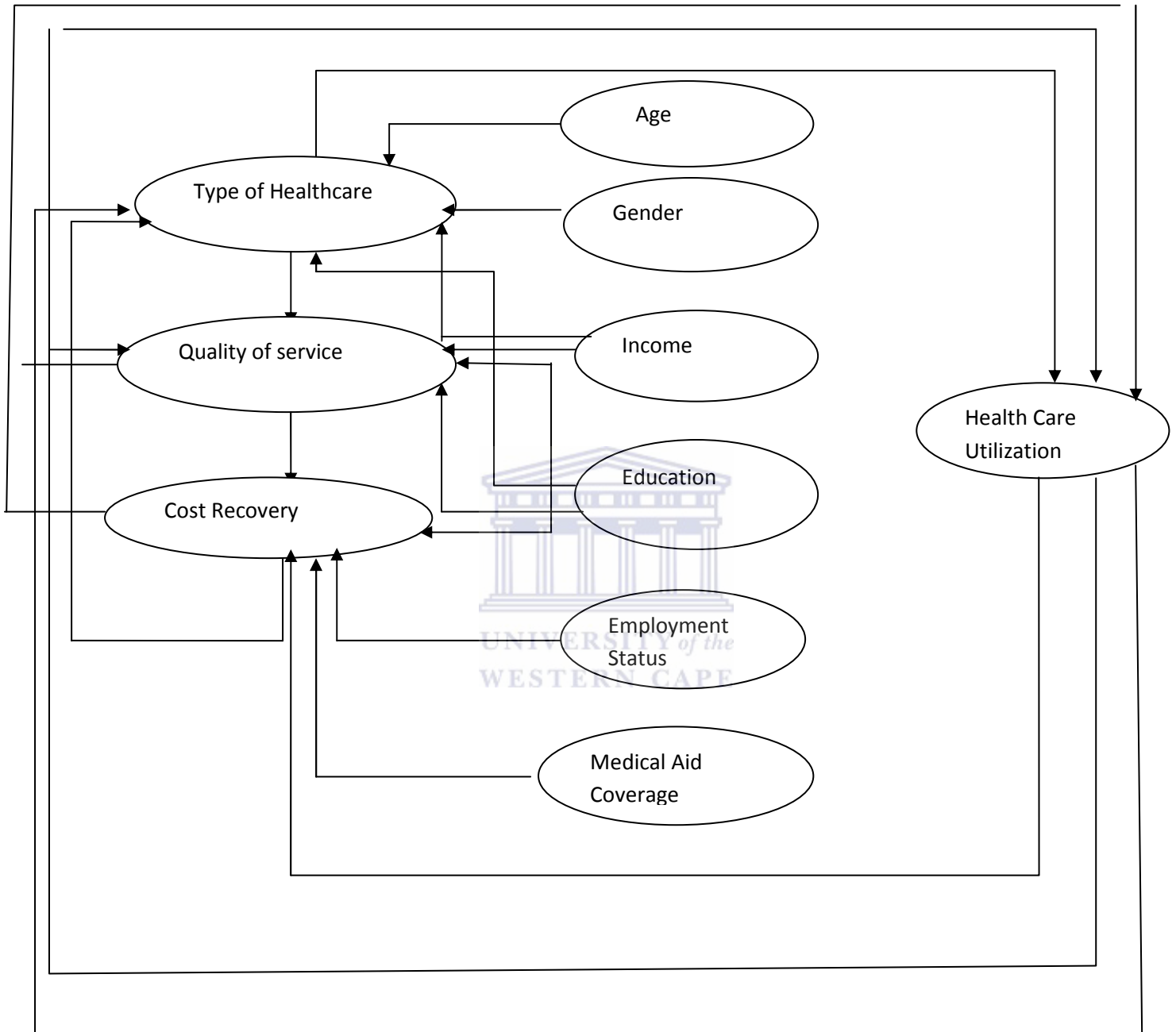
2.13. Conclusion

The proposed hypotheses then lead the study to description of variables that will be used and the method of analysis that will be utilised in testing the hypotheses.

CHAPTER 3: DATA AND METHODS

3.1 Introduction

An examination of research methods utilised in this study will be discussed in this chapter. Firstly, the study perspective with respect to the nature of the research conducted will be examined, followed by the type of research which is the design of the study. Thereafter, the context, access and instrumentation used in this study will also be evaluated. A list of variables utilized in analysing the data will be included in this chapter, while the description of the variables which comprises of name, position, source, and the valid range of variables will be explained. Statistical analysis used in measuring the impact of demographic variables in healthcare seeking behaviour will also be discussed. Lastly hypotheses testing will be described in order to observe if they are true or false.
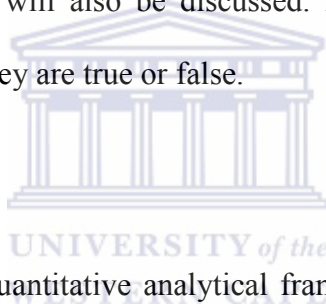
3.2 Study perspective

This study will make use of a quantitative analytical framework to observe health seeking behaviours in South African households. Therefore, a systematic empirical investigation of quantitative properties and phenomena, and their relationships will be explored in this research. The statistical approach includes exploratory and predictor analyses and hence, this study will make use of descriptive, correlation and regression analysis to explore relationships between selected variables.

3.3 Type of research

The research design used in this present study is a cross-sectional design. This type of design can be identified within a survey research by carrying out a random sampling of individuals and the collection of data done via a questionnaire .In effect the data was collected from individual households through the General Household Survey. The present study utilizes the General Household Survey of 2007 because it provides coherent information and a true

picture of data above all, it is assumed to be of good quality. The utilization of this type of data is of significance because it facilities the purpose of the study which is to profile health seeking behaviours of South African households by using demographic, socio-economics, location variables and health seeking behaviours related variables.

3.4 Context and access

This study was conducted on individuals of all ages and races across the nine provinces of South Africa distinctively looking at healthcare seeking behaviours of South African households. The research was conducted utilizing secondary data from Statistics South Africa which is the General Household Survey (GHS) of 2007. The General Household Survey accessed files were obtained in the Statistical Package for Social Sciences (SPSS) format which made it possible to run statistical analysis. The General Household Survey is a survey that is conducted annually by Statistics South Africa since 2002. For the sake of space economy ample details can be found in the Metadata Data document of 2007.Meta data for 2007 is available in Statistics Africa website (http://www.statssa.gov.za).

3.5 Dimensions of health conditions observed

The fundamental aim of this study was to profile health seeking behaviours of South Africa households, particularly looking at how many were ill one month prior the survey, how many reported illness, the type of illness suffered from, the type of healthcare facilities consulted and for those who did not consult, what were the reason(s) for not consulting healthcare facilities. This study also focused on whether these participants were in a position of financing their health for instance having medical aid coverage. In fact, this study distinctively profile healthcare seeking of medical aid holders and non medical aid holders. This study focuses on all age groups, males and females, and race across the nine provinces of South Africa.

3.6 Instrumentation

To collect the information required, Statistics South Africa employed the use of a questionnaire which covered five main areas of significance with a section on education health, non-remunerated trips undertaken by household, housing, and household access to services and facilities. The total number of questions was 166. The cover page consisted of household information, response details, and field staff information. The flap section comprised of demographic information such as name, sex, and age and population group. The first section consists of biographical information such as education, health, disability and welfare. The second section comprise of activities related to work and unemployment. The third section consists of activities related to work and unemployment. This present research mainly used data from the demographic section, as well as health information.

3.8 Description of instrumental variables

Variables selected in this study are the same variables used in the GHS of 2007. These variables where categorized as follows: socio-demographic, socio-economic, health seeking related and location variables.

Socio-demographic variables: These include variables such as age, gender, marital status, population group, and education. These variables are recorded in the person's file which also includes data from flap section and section one of the questionnaire.

Socio-economic variables: These include variables such as occupation, and economic activities of the household head. These variables are coded in the worker's file and contain data from section two of the questionnaire.

Location variables: This include variables such as residential area or province; they are however, recorded in a person's file.

Health seeking-related variables: These include type of illness, type of healthcare institution consulted, and type of health worker, and user fees. These variables are coded in a house file and they contain data from section two.

On the whole, the above mentioned variables can also be categorized into two groups: independent and dependent variables. Where all health seeking-related variables are dependent variables and location, socio-economic and demographic variables are all categorized as independent variables.

3.8.1 Demographic Variables

3.8.1.1 Age groups

The question which was asked to determine the age of household members was *"how old is the person"* in completed years. The enumerators were instructed to write the completed years as integers and not in words. This was then captured and re-coded into groups using SPSS as follows:

1= 0-4 yrs; 2= 5-9 yrs; 3= 10-14 yrs; 4= 15-19 yrs; 5= 20-24 yrs; 6= 25-29 yrs; 7= 30-34 yrs

8= 35-39 yrs; 9= 40-44 yrs; 10= 45-49 yrs; 11= 50-54 yrs; 12= 55-59 yrs; 13= 60-64 yrs

14= 65-69 yrs; 15= 70-74 yrs; 16= 75-79 yrs; 17= 80+ yrs and above.

3.8.1.2 Sex (Gender)

To determine the gender of each member of a household, the question used *"is (the person) male or female"*. The enumerators were instructed not to assume gender based on the name or physical appearance. The gender of absent family members was also asked from other family members present. The answer to the above question on gender or sex was re-coded as follows:

1= Male; 2= Female

3.8.1.3 Marital Status

The marital status of a member of a particular household is determined with the question: "*what is the (person's) present marital status?*" Here, both modern and traditional marriages were considered. The marital status question was categorized as follows:

1= Married; 2= Living together as unmarried partners; 3= Widow/Widower

4= Never married.

More so, additional question such as "Does the person's spouse/partner live in this household"? The answer to that question is categorized into two:

1= Yes; 2= No

The above additional question was pertinent to people who specified they are married or living together as husband and wife.
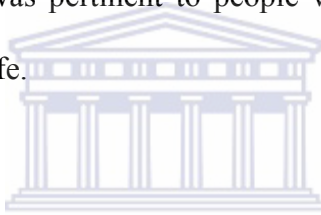
3.8.1.4 Population groups

The question "*what population group (the person) belong to*"? The question was enquired to determine the population group of the persons from selected dwelling. The respondent had to answer for each member without any assumption. The enumerator was instructed not to make conclusions based on his observations or by names during the interview. This question seemed very sensitive but extremely imperative to find out the composition of South African population. Response to this question was grouped into four groups:

1= African/black; 2= Coloured; 3= Indian/Asian; 4= White.

3.8.1.5 Educational levels

This question was asked all household members and it referred to the highest level of education the person had completed. Only qualifications already obtained was to be entered. Thus, the current education level that a person was still busy with was not considered. In this

case, diplomas and certificates should be of six months duration. The level of education was recorded as follows:

1= No schooling 2= some primary: (Grade 1/Sub A to Grade6/Standard 4)

3= Complete primary: (Grade 7/Standard 5);4= Some secondary: (Grade 8-11 and certificate with less than Grade 12 and Diploma with less than Grade 12) ;5= Grade12/Standard 10: (Grade 12/standard 10 from 5/Matric/NTC);6= Higher: (Certificate with Grade 12 and higher) ;7= Tertiary education: Bachelor's degrees and diplomas, honours degrees;8= Highest degree: Master's and Doctorate

3.8.2 Socio-economic characteristics
3.8.2.1 Salary
This variable indicates the employment status of all persons in the household aged between 15-65 years old. The question asked as regards this variable was: "in the past seven days, did the person do any work for a wage or salary, commission or any payment in kind excluding domestic work'? This question included all types of paid employment even for one hour. Enumerators where instructed to probe further in the case of casual work, piece jobs and part time work. The answer to the question was recorded as follows:

1= Yes; 2= No

3.8.2.2 Income category
The income category of members of a household who had been performing economic activities in the last seven days was asked for. This kind of information is personal and enumerators where instructed to inform the respondents that the information will be confidential. Thereafter, the enumerators would draw a range of money in Rand (ZAR) and respondents would point to one of this incomes, and state whether it is weekly or annually. In this regard income was categorised monthly and was recorded as follows:

1= None; 2= R1-R200; 3= R201-R500; 4= R501-R1000; 5= R1001-R1500; 6= R1501-R2500

7= R2501-R3500; 8= R3501-R4500; 9= R4501-R6000; 10= R6001-R8000; 11= R8001-R11000; 12= R11001-R16000; 13= R16001-R30000; 14= R30001+

3.8.3 Locational characteristics

3.8.3.1 Province of usual residence

With regards to location variables, residential areas were the main focus. Residential area is derived from the type per province. Thus, the answer to this question was recorded according to the nine South African provinces as follow: 1= WC: Western Cape; 2= EC: Eastern Cape; 3= NC: Northern Cape; 4= FS: Free State 5= KZN: KwaZulu-Natal; 6= NW: North West; 7= GP: Gauteng; 8= MP: Mpumalanga; 9= NP: Northern Province and Limpopo

3.8.4 Health Seeking Behaviours Variables

3.8.4.1 Medical Aid Coverage

This variable is applicable to all household members and was asked to obtain information on whether household's members were covered by a medical aid or medical benefit scheme or private health insurance. Respondents were informed that medical aid scheme can cover medical expenses partially or fully. The answer to this question was recorded as follows:

1=Yes, 2= No

3.8.4.2 Suffer illness/injuries

The question "*during the past month, did a person suffer from any illness or injuries*?" was asked to attain information whether household members suffered from any illness or injuries in the past twelve months. This was regardless of whether household members reported illness or not. The answer to this question is recorded as:

1= Yes, 2= No

3.8.4.3 Type of illness

To acquire information on the type of illness that household members suffered from in the past twelve months, the question asked was "*what sort of illness or injuries did the person suffer from*?" Enumerators were instructed to read the listed types of sickness to household members and to answer either Yes or No in the given list of illness which was recorded into eleven categories as follows:

1= Flu or acute respiratory tract infection;2= Diarrhoea;3= Severe trauma;4= TB or severe cough with blood ;5= Abuse of Alcohol or Drugs; 6= Depression or Mental Illness 7= Diabetes ;8= High or low blood pressure;9= HIV/Aids;10= Other Sexually Transmitted Disease;11= Other Illness or Injury.

3.8.4.4 Consultation

This question was asked to acquire if household members consulted a health worker due to illness or injuries. The question asked was "*During the past month did any person consult a health worker such as a nurse, doctor or traditional healer as a result of illness or injury*"? The answer to the question was recorded as follows: 1= Yes; 2= No

3.8.4.5 Kind of health worker

The question asked as regards the above variable is "*what kind of health worker did he/she consult*"? The latest consultation that took place was considered in the case of more than one consultation. The response was recorded into nine categories:

1= Nurse; 2= Doctor; 3= Medical Specialist; 4= Pharmacist Chemist; 5= Dentist; 6= Spiritual Healer; 7= Traditional Healer; 8= other healthcare providers such as psychologist, physiotherapist, chiropractor, homeopath, optometrist

3.8.4.6 Type of health institution

The main interest of this question was to determine whether households use public or private sector health institution. The question asked to ascertain this information was "*where did the consultation take place*?" In this regard, the public sector consisted of government, provincial and community institution and the private sector consists of private clinics hospital, surgeries and sangomas. The enumerators were instructed to ask about the most recent consultation place in case of more than one type of healthcare institution consulted. The question was recorded in eleven categories; the first three being public sector and the last eight were from the private sector. They are as follows:

1= Public Hospital; 2= Public Hospital; 3= Others in the Public Sector; 4= Private Hospital

5= Private clinic; 6= Private Doctor; 7= Traditional Healer; 8= Pharmacy/Chemist; 9= Health Facility; 10= Alternative medicine; 11= others in the private sector.

3.8.4.7 Experience of health services

This question is pertinent to those who consulted a health worker in the past month prior to the survey due to injury or illness. The question asked was "*did the person experience any problem following during this particular visit to a health worker*"? The question was divided into eight categories and in each category, the household member was supposed to answer either: 1= Yes or 2= No. The response of those who answer in the affirmative was recorded as follows: 1= Facilities not clean; 2= Long waiting time; 3= Opening time not convenient

4= Too expensive; 5= Drugs needed not available; 6= Staff rude or uncaring or turned patient away; 7= Incorrect diagnosis; 8= other

3.8.4.8 Service Satisfaction

This question was asked to evaluate the level of satisfaction of household members with healthcare services they received on their most recent visit. The question was phrased as

"*How satisfied was the person with the services he/she received*". Thus service satisfaction information was recorded and categorized as follows:

1= Very satisfied; 2= Somewhat satisfied; 3= Neither satisfied; 4= Somewhat dissatisfied

5= Very dissatisfied

3.8.4.9 Payment for Service

The question "*Did the person have to pay for services*"? was asked in order to ascertain whether household members paid when they consult health workers. This question was asked regardless of whether the service was rendered by modern or tradition practices. The answer to the question was categorized into two as follows: 1= Yes; 2= No

3.8.4.10 Reasons for not consulting

To identify the main cause of not consulting healthcare services among South African household members, respondents were asked "*Why did you not consult any health worker during the past month*"? This question was applicable to household members who did not consult a health worker in the past month prior the interview. Answer to this question was recorded as follows: 1= Too expensive; 2= Too far; 3= Not Necessary; 4= Don't Know

3.9 Data Analysis

Analysis was conducted using General Household Survey secondary data from Statistics South Africa. The level of analysis carried out in this study is on individual level. Medical aid coverage in the analysis was used as a control variable because medical aid discriminates against propensity to consult. Medical aid coverage is a very critical variable in health seeking the current study emphasis is in distinguishing health seeking behaviours of based on medical aid coverage. Hence two homogenous groups: medical aid holders and non medical aid holders where utilised and observed thorough the analysis of the study. This homogenous group are then used for those who report illness and those who did not report illness. The type

of health care centres consulted by medical aid holder and non medical aid holders for also the demographic variables where investigated in this study

Analysis of data was profiled and quantification of relationships between dependent variables (health seeking behaviours) and independent variables such as location variables, socio-economic variables and socio-demographic variables was conducted. Health seeking behaviours are directly influenced by access to healthcare facilities. Households, in many cases do not utilise healthcare services because healthcare access to these facilities is limited or hinder by certain barriers. Accessibility in this study will be measured by affordability, availability and acceptability of healthcare services. Affordability of healthcare included time taken to access service and user fees. Availability considered the opening and the closing time of the healthcare facilities. Acceptability checked the interpersonal relationship between providers and users of healthcare facilities. All these variables were combined to measure access to healthcare facilities and were divided into three values: highly accessible, moderately accessible and lowly accessible.

To analysis the data, the statistical program SPSS was used to conduct descriptive and inferential analysis. Thereafter, cross tabulation distribution was used to profile each study variable with regards to value and labels. The frequency tables were used in this study to determine the rate of healthcare seeking, the type of healthcare that are normally used, the type of illness households suffered, the main reason for not consulting and medical aid coverage rate of South African households. Cross tabulation where also

Furthermore, chi-square, Cramer's V and Eta, Lambda, Phi were used to test for association between two variables. The chi-square test in this study was used to determine whether there

was a significant difference between the expected frequencies and the observed frequencies in one or more categories. The data utilised in this study meet the requirements of a chi-square test because the data is quantitative data, it contained variables with one and more categories there are independent variables that where observed the data had adequate sample size and the data was in frequency form. Cramer's V utilisation in this study is based on its ability to produce nominal association as it gives good significance from 0-1 despite the table size. Lambda is statistics is used for nominal measurement and its was utilised in this study. Lambda is proportional reduced in measuring the error, therefore the value of lambda means the percentage of the reduction in error in predicating the dependent variable with the knowledge of the independent variable. The main relationships explored are demographic variables, socio-economic variables and location variables with health seeking behaviours variables. Observed and expected values were compared to verify if the hypothesis was accepted or rejected. A P- value > 0.05 proposed the hypotheses formulated as insignificant, while a P-value < 0.05 that showed a significant association.
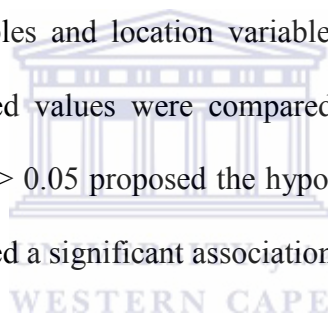
In addition, a logistic regression which is a statistical model for binary or dichotomous dependent variables was also conducted. The model allowed the prediction of a discrete outcome from a set of variables that maybe continuous, discrete, dichotomous, or a combination of these. The use of logistic regression was useful in this study in order to understand the relationship between the predictors and the response variable. Therefore the study used the logistic regression to investigate the effect of some demographic variables on the health seeking behaviours. The predictor's variables are gender, age groups, educational levels, marital status, location variables and employment status, while the dependent variable includes health seeking behaviours such as type of healthcare consulted, reason for not

consulting, the type of illness suffered from, medical aid coverage and reasons for not consulting. Mathematically, the model is expressed as:

$$\text{Log} \quad \frac{P}{(1-P)} \quad P(y=1) = \frac{\exp(X_i'\beta)}{1+\exp(X_i'\beta)} \qquad \text{Equation 1}$$

Where Xi = a vector of explanatory variables

And p = a vector of unknown coefficient to be estimated

α is the intercept parameter

β_i parameter estimates (coefficients)

X is a vector matrix which express the independent variable (IDV)

Y is a dependent variable (DV)

The logarithm of odds (probability divided by one minus the probability) of the outcome is modelled as linear function of the explanatory variables, x_1, x_2, …, x_n.

Odds = P/1-P

The logistic regression calculates changes in log odds of the dependent, not changes in the dependent itself as ordinary least squares regression does. The parameter estimates (coefficients) as log of explanatory variables used in the logistic regression equation to estimate the log odds that the dependent which is equal to 1. The independent variable (IDV) X in this study was all the demographic and location variables while the dependent variable (DV) Y was the consulting healthcare facilities and the types of healthcare facilities consulted.

3.9.1 The hypothesis of this study was tested as follows:

Hypothesis 1: Propensity to consult is positively influenced by the level of education. This study expects to see those with higher and tertiary education consulting more as compared with those who have no higher or tertiary education.

This hypothesis was examined firstly through a descriptive analysis by doing frequency distribution of the ordinal variable "highest level of education". Then a cross-tabulation statistics was conducted between ordinal variables "highest level of education and the consultation of healthcare services and the type of healthcare facilities consulted were controlled for medical aid. Then, chi-square test of association and Cramer's V was conducted to confirm significant relationship between these categorical variables. A logistic regression was done to check the highest level of education more likely to consult and all the type of healthcare facilities they are likely to consult. These results were used to determine the odd ratio in the regression model.

Hypothesis 2: Propensity to consult is positively influenced with the level of income. With households in high payment segment and middle segment consulting more as compared with those in low payments segments.

Income was first grouped into quintiles. Cross tabulation was used to examine which quintiles consulted and the type of healthcare facilities consulted. Thereafter, profiling the consultation of healthcare facilities by income quintiles was controlled for medical aid coverage. Eta was utilized to test association between these two variables. Logistic regression was also used to evaluate the odd ration income categories. This assisted in determining the income categories that are more likely to consult healthcare facilities and the type of healthcare facilities they are more likely to consult.

Hypothesis 3: *Gender differentials exist in healthcare seeking behaviours. This study expects to see woman consulting more as compared to men.*

To test this hypothesis, a bivariate analysis was conducted to establish association between gender and healthcare consultation and the type of healthcare facilities consulted controlled for medical aid. This was carried out by via a cross-tabulation between these variables. Then these variables were used to study the consultation of healthcare facilities and the type of healthcare facilities consulted by gender. The association between these nominal variables was conducted using chi-square and Cramer's V. Then, the likelihood of consultation of healthcare facilities and the type of healthcare facilities was obtained by running a logistic regression where males were used as reference category. The odd ration assisted in determining the more likelihood to consult gender and used to determine whether the analysis was rejected or accepted.

Hypothesis 4: *The rate of consultation is negatively influenced by the distance households have to walk to healthcare facilities. This study expects to see South Africa households not consulting because healthcare facilities are far.*

Chi-square test of association was utilised to test the proposed hypothesis using the variable "reason for not consulting "Frequency tables where utilised to assess the reasons of non consultation in in South Africa household members.

Hypothesis 5: *User fees such as transport costs and payment for healthcare service negatively influence healthcare utilisation.*

A univariate analysis was first utilized by using frequency distribution with the variable "reason for not consulting" in testing the above hypothesises. The frequency distribution assisted in evaluating the proportion of reason behind non-consultation of healthcare services.

The aim of this hypothesis was to find the main reason why South African households do not utilize the healthcare services when confronted by illness.

Hypothesis 6: *Medical aid coverage positively influence consultation rate with medical aid holders consulting more as compared with non medical aid holders.*

Firstly, this hypothesis examined a descriptive analysis by profiling consultation of healthcare services and the type of healthcare facilities consulted by medical coverage. Then a bivariate analysis aimed at establishing association between these variables was utilized by running a chi-square of association and Cramer's V. Thereafter, a logistic regression was utilized to establish association between these variables and this assisted in determining the likelihood of consultation between medical aid holders and non medical aid holders of South Africa and the healthcare facilities they are more likely to consult.

3.10. Conclusion

The method of data describes in this chapter then assisted the current study in analysing the data. The depiction of the procedure in data analysis gave clear guidelines to be followed in data analysis.

CHAPTER 4: RESULTS

4.1 Introduction

This chapter provides the findings of the study. The subject of analytical interest is the evaluation of the relationship between health seeking behaviours and health services being offered in South Africa and the response of South African households in seeking medical help when ill. The statistical analysis performed includes frequency distribution, cross tabulation and chi square test for association, logistic regression. The data analyzed in this study was taken from the General Household Survey of 2007.

4.2 Incidence of illness among the households

According to Bradshaw and co-workers (2000), South Africa is in the midst of health transition that is characterized by simultaneous occurrence of epidemic infectious disease and a rise of non-communicable disease. In the past fifteen years of political transition, health policies such as free primary healthcare have been formulated because of low quality of healthcare and uneven access to health services (Puane *et al.,* 2008). An insight on the incidence of illness among South African households is crucial in assessing healthcare utilization. The incidence of illness among South Africa households will shed a light into effective action that can be taken by the government to improve healthcare utilization. To assess the incidence of illness, participants who suffered from illness one month prior the survey were evaluated. Using the General Household Survey of 2007, the study found an illness incidence of 11.4 %. This proportion will be used to measure the prevalence of disease and in profiling the rate of those who did not consult healthcare facilities when ill and in evaluating their main reasons for not consulting.
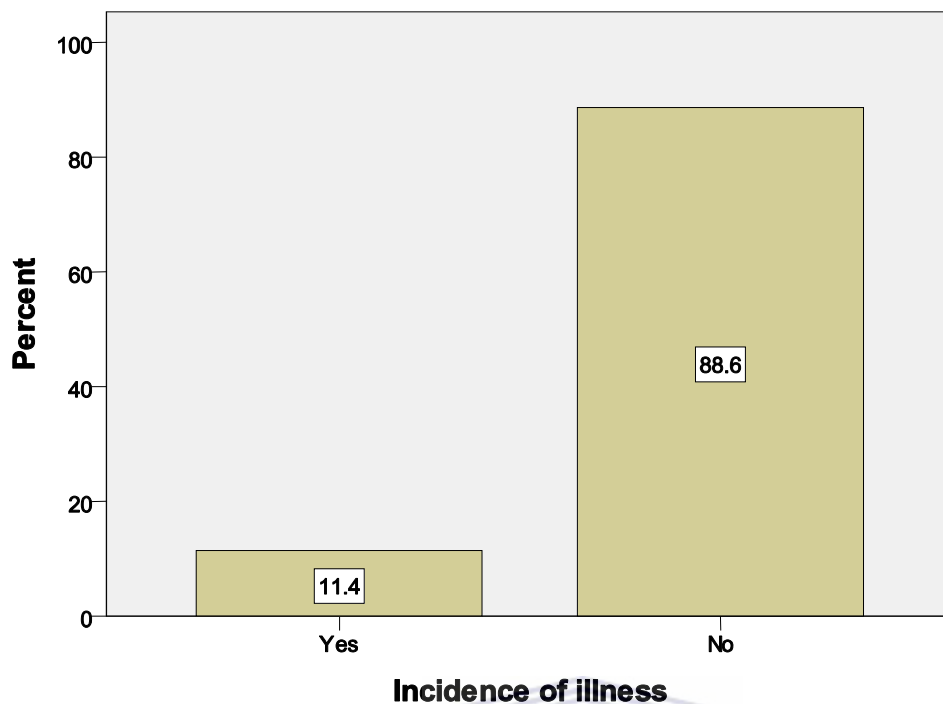
Figure 4.1: Incidence of illness among households

4.3 Consultation of healthcare services

Health behaviours generally include all those behaviours associated with establishing and retaining a healthy state, plus all the aspects of dealing with departure from that state (WHO, 1995). The present study is aimed at profiling health seeking behaviours of South African households which is a small part of the wider concept of health behaviours. In achieving this goal, attention to health seeking due to illness suffered was examined. Therefore, these results will be of interest for planning and monitoring of health programmes. To measure accessibility, the decision to visit a healthcare sector needs to be evaluated. According to the General Household Survey of 2007, respondents who suffered from reported illness were a proportion of 80 %, while those who did not report it were 20 %. This proportion demonstrates that out of 12485 respondents who suffered from illness, a rate of 80 % consulted healthcare facilities. The proportion of 80 % does not imply that South African

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households who consulted received good quality services at the healthcare centre visited and cannot be used to measure the level of accessibility of healthcare facilities. Hence the study investigated the main reasons for not consulting and the type of health care centres consulted.

Table 4.1: Consulted a health worker

Health worker	Frequency	Percentages
Yes	9973	80.4
No	2433	19.6
Total	12406	100

4.4 Medical aid coverage

Medical aid coverage is an important aspect of health seeking as people take precautionary insurance to cover their household from illness. According to the Medical Aid Scheme Act, one of the main aims of the medical aid coverage is to reduce the burden of healthcare from the state. According to Econex Trade Note of 2009, the proportion of people covered by medical aid in South Africa is limited. Medical aid coverage has a huge impact on utilization of healthcare facilities especially the private healthcare sector. The Congress of South Africa Trade Unions (COSATU) in 2006 constructed a model estimating the percentage of South Africa's population who would visit a healthcare provider if they had medical aid coverage. The result of the model demonstrated that private doctor's utilization rate would improve by 55 %, specialties by 45 % and the use of public clinics would decrease by 50 % (COSATU, 2006). The current study showed that respondents with medical aid coverage were 11.3 % (Fig. 4.2). This rate of medical aid coverage is very low and has an influence in health seeking behaviours of South Africa households. The rate of medical aid coverage have been shown to be decreasing over the years because the General Household Survey of 2002

indicated a proportion of 15.2 % and in 2005, medical aid coverage in South Africa was 14 %.The low medial aid coverage rate of 11.3 % in 2007 therefore demonstrates that the government is burdened with healthcare because there is a strong relationship between medical aid cover and utilisation of private healthcare sector. Furthermore, this rate of medical aid coverage illustrate that South African households utilizes public healthcare facilities more than private healthcare.

Söderlund and colleagues (1998) argued that access to private health insurance or medical scheme remains probably the best single indicator of the distribution of healthcare resources in South Africa. Medical aid coverage rate of 11.3 % from the present study shows that distribution of healthcare resource in South Africa is unevenly. The medical aid coverage was used in this study as a control variable in profiling the impact of the demographic and socio-demographic variable in the consultation of healthcare centres and the type of healthcare facilities consulted by South Africa households.
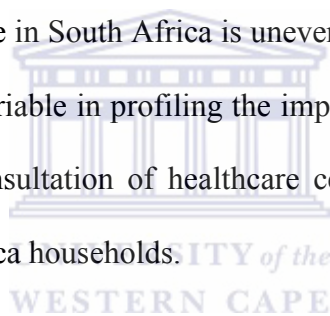
The findings in Figure 4.2 demonstrate the necessity of the National Health Insurance fund, which seeks to address the challenges of the health care systems. The National Health Insurance is anticipated to generate funds from the general tax revenue and compulsory contributions by formal sector workers and their employees. These funds will then be used to purchase quality healthcare from public and private providers that will benefit the entire population. The initiation of this healthcare plan will not stop those who want to take an additional medical aid cover but its main objective is to financially protect against the costs of using health services when needed. Therefore, the uneven distribution in medical aid in South Africa will be solved by this health plan if implemented.

Figure 4.2
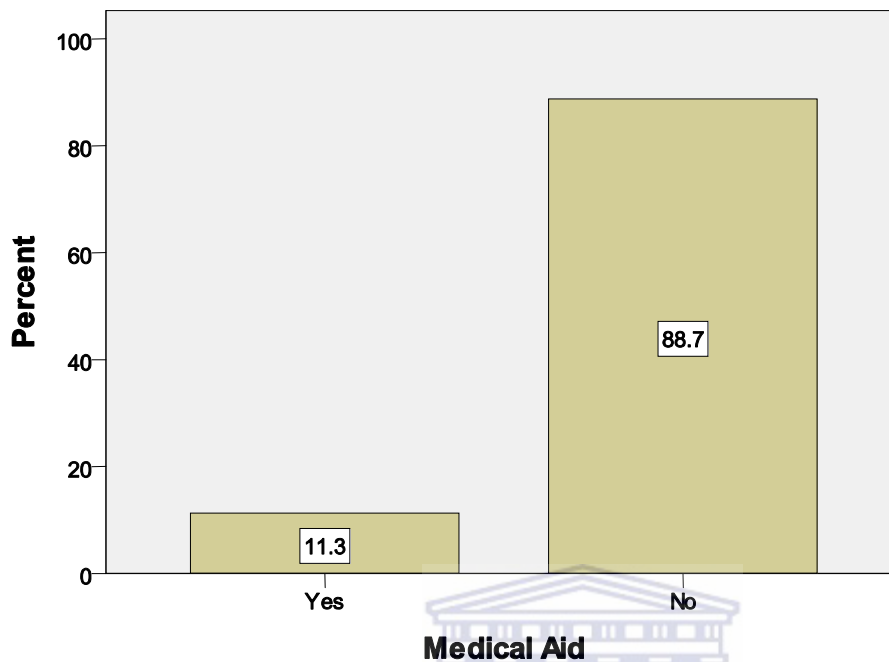
Figure 4.2: Medical aid coverage of South African households

4.5 Type of healthcare facility Consulted

South Africa has a large public health sector as well as an extensive, well-established private

sector .Financial disparities in health spending between the two sectors have widened, with

the private sector spending approximately seven times more per capita than the public

sector(Leon and Mabophe, 2003).In this study public healthcare facilities comprise of public

hospitals, public clinics and other healthcare facilities in the public sector while private health

care consists of private hospitals, private clinics and other health facilities in the private

sector. Those healthcare facilities designated as other healthcare facilities in the present study

comprise of pharmacies/chemists, traditional healers and other alternative medicine.

The results of the General Household Survey of 2007 confirmed that South African

households utilize public healthcare facilities more than private healthcare facilities. The

proportion of private healthcare utilization in 2007 was 34.4 % while public healthcare sector usage was 63.2 %.Further findings from this study showed a low utilization of pharmacy/chemist, traditional healer and other health facilities with frequency percentages of 1.4 %, 0.8 % and 0.2 % respectively as shown in Table 4.2.

There are enormous variations in quality of healthcare in private and public healthcare sector with the former sector providing better quality services when compared to the latter sector. The National Health Department in 2004 drafted a Health Charter with the task team made up of the private, public sector, civil society and non-governmental organisations. The main aim of this drafted health charter was to strengthen the health system as a whole by using it as an instrument to measure the degree and transformation in the health sector in the following areas: access to healthcare services, equity in healthcare, quality of care, sustainability and efficiency, public-private interactions and black empowerment. Even though the health charter was drafted in 2004, results of the GHS 2007 as analyzed in this study showed low access in private healthcare sector resulting in congestion of the public healthcare facilities and the consequent poor quality in the services provided.

Table 4.2: Type of healthcare facility consulted

Type of healthcare facility	Frequency	Percentage
Public healthcare	6227	63.2 %
Private healthcare	3389	34.4 %
Traditional healer	80	0.8 %
Pharmacy	133	1.4 %
Other healthcare facilities	16	0.2 %
Alternative medicine	3	0 %
Total	9848	100 %

4.6 Medical aid and type of health facility consulted

Thomas and colleagues (2000) reported that 93 % of the public healthcare is funded predominantly from general taxation and only 1 % representing the user fees of the public funding. They further found a significant variation in the ratios of trained medical staff per 100 000 population which ranges from 34 for 380 and 2,050 for 4453 in the public and private healthcare sector respectively. However, the private healthcare in turn is financed mainly via medical schemes (73 %) and out-of-pocket expenditure (23 %) (Goudge *et al.,* 2001). The results of the present study revealed there that there are variations between non medical aid holders and medical aid holders with respect to healthcare facilities consulted. The results demonstrate a high proportion of non medical aid holders (73.5 %) consult public healthcare, while 86.1 % of medical aid holders consult private healthcare. The variation in medical aid holders and non medical aid holders in private healthcare consulting is as a result of user fees paid in the private healthcare sector. These findings show that the private healthcare sector is more accessible to household's members with medical aid coverage than those with no medical aid. A statistical relationship was conducted to evaluate the relationship between the type of healthcare consulted and medical aid coverage. Chi-square analysis revealed a significant relationship (P <0.05) between the type of healthcare consulted and the medical aid coverage. Hence, the findings of this study confirmed the type healthcare facility consulted is associated with medical aid coverage.

Visser and Boysen (2004) showed that the majority of the people who consulted public healthcare did so because treatment was free (53 %), whereas, people who used private care cited more effective treatment (43 %). Medical aid coverage is mainly prominent to affluent household's, whereby holders have access to better quality of healthcare than the disadvantaged or less privileged households. The results from the present study therefore demonstrate the over-use of public healthcare sector in South Africa, leading to

unsatisfactory service because over 60 % of households are relatively dependent on them. The World Health Organisation (WHO) stated that South Africa's public healthcare provision ranked 160th out of 190 countries in terms of disability life adjusted expectancy (WHO, 2000). Furthermore, they showed that health expenditure as a proportion of Gross Domestic Product of South Africa was 8.7 % in 2005 placing the country in the 33rd position among the nations (WHO, 2008). This means that South Africa's expenditure is low in health ranking even though it has high expenditure in healthcare, pointing to a mal-distribution of healthcare between the private and the public health care sector (McIntyre and Gibson, 2000). Therefore the government still needs to play a stewardship role in using the national resources for the benefit of the entire populace. According to Leon and Mabophe (2003), the stewardship role involves three areas: equitable, effective and efficient public health sector, regulating the private health sector to ensure private organisations act responsibly, facilitating a cooperative working relationship between the public health sector and a private sector that is beneficial for the health of the population as a whole. The findings of the GHS of 2007 indicates that the government of South Africa needs to strategically distribute healthcare resources evenly for the entire population by increasing access to medical aid policies.

Table 4.3: Place of consultation with regards to medical aid coverage

Place of consultation	Medical aid		Total
	Yes	No	
Public healthcare facility	175	6038	6213
	10.9 %	73.5 %	63.2 %
Private healthcare facility	1388	1992	3380
	86.1 %	24.3 %	34.4 %
Other	49	105	155
	2.5 %	1.2 %	1.6 %
	1621	8030	9593
Total	100%	100%	100%

4.7 Type of Illness people suffered

According to Bradshaw *et al.,* (2009), South Africa is in a midst of intense health transition which is exemplified by a quadruple burden of communicable, non-communicable, perinatal and maternal, and injury-related disorders. Non-communicable disorders are reported to be emerging in both rural and urban areas but mostly dominant in poor people living in urban settings. Therefore, the South African health sector is challenged by the growing burden of HIV/AIDS and non-communicable diseases. This study also profiles the prevalence rate of communicable and non-communicable diseases that South Africa households suffer from using the General Household Survey of 2007. The significance of the illness profile in this study is associated with households' decision to consult healthcare facilities. The findings of this study reveal that flu and respiratory tract infection have the highest prevalence of illnesses (46 %) compared to other sicknesses; this is common among South Africa households and the occurrence is seasonal. High or low blood pressure is also among the highest reported illness with a prevalence of 13.6 %. McMahon and Rodger (1993) showed a strong correlation between blood pressure, stroke, heart disease and other cardiac diseases. Hence, those respondents who suffered from low or high blood pressure are at risk of those diseases. More so, a prevalence of 5.9 % was shown for TB, severe cough with blood and diabetes.

Visser and Booysen (2004) stated that South Africa is currently faced with high prevalence rates of HIV than any other country in the world. The results of the present study show a prevalence of 2 % among South Africa households, which is very low when compared with the global trend of HIV/AIDS. Various reasons can be attributed for the low prevalence of HIV/AIDS. Firstly, it is worth noting that the results of General Household Survey are based on self-reported measures by respondents, which means participants may give a desired answer or it might be difficult to report that they suffered from HIV/AIDS due to the stigma

attached with the disease. Secondly, people with HIV infection are susceptible to infections and malignancies that are called opportunistic infections. These infections take advantage of the weaken immune system so it is possible that at the time of the survey, participants might have suffered from HIV/AIDS opportunistic infections and might not be aware that the infections are HIV/AIDS-related.

The most common HIV-related opportunistic infections include bacterial diseases like tuberculosis and, fungal diseases such as candidiasis, cryptococcosis and penicilliosis. These opportunistic diseases differ according to different stages of HIV infection (UNAIDS, 1998). In early stages of HIV, people are more likely to develop tuberculosis, malaria, bacterial pneumonia, herpes zoster, staphylococcal skin infections and septicaemia. These diseases are also common with people with healthy immune systems but with HIV, they occur at a much higher rate. It also takes longer for a person with HIV to recover than it takes for someone with a healthy immune system (UNAIDS, 1998). The high prevalence of flu and acute respiratory tract infection demonstrated in this study might be HIV/AIDS associated because pneumonia is related to flu and acute respiratory tract infections. More so, a prevalence of 5.9 % in TB and severe cough with blood might be HIV/AIDS related. Thirdly, the 2 % prevalence of HIV/AIDS seen only represents participants who suffered from the illness a month prior the survey, which is calculated from 11.3 % participants who suffered from illness.

The findings of the present study also indicated a consultation rate which is more than 7 % from respondents who suffered from high/low blood pressure. The prevalence of respondents who suffered from diarrhea (3.8 %) and depression (3.2 %) was low. The WHO-led South African Stress and Health (SASH) study (2009) showed that there is good evidence in the prevalence of depression and anxiety in people living with HIV/AIDS. The findings of the

study demonstrated that prevalence of depression and anxiety in people living with HIV or AIDS is higher than the prevalence of these disorders in HIV-negative controls. Hence, the prevalence of depression in this study may be influenced by the HIV/AIDS burden.

The prevalence rate of respondents who suffered from severe trauma, alcohol abuse and other sexually transmitted diseases (STD) ranged between 1.9 % to 0.3 %. The prevalence of STD is very low compared to the recent research conducted by the Medical Research Council (MRC). MRC showed that South Africa is experiencing a massive burden of STDs such as gonorrhoea, Chlamydia infection, and recent/active syphilis. The low prevalence of other sexually transmitted disease in the present study might be due to lack of understanding of the symptoms of STDs or the stigma attached to these diseases.

Table 4.4: Types of illnesses

Prevalence of sickness	Frequency	Percentages
Flu or acute respiratory	5715	46 %
Diarrhoea	477	3.8 %
Severe trauma	233	1.9 %
TB and severe cough with blood	736	5.9 %
Abuse of alcohol or drugs	39	0.3 %
Depression or mental illness	369	3.2 %
Diabetes	732	5.9 %
High or low blood pressure	1648	13.6 %
HIV/AIDS	253	2.0 %
Other sexually transmitted diseases	39	0.3%
Other diseases/injuries	3784	30.5 %

4.8 Type of illness and consultation of health care

The rate of consulting differs according to the significance of the illness that the respondents suffered from. Results from the present study as depicted in Table 4.5 shows respondents consult less (44.9 %) when suffering from flu or acute respiratory infections. The main reason for this is that flu or acute respiratory infection is a common illness and due to its rate of recurrence, it might not be taken seriously to such an extent that it would be reported infrequently when suffering from it. Respondents who suffered from other sexually transmitted diseases, other injuries, diarrhea, and alcohol and drug abuse have the second lowest rates in consulting healthcare workers. The reason for this low rate in STDs might be due to the stigma attached to disease while in alcohol and drugs abuse it is illegality of this deed. The prevalence of HIV/AIDS consultation in the findings of the study is the highest. This confirmed the result of the Joint United Nations Programme on HIV study which reported that about half of all patients admitted to hospitals in South Africa seek care for HIV-related illness and the number of HIV-positive patients in paediatric wards was high. The findings of the present study confirm greater pressure on health facilities due to HIV/AIDS and a heavier financial burden on the country's public healthcare sector. TB and severe cough with blood has the second highest consultation prevalence. The results also indicate a good consultation rate which is more than 70 % from respondents who suffered from high/low blood pressure depression and severe trauma.

Table 4.5: Type of illness and health care consultation

	Consulted a health worker	
Illness	**Yes**	**No**
Flue or acute respiratory	55.1 %	44.9 %
Diarrhoea	63.4 %	36.6 %
Severe trauma	70.5 %	29.5 %
TB and severe cough with blood	85.3 %	14.7 %
Abuse of alcohol or drugs	65.5 %	34.5 %
Depression or mental illness	73.5 %	26.4 %
Diabetes	74.4 %	25.6 %
High or low blood pressure	76.8 %	23.2 %
HIV/AIDS	88.7 %	11.3 %
Other sexually transmitted diseases	65.7 %	34.3 %
Other diseases/injuries	61.5 %	38.5 %

4.9 Type of illness according to age

Age is an imperative demographic dynamic and has an impact on the type of illness people experience. The results depicted in Table 4.6 shows the prevalence of sickness in the present study according to age of respondents. Our findings showed 71.4 % of children aged 0-14 years suffered from acute respiratory illness; this age group had the highest prevalence compared to other age groups. This is in excellent agreement with the study of Parth (2008), which showed infections of the respiratory tract are very common in childhood. Moreover, this illness has been reported to be a major cause of morbidity and mortality in young children worldwide. The WHO reported that 20 % of all deaths in children below 5 years are due to acute respiratory infections. Parth, (2008) states that an average child has 5 to 8 attacks of acute respiratory infections annually and they account for 30-40 % of the hospital visits by children. The adults and elderly population who suffered from respiratory tract were 45.8 % and 34.9 % respectively. More so, diarrhoea has the highest prevalence (8.1 %) among children while the prevalence among adults and the elderly population was(3.5 %) and

(2.2 %) respectively. Diarrhoea is a very common problem during childhood and it is associated with acute respiratory infection. Hence, a child with diarrhoea may also suffer from acute respiratory illness.

Further findings from the present study shows a high prevalence of diabetes (7.4 %) and TB and severe cough with blood (10.1 %) in the elderly population. The elderly population is more vulnerable to illness because of their weaker immune systems. Stead (1985) showed the elderly population to have an increasing risk of TB infections. Fae (2010) confirmed by indicating that the elderly population tends to have an increased prevalence of illness including those affecting lungs. The prevalence of TB or severe cough with blood (6.2 %) was also high in the adult age group. Hence, it can be deduced that this disease is not only common in the elderly population but also among the adult age group. The high prevalence in TB and severe cough among the adult population is due to smoking patterns and the fact that TB and severe cough is one of the HIV/AIDS opportunistic diseases. However, a low prevalence (2.3 %) for TB and severe cough was seen among children.

Diabetes prevalence was quite high in the elderly population and since diabetes is mostly a hereditary disease there are high changes of increase in the prevalence of diabetes among South Africa households. There was a low prevalence of diabetes according to the results of the study in the adult (3.0 %) and children (0.2 %) population. The results of study display no variation in the prevalence of depression and mental disorders in the elderly and the adult group with a prevalence of 3.9 % and 3.8 % respectively. There is a low depression or mental disorders prevalence (0.6 %) in children and this is due to the fact that the illness is characterized by sadness, changes in appetite, altered sleep pattern and the feeling of dejection or hopelessness; this characteristics are minimal in that age group (Sharima *et al.,* 2005). This study demonstrated blood pressure to be amongst the illness with high prevalence

in the elderly population (22.4 %) while among the adults and children age, the prevalence was 8.5 and 0.1 % respectively.

An important aspect of the present study was the prevalence of HIV/AIDS according to age group. The results show a high prevalence of 2.8 % in the elderly population as compared to the adult age group (1.9 %). This contradicts the prevalence of other sexually transmitted disease which was shown to be high among the adult age group. Hence, high prevalence in the elderly age group demonstrates the stigmatization of HIV/AIDS in the adult age group, which is a reflection that the elderly are more at ease in revealing their HIV/AIDS status than the adults. The findings of the present study also show a high prevalence of sexually transmitted disease in the adult age group than other age groups. This may be due to the different patterns in sexual behaviours in different ages, with the adult population is more sexually active than other age groups.
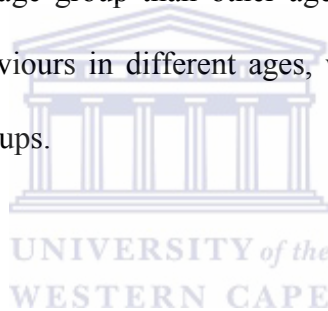
Table 4.6: Type of illness according to age

Prevalence of Illness	Age		
	Children	**Adults**	**Elderly**
Flue or acute respiratory	1911 71.4 %	1657 45.8 %	2140 34.9 %
Diarrhoea	217 8.1 %	128 3.5 %	132 2.2 %
Severe trauma	28 1.0 %	82 2.3 %	451 2.0 %
TB and severe cough with blood	62 2.3 %	223 6.2 %	451 7.4 %
Abuse of alcohol or drugs	3 0.1 %	11 0.3 %	25 0.4 %
Depression or mental illness	15 0.6 %	136 3.8 %	241 3.9 %
Diabetes	5 0.2 %	107 3.0 %	619 10.1 %
High or low blood pressure	3 0.1 %	307 8.5 %	1372 22.4 %
HIV/AIDS	10 0.4 %	68 1.9 %	174 2.8 %
Other sexually transmitted diseases	0 0 %	23 0.6 %	10 0.3 %
Other diseases/injuries	548 20.5 %	1195 33.1 %	2036 33.3 %

4.10 Consultation of health care Services by gender for medical and non medical aid holders

Different studies have consistently shown that women use more healthcare services than men (Callahan *et al.,* 2000). Different explanations have been given for this such as different health perceptions in illness where woman have a greater likelihood to seek for prevention. Mayer *et al.,* (1998) described gender variations in healthcare services using secondary data but without taking into account other variables. However, other researchers have attempted to control for health status by including in their study population only those individuals rating their health as good or excellent. According to the findings of Health Economics and Financing Programme conducted in Cape Town in 2007, females were reported to be more effective monitors of their health and more sensitive in changes capacity of their wellness, males on the other hand, tend to delay treatment seeking longer than women.

The specifically aims of the study include examination of the gender differences in utilization of healthcare services taking into account medical aid coverage. The present study show that female medical aid holders who consulted healthcare facilities when ill are 88.5 % compared to male respondents (86.9 %). Furthermore, female respondents with medical aid who did not consult health care facilities when ill are 11.5 % while males are 13.1 %. These results exhibits 2 % gender differentials in medical aid holders and non medical aid holders in consultation of healthcare facilities. Therefore, these results show that females tend to consult more than males but the variation in percentage is minimal. These results confirm the findings of a study conducted in Uganda which showed women are slightly more likely to consult than men.

To evaluate the statistical relationship between consultation of healthcare and gender controlled for medical aid, a Chi-square and Cramer's V was utilized. The p values for both medical aid holders and non medical aid holders who consulted healthcare facilities taking

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into consideration the effect of gender was more than 0.05. These results therefore imply that there is no statistical significant relationship between consulting healthcare facilities and gender. Hence, gender is not a prominent factor in consultation of health care in the South African context.

Table 4.7: Consultation of health care services by gender for medical and non medical aid holders

Medical aid	Consulted a health worker	Gender	
		Male	Female
Yes	Yes	746 86.9 %	884 88.5 %
	No	112 13.1 %	115 11.5 %
	Total	100 %	100 %
No	Yes	3333 77.9 %	4982 79.9 %
	No	946 22.1 %	1250 20.1 %
	Total	100 %	100 %

4.11 Consultation of health care by population group controlled for medical aid

According to Gold and colleagues (1998), the population group of an individual have been shown to affect his or her health seeking behaviours. According to the cohort component method, the mid-year population of South Africa in 2009 was reported to be 79.3 % of African, 9.1 % of whites, 9 % of coloured and 2.6 % of Indian population (Stats SA 2009). Hence, these ethnic grouping proportions are expected to influence household's decision in healthcare seeking taking into account medical aid coverage. According to the findings of GHS 2007 there is huge gap in holding medical aid and population group. Medical aid holders are high in proportion in the white population group than any other ethnic groups. The results from the present study as depicted in Table 4.8 showed white medical aid holders were 64 %, Asian/Indian medical aid holders were 31.5 % while Coloured and Black/African

were 13 % and 6.9 % respectively. This result is in agreement with the result of the study conducted by Statistics South Africa in 2008 that access to medical aid varies widely by population group. Their findings indicate a proportion of 67 % of whites while less that 7.5 % blacks were covered (Koch, 2009). More so, Myburgh and colleagues (2008) reported similar disparities between medical aid coverage and population groups. The rationale in these differentials in medical aid coverage in different population group is mainly cause by affordability of a medical aid scheme. Hence, this showed that Whites and Indians are more likely to afford medical aid cover as compared to Coloured and Blacks/African.

Chi-square was conducted to examine the relationship between population group and medical aid coverage. The results demonstrates that there is a significant and strong relationship between population group and medical aid coverage because the p values was less that 0.05.Furthermore lambda test of association was conducted and the findings confirmed the results of the chi square. The value of the lambda value obtained was 0.136 which therefore means that the population group of an individual's determines if one will have a medical aid coverage by 13%.These results therefore demonstrates that reporting of illness for both medical aid holders and non medical aid holders is affected by population group.

Thereafter, the impact of medical aid coverage in consulting healthcare when sick in different ethnic group was also evaluated in this study. The results shown in Table 4.9 revealed medical aid holders in Africa/Black ethnic group consulted more when ill as compared to all other racial groups with a high percentage of 91.6 %. The second highest population group that consulted is the Indian population with 85.1 % of them having consulted a healthcare facility when ill. The Coloured and White population group with medical aid had the lowest percentage in consultation as compared to other population groups at 84.2 % and 83.8 % respectively. These results showed disparities in medical aid holder and non medical aid

holders who consulted health care facilities across the population group. A difference of 11.35 % was seen in the African population between medical aid holders and non medical aid holders in healthcare consultation. The findings in Table 4.8 also show a difference of 7.9 % in Coloured population consultation rate among medical aid holders and non medical aid holders. There is a low difference of 2 % in the Asian population while there is a significant difference in the white population of 18.1 % in consultation among medical aid holders and non medical aid holders. These results demonstrate that medical aid covering has a significant impact in consultation patterns of different ethnicity groups.

A statistical relationship was determined in this study between healthcare consulting and population group controlled for medical aid using chi- square test of association. The results illustrate a statistical significance in consulting health care and ethnicity group for both medical aid holders and non medical aid holders because the p value was less than 0.05.This therefore demonstrates that reporting illness for both medical aid holders and non medical aid holders is affected by population grouping .

Table 4.8: Medical aid coverage by population group

Medical aid	Population group			
	African	**Coloured**	**Indian**	**White**
Yes	5954 6.9%	1918 13.0%	607 31.5%	3829 64%
No	80785 93.1%	12801 87.0%	1329 68.5%	2153 36%
Total	86739 100%	14719 100%	1936 100%	5982 100%

Table 4.9: Consultation of health care by population group controlled for medical aid

Medical aid	Consulted health worker	Population			
		African	Coloured	Indian	White
Yes	Yes	898 91.2 %	235 84.2 %	57 85.1 %	440 83.8 %
	No	87 8.8 %	44 15.8 %	10 14.9 %	85 16.2 %
	Total	985 100 %	279 100 %	67 100 %	525 100 %
No	Yes	6964 79.9 %	1035 76.3 %	113 83.1 %	195 65.7 %
	No	1748 20.1 %	321 23.7 %	23 16.9 %	102 34.3 %
	Total	8712 100 %	1356 100 %	136 100 %	297 100 %

4.12 Consultation of health care by marital status controlled for medical aid

The result of the present study showed a minimal difference in marital status group with response to consulting a healthcare centre when ill for both medical aid holders and non medical aid holders. The respondents who where sick, living together with partner and having a medical aid cover demonstrated the highest proportion of 92.3 % in consulting healthcare facilities compared with other marital status group. The second highest prevalence was recorded for those who are divorced/ separated with medical aid coverage. Those who were married widowed and those who were never married had a slight variation in consulting healthcare facilities with the proportional difference indicated to be 2 % to 3 % for medical aid holders. The rate of not consulting in medical aid holders was higher to those widowed the might be various reason for this such as ethnicity group or age. The findings demonstrated that those who are married and reported illness without medical aids were 81.9 % followed by those who are widowed at 81.5 %. The rate of non consulting healthcare services to non-medical aid holders was high to those that are living together at (22.7 %). These results demonstrate that no pattern was observed in consultation rate of the different marital status group both for medical aid holders and non medical aid holders.

To test the significance between marital status and consultation of healthcare controlled for medical aid coverage, a Chi-square and Cramer's V analysis were conducted. The results demonstrated no statistical significance in marital status and consultation for medical aid holders because the p value is 0.447, less than 0.05. For non medical aid holders there was a significant relationship that was exhibited between marital status and consultation because the p value <0.05. The result of chi-square test showed that there is an association between the two variables because p=0.011<0.05. Cramer's V test was conducted to confirm the chi-square results its indicates that there is no relationship between marital status and consultation of healthcare services for medical aid holders, while a significant relationship is demonstrated for non medical aid holders in healthcare reporting when ill in different marital status groups.
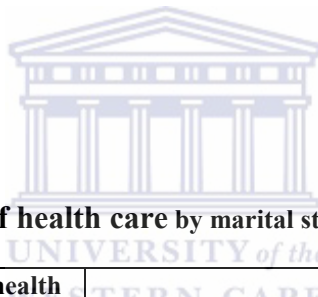
Table 4.10: Consultation of health care by marital status controlled for medical aid

Medical aid	Consulted a health worker	Marital Status				
		Married	**Living together**	**Widowed**	**Divorced**	**Never Married**
Yes	Yes	700 88.7 %	48 92.3 %	87 84.5 %	52 89.7 %	743 86.9 %
	No	89 11.3 %	4 7.7 %	16 15.5 %	6 10.3 %	112 13.1 %
	Total	789 100 %	52 100 %	103 100 %	58 100 %	855 100 %
No	Yes	2026 81.9 %	596 77.3 %	1165 81.5 %	291 79.7 %	4235 77.4 %
	No	448 18.1 %	175 22.7 %	264 18.5 %	74 20.3 %	1234 22.6 %
	Total	2474 100 %	771 100 %	1429 100 %	365 100 %	5469 100 %

4.13 Health facility consulted by households with different education levels attained for medical and non medical aid holders

The level of education attained is hypothesized to be among the factors that influence South Africans' propensity to consult healthcare facilities. The level of education used in the study was divided into six namely: No schooling, primary school which consists of Grade 0-7, some secondary which consist of Grade 8-12 and NCT1-11, diplomas and certificates with Grade 12, Degree and Postgraduate degree which consist of honours, masters and PhD degrees. The reason why this variable was used instead of institution attended is because it is a true reflection of the highest level of education obtained by the respondents.

From the results depicted in Table 4.11, approximately 48.1 % of the respondents who had consulted a health worker irrespective of whether they are covered by a medical aid scheme attained secondary education. This is closely followed by those who have a primary school education (29 %) and those respondents with no form of schooling (19.7 %). More so, the present study returned a very low illness reporting illness reporting (ranging from 2.1 % to 0.3 %) for those who had diplomas/certificates with grade 12, bachelor degrees and postgraduate degree.

The results from Appendices 4.1 showed a higher proportion of not consulting healthcare in medical aid holders with secondary level of education (13 %). Moreover, a minimal difference of not reporting illness exists in those with primary, Grade12 and Certificate, and Postgraduate with medical aid holders with proportion of 12.3 %, 12.4 % and 12 % respectively. The findings of this study demonstrate that medical aid holders with no schooling and degrees report illness more than other policy holders. The proportional levels of illness reporting for non schooling and those with degrees were (7.8%) and (8.7%) for

medical holders. The proportion of non-medical aid holders with no schooling who consulted was higher (81.6%) compared to levels of education. Non medical aid holders with primary, secondary and postgraduate had a minimal difference in health seeking with proportion of 79.7 %, 77.9 % and 77.2 % respectively. The analysis also show low utilization in those with non medical aid holders with degrees, diplomas and certificates with grade 12 with proportion 62.5 % and 64.3 % respectively than other levels education.

A statistical relationship was conducted to test the level significance in education and illness reporting for medical and non medical aid holder. The findings illustrated no significant relationship among medical aid holders with different level of educational and illness reporting. While on the other hand, a statistical significance was exhibited among non medical aid holders with different levels of education obtained and illness reporting. This therefore means that level of education and not having a medical aid cover influence illnesses reporting in South African households.
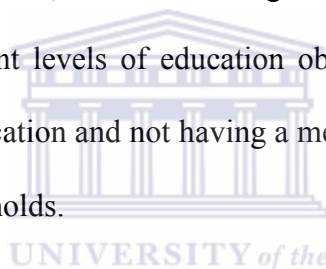
Table 4.11: Consultation of health care facilities by education level

Highest Level of Education	Frequency	Percentage
No schooling	21324	19.7 %
Primary	31344	29.0 %
Secondary	51896	48.1 %
Diploma/Certificate with grade 12	276	0.3 %
Degree	926	0.9 %
Postgraduate	2214	2.1 %
Total	107980	100 %

4.14 Consultation of healthcare facilities by age controlled for medical aid

Age groups in this study where recorded into three categorical groups, respondents within age 0-14 years were classified as children, 15-59 years as adults and those aged 60 and above were classified as the elderly group. The findings of the study demonstrate slight variation in the healthcare consultation rate in medical aid holders of the different age groups. The proportion of children who consulted was 89.7 % which was the highest and closely followed by the elderly population with frequency rate of 87.9 %. The rate of non-consultation was high in the adults' age group with proportion of 14.4 %. This study exhibited some differences in non-medical aid holder in healthcare consultation. The elderly population of non medical aid had the highest proportion rate in healthcare consultation of 82. % while the children age group had a proportion of 79.4 % and the adults had a lowest consultation rate of 74.1 % compared to other age groups.

Statistical relationship between age and illness reporting was examined using Phi and Cramer's V controlled for medical aid. The results showed no significant relationship between age group and illness reporting ($P>0.05$). An association was demonstrated in non medical aid holders among the different age groups as $p<0.05$. Hence, this study show no associations among the different age group in illness reporting for medical aid holders while an association is shown in non medical aid holders in different age groups.

Table 4.12: Consulting a healthcare facility by age controlled for medical aid

Medical aid	Consulted a health worker	Age groups		
		Children 0-14	Adults 15-60	Elderly 60+
Yes	Yes	418 89.7 %	411 85.6 %	799 87.9 %
	No	48 10.3 %	69 14.4 %	110 12.2 %
	Total	466 100 %	480 100 %	909 100 %
No	Yes	1734 79.4 %	2314 74.1 %	4258 82.0 %
	No	449 20.6 %	810 25.9 %	935 82.0 %
	Total	2183 100 %	3124 100 %	5193 100 %

4.15 Type of healthcare consulted by gender controlled for medical aid

The utilization of the type of healthcare services is determined by different factors and the aim of this study is to identify those factors and to measure to which extent they influence the type of healthcare consulted. Utilization of private and public healthcare use is also determined by the issue of affordability of healthcare services. In this study the type of healthcare facilities refers to private, public and other facilities which include traditional healers, pharmacy/ chemist other facilities in the private healthcare sector. According to the results as depicted in Appendix1.b there is a minimal difference in the type of healthcare facility and gender for both medical aid holders and non-medical aid holders. The results demonstrates that female medical aid holders tend to use public healthcare more as compared to males with the proportion variation of 1 %. This difference is also evident in utilization of private health care of medical aid holders between males and females. A slightly variation in

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non-medical aid holders in different healthcare facilities is also evident and the results confirmed females tend to use public healthcare than males. However, males with no medical aid tend to used private healthcare more than females the results indicated a proportion of 24.8 % and 23.9% for males and females respectively private healthcare utilisation. This minimal difference is confirmed by the study conducted in Uganda that men are more able to finance their healthcare cost as compared to women. The use of private healthcare demand a certain fee to be paid for consultation this variation of 1 % is highly influenced by healthcare financing abilities of males and females.

The relationship between the type of healthcare provider and gender for medical aid was tested using chi-square and Cramer's V. A non-significant relationship between gender and the type of healthcare consulted for both medical aid holders and non-medical aid holders was demonstrated. This insignificance is demonstrated by the p values of both non-medical aid holders and medical aid holders which was more than 0.05. These results therefore show that gender does not influence the type of healthcare facilities consulted by South Africa households irrespective of medical aid coverage.

4.16 Type of healthcare consulted by households across the provinces controlled for medical aid

The results depicted in Appendix1.c low usage of public healthcare across the provinces of South Africa by medical aid users. The highest use of public healthcare was found in the Northern Cape (16.3 %). This implies that medical aid holders in Northern Cape made minimal utilization of their medical aid one month prior to the survey. This could be caused by a number of factors such as availability of funds in medical aid, the type of medical aid cover and the type of sickness. Limpopo is indentified as the second province relying more on public healthcare facilities with a proportion of 15.7 %, while Free State, Kwazulu Natal, Northern West, Mpumalanga Eastern Cape ranged from 10.1 % to 14.1 %. Western Cape and Gauteng medical aid holders had the lowest utilization of public healthcare centres across the provinces with a proportion of 4.1 % and 8.1 % respectively. This low use in public health care services demonstrates that Western Cape and Gauteng medical aid holders utilize more of private healthcare. The results illustrate minimal variation across the provinces in private health care utilization of medical aid holders the lowest province in private health care consultation being the Northern Province.

In the North Cape, non medical aid holders tend to use public healthcare facilities more compared to other provinces. These results are an awareness of high utilization of public healthcare facilities in Northern Province for both medical aid holders and non medical aid holders. KwaZulu Natal ranked the second highest in public healthcare utilization of non-medical aid holders with proportion of 81.9 %. Gauteng and the Free State were shown to have the highest proportional rate in utilization of private healthcare in non medical aid holders. This however, signifies that non-medical aid holders of these provinces where able to pay for private healthcare consultation in the past month prior the survey. There are

numerous reasons why these non medical aid holders in these provinces where able to finance their healthcare e.g. Gauteng is the richest province in South Africa therefore irrespective of the medical aid its people are more likely to afford private health than other provinces.

There is general low utilization of other healthcare services across the provinces with Gauteng having highest proportion of non-medical aid holders consulting other healthcare facilities. The statistical significance using Cramer V for provinces and the type of healthcare facility consulted was significant for both medical aid holders, and non-medical aid users. The p value was less than 0.05 hence showing that there is a statistical relationship between provinces and the type of healthcare facility in South African households.

4.17. Type of healthcare consulted by households across the population controlled for medical aid coverage

The healthcare consultation patterns for both medical aid and non-medical aid holders according to population groupings were analyzed and the results depicted in Table 4.13 Findings from the present study revealed African/black medical aid holders consult public healthcare facilities more than other ethnicity groups. The results shows that 14.6 % Black/African medical aid holders consulted public healthcare and closely followed by the coloured population with a proportion of 13.2 %. White and Indian medical aid householders show low utilization of public healthcare with proportion of 2.3 % and 1.8 % respectively. The implication of this observation is that White and Indian population utilizes public healthcare less than coloured and African population. Conversely, white and Indian medical aid holders use private healthcare centre mostly.

Non-medical aid holders were found to use public healthcare facilities more than private healthcare facilities. The results from this study show a pattern of high usage of public

healthcare use by the coloured and black population. The findings show a high use of public healthcare facilities for coloured and blacks populace of non-medical aid holders with a proportion of 83.5 % and 73.2 % respectively, while the white and Indian population utilizes private healthcare facilities the more. These variations in population group are mainly influenced by the costs involved in consulting private health care. These findings demonstrate that whites and Indians populace with no medical aid cover can still afford private healthcare compared to Africans and Coloureds.

A statistical relationship was tests to examine the relationship between the dependent and the independent variable. The relationship between the type of healthcare and population group was evaluated using chi square and Lambda test of association and a significant relationship between the two variables existed because the results indicated p value <0.05.The value for lambda was very low at 0.006.

Table 4.13: Type of healthcare consulted by population groups controlled for medical aid coverage

Medical aid	Type of healthcare	Population			
		African	Coloured	Indian	White
Yes	Public	129 14.6 %	31 13.2 %	5 8.8 %	10 2.3 %
	Private	723 81.7 %	195 83.3 %	52 91.2 %	418 95.9 %
	Other	33 3.7 %	8 3.4 %	0 0 %	8 1.8 %
	Total	885 100 %	234 100 %	57 100 %	436 100 %
No	Public	5033 73.2 %	855 83.5 %	66 60.6 %	76 39.6 %
	Private	1688 24.5 %	158 15.4 %	43 39.4 %	101 52.6 %
	Other	159 2.3 %	11 1.1 %	0 0	15 7.8 %
	Total	6877 100 %	1024 100 %	109 100 %	192 100 %

4.18. Type of Health Care Consulted by Level of education controlled for Medical Aid Coverage

The findings of the study demonstrated a greater proportion of those with primary as the highest level of education obtained in public health care utilization for medical aid holders. Medical aid holders with secondary as their level of education obtained with a proportion of 11.4% and they are the second highest. Those with no schooling and diploma /certificate with grade 12 demonstrated a minimal difference in consulting public health care with proportion of 10.1%, 9.1%, 10.3% respectively. Appendix1d illustrated that medical aid holders with postgraduate utilized only 5.7 % of public health care .Medical aid holders in all the different levels of education utilization 80% and above of the private health care. The utilization for other health care facilities was general too low for all the different levels of education with proportion of 1%.

 Major differences are exhibited in non-medical aid holder with different levels of education and the type of health care they consult when ill. The results demonstrated that those with higher education such as degree, certificate with grade 12 and postgraduate consult private health more than those with primary, secondary and no schooling. The findings of the study shows that Non-medical aid holders with primary as their level of education had the highest proportion at 78.6% followed by those with no schooling and secondary with proportion of 78.6% and 70.4% respectively. Appendix1d demonstrates a low rate of consulting public health care in those with tertiary qualification especially for those with postgraduate as their level of education .Those with degrees showed a proportion of 53.3% and 44.4% respectively in public health care facility usage. Non-medical aid holders who utilized private health care centres where higher in those with diploma/ certificate closely followed by postgraduate with proportion of 28% 35.1% respectively . Low utilization of private health care in non medical

aid holders with Primary, No schooling and Secondary with a proportion of 19.8%, 22.8% and 26.9% respectively is illustrated in Appendix1d.

Statistical test was conducted using a Chi- square and Cramer's V to measure the significance between the highest levels of education obtained and the type of health care consulted controlled for medical aid. The results illustrate the there was no significant relationship between the level of education and the type of health care facility consulted in medical aid holders the p value =0.414 .While a significance was demonstrated in the type of health care consulted and the level of education obtained in non medical aid holders.

4.19 Type of healthcare consulted by age controlled for medical aid coverage

The findings of the present study demonstrate a low utilization of public healthcare among medical aid holders across the age groups with the elderly age group consulting public facilities more compared to other age groups. The proportion for the elderly group that reported sickness in public healthcare was 12.8 % while adults and children was 9.2 % and 8.7 % respectively. Adults with medical aid demonstrated a high utilization of private healthcare facilities with proportion of 86.4 % the adult group and elderly age group utilization proportion was 84.0 %. The results demonstrate some variations in other healthcare facilities usage with the adults consulting more as compared to other age groups with medical aid. This variation in consulting healthcare facility between the age groups might be due to the type of sickness they suffered from one month prior the survey. The elderly population with no medical aid is shown to consult public healthcare more than adults and elderly population with medical coverage. The proportion of the elderly age population who consulted public healthcare facilities with non medical aid was 75.2 % while adults and the children where 71.1 % and 71.8 % respectively. The reason for these variations might be

due to the elderly population inability to afford the user fees paid for consultation in the public sector. The adults and children with no medical aid demonstrated a prevalence of 25 % in utilization of private healthcare while the elderly population has a population of 23 %. The elderly population with non medical aid was shown to consult other healthcare facilities more as compared to other age groups.

A Phi test of association was conducted to test association between the type of healthcare facility consulted and age controlled for medical aid. The results indicate a statistical relationship between the type of health facility and age group both for medical aid holders and non medical holders. These results show the type of healthcare facility consulted by South Africa householder is associated by with age.

Table 4.14: Type of healthcare consulted by age controlled for medical aid coverage

Medical Aid	Type of Health Care	Age groups		
		0-14	15-59	60+
Yes	Public	36 8.7 %	37 9.2 %	102 12.8 %
	Private	370 84.4 %	348 86.4 %	669 84.3 %
	Others	8 1.9 %	18 4.5 %	23 2.9 %
	Total	414 100 %	403 100 %	794 100 %
No	Public	1254 72.8 %	1620 71.1 %	3156 75.2 %
	Private	435 25.2 %	587 25.8 %	967 23 %
	Other	34 38.2 %	72 50.6 %	76 93.2 %
	Total	1723 100%	2279 100%	4199 100%

4.20 Income distribution in healthcare seeking

The level of income was hypothesized in this study to be a proxy in healthcare seeking behaviours, with those in the lower quintile consulting public healthcare while those in high income quintiles are expected to consult private healthcare facilities. To determine the healthcare seeking behaviour of South Africa households for different income level two variables were utilized: income categories and the total salary. The income category variable was divided into quartiles while the salary variable was categories into quintiles. Salary and income variables where utilized to profile health care utilization of households from the lowest quartiles and quintile.

4.20.1 Income bracket for those who consulted controlled for medical aid

The result in Table 4.15 indicates variation in income levels for both medical aid and no medical aid holder's .This clearly demonstrates that medical aid coverage in South African households is influenced by the level of income. A variation of 5 % existed in the first quintile between medical aid holders and non medical aid holders who reported illness. Table 4.15 shows income disparities across the quintiles, those with medical aid coverage have a higher income bracket that those with no medical aid coverage. More so, 20 % of non-medical aid holder who reported illness had income lower than R1510 while medical aid holders had an income lower than R1668. A proportion of 40 % of those who consulted healthcare facilities with medical aid coverage had an income lower than R2845 while those with no medical aid coverage had an income lower than R2665.

Table 4.15: Income bracket for those who consulted controlled for medical aid

Quartiles	Income	
	Non-Medical Aid Holder	**Medical Aid Holder**
First Quartiles	1510	1668
Second Quartiles	2665	2845
Third Quartiles	6008	6043
Forth Quartiles	10040	11032

4.20.2 Income bracket of those who consulted private healthcare controlled for medical aid

The type of healthcare utilized in the findings is demonstrated to be influenced by the level of income. As shown in Table 4.16 those who have higher income are more likely to use private healthcare sectors because they can afford medical aid coverage. The results further demonstrated that 20 % of medical aid holder who consulted private healthcare had income below R1608 whereas non-medical aid holders had income below R523. A proportion of 60 % of medical aid holders who consulted private healthcare facilities had an income equal to or below R4005, while non medical aid holders had an income of 3690. Hence, these findings show that consulting private healthcare centres are not only influenced by medical aid holder but also by the level of income.

Table 4.16: Income bracket of those who consulted private healthcare controlled for medical aid

Quartiles	Income	
	Non-Medical Aid Holder	**Medical Aid Holder**
First Quartiles	1058	2500
Second Quartiles	3690	4005
Third Quartiles	6251	5000
Forth Quartiles	11232	8375

4.20.3 Income Bracket of those who consulted public healthcare controlled for medical aid

The findings of this study as depicted in Table 4.17 shows that medical aid holders also consult public healthcare facilities and those who are more likely to consult public healthcare facilities are those with the low income bracket. The result showed that 20 % of medical aid holders who consulted public healthcare facilities had income below R1608 while those who consulted private healthcare demonstrated an income below R2500. These findings demonstrate that even for medical aid holders, consultation of private healthcare sector varies according to income. This therefore demonstrates that having a medical aid coverage does not necessary result in consultation of private healthcare sector .Logistic regression will be utilised to measure the influence of income in consulting health care facilities and the type of health care facilities consulted by South African Households.

Table 4.17: Income Bracket of those who consulted public healthcare controlled for medical aid

Quartiles	Income	
	Non-Medical Aid Holder	**Medical Aid Holder**
First Quartiles	523	1608
Second Quartiles	2592	2502
Third Quartiles	6154	6504
Forth Quartiles	11049	11280

4.21 Experiences in healthcare facilities consulted

The Department of Health Strategic Framework for 2002 -2004 identifies that improvement of quality of care as one of the four key challenges currently facing the health sector in South Africa. Therefore the experiences of households in healthcare facilities are of significance in South Africa because it serves to assist the Department of Health in identifying precisely service delivery improvement. The experiences of households in healthcare services are substantial in this study because they are directly linked with satisfaction of patients in healthcare facilities. Experiences in healthcare facilities are determining factor in continuing utilization of services and this therefore implies that these experiences highly influence their behaviours in healthcare seeking. Since the patients experiences are directly linked with the satisfaction rate of user this information will be of importance to healthcare policy makers. Therefore, these results will assist the private and the public healthcare sector of South Africa in advancement of healthcare services provided to households.

Rastaka and co-workers (1998) point out that long queues are common in most public sector institution and that they are a major source of dissatisfaction for patients. This was confirmed by Soderlund (1998) in a series of time flow and workload studies that healthcare personnel spend much of their time being unproductive at work. Tshabalala (2002) indicated 40 % of

patients who consulted primary healthcare waited more than an hour before being attended to by health personnel. The finding of this study is of most critical issue in healthcare services is the waiting time. The results depicted in Table 4.18 showed 25 % of respondents waited long time before being attended to by health personnel. More so, 84 % of respondents who waited long time are those who consulted public health facilities while private healthcare users have a proportion of 14 %. This clearly demonstrates the variation in healthcare quality between public and private healthcare facilities.

Dusayanga (2000) stated drugs play an important role in healthcare delivery systems because it gives it credibility. The availability of drugs is one factor known to improve utilization of healthcare services. Hlongwane (2009) stated that the public healthcare of South Africa is in disarray because many hospitals and clinics country wide are experiencing shortage in medical supply. The findings of this study revealed a proportion of 7 % in unavailability of drugs in healthcare facilities. The results demonstrate a high unavailability of drugs in public healthcare than in private healthcare with a proportion of 87 % and 12.2 % respectively. This reveals that those public healthcare users are less likely to receive the necessary treatment when ill as compared with private healthcare users.

Access to healthcare facilities is also determined by the user fee and the opening time of healthcare facilities. The findings of this study show a proportion of 6.6 % of respondents who indicated that healthcare facilities were expensive and while a proportion of 5 % indicated that the opening time was not convenient. Those who consulted private healthcare are shown in the findings to be those who indicated that the healthcare facilities were costly with proportion of 70.8 % compared to 26.6 % of those who consulted public healthcare. Primary healthcare in South Africa is free so those who indicated that consulting a public healthcare sector was expensive demonstrated the indirect cost involved in health consultation such as transport cost. Myburgh (2005) stated that when people visit healthcare

facilities, they have an expectation to receive professional healthcare in clean and hygienic surroundings. This study showed a proportion of 5 % who consulted healthcare facilities encountered unhygienic facilities while a low proportion revealed uncaring staff and incorrect diagnosis.

4.21 Experiences in healthcare facilities consulted

The Department of Health Strategic Framework for 2002 -2004 identifies that improvement of quality of care as one of the four key challenges currently facing the health sector in South Africa. Therefore the experiences of households in healthcare facilities are of significance in South Africa because it serves to assist the Department of Health in identifying precisely service delivery improvement. The experiences of households in healthcare services are substantial in this study because they are directly linked with satisfaction of patients in healthcare facilities. Experiences in healthcare facilities are determining factor in continuing utilization of services and this therefore implies that these experiences highly influence their behaviours in healthcare seeking. Since the patients experiences are directly linked with the satisfaction rate of user this information will be of importance to healthcare policy makers. Therefore, these results will assist the private and the public healthcare sector of South Africa in advancement of healthcare services provided to households.

Rastaka and co-workers (1998) point out that long queues are common in most public sector institution and that they are a major source of dissatisfaction for patients. This was confirmed by Soderlund (1998) in a series of time flow and workload studies that healthcare personnel spend much of their time being unproductive at work. Tshabalala (2002) indicated 40 % of patients who consulted primary healthcare waited more than an hour before being attended to by health personnel. The finding of this study is of most critical issue in healthcare services is the waiting time. The results depicted in Table 4.18 showed 25 % of respondents waited long time before being attended to by health personnel. More so, 84 % of respondents who waited

long time are those who consulted public health facilities while private healthcare users have a proportion of 14 %. This clearly demonstrates the variation in healthcare quality between public and private healthcare facilities.

Dusayanga (2000) stated drugs play an important role in healthcare delivery systems because it gives it credibility. The availability of drugs is one factor known to improve utilization of healthcare services. Hlongwane (2009) stated that the public healthcare of South Africa is in disarray because many hospitals and clinics country wide are experiencing shortage in medical supply. The findings of this study revealed a proportion of 7 % in unavailability of drugs in healthcare facilities. The results demonstrate a high unavailability of drugs in public healthcare than in private healthcare with a proportion of 87 % and 12.2 % respectively. This reveals that those public healthcare users are less likely to receive the necessary treatment when ill as compared with private healthcare users.

Access to healthcare facilities is also determined by the user fee and the opening time of healthcare facilities. The findings of this study show a proportion of 6.6 % of respondents who indicated that healthcare facilities were expensive and while a proportion of 5 % indicated that the opening time was not convenient. Those who consulted private healthcare are shown in the findings to be those who indicated that the healthcare facilities were costly with proportion of 70.8 % compared to 26.6 % of those who consulted public healthcare. Primary healthcare in South Africa is free so those who indicated that consulting a public healthcare sector was expensive demonstrated the indirect cost involved in health consultation such as transport cost. Myburgh (2005) stated that when people visit healthcare facilities, they have an expectation to receive professional healthcare in clean and hygienic surroundings. This study showed a proportion of 5 % who consulted healthcare facilities encountered unhygienic facilities while a low proportion revealed uncaring staff and incorrect diagnosis.

Table 4.18: Experiences in healthcare facilities consulted

Experiences		Private	Public
Unclean Facilities	Yes	134 27%	9315 84%
	No	359 73%	111 26%
	Total	493 100%	9426 100%
Long Waiting Times	Yes	371 15%	2107 40%
	No	2156 85%	5295 60%
	Total	2527 100%	7402 100%
Opening Time not Convenient	Yes	131 26%	351 4%
	No	375 74%	9061 96%
	Totals	506 100%	9412 100%
Drugs not available	Yes	85 16%	8614 88%
	No	619 84%	605 16%
	Totals	704 100%	9219 100%

4.22 Satisfaction rate of healthcare services

The right of access to healthcare services is specified in the constitution of the Republic of South Africa and the white paper on Transforming Public Service Delivery (Batho Pele White Paper) which required specific standard the way in which customers should be treated (South Africa, 1997). The user of the healthcare facilities in South Africa have a patient right charter which serves as a form to healthcare standard. Ferrel (1999) states that the patients' rights charter serves as a tool against which people can measure good quality service. Andaleeb (1998) stated patients' satisfaction is overall evaluation of his/her experiences with health services. Therefore, the experience of South Africa households in this study such as long waiting time, drug shortage etc. resulted to unsatisfied patients. Berwick (1990) showed health users are more informed lately than before therefore, it is crucial that health providers understand how patients perceives their services and respond.

The South African healthcare sector inherited huge inequalities in health status and healthcare provision because of the apartheid era. The government in health status and healthcare provision is committed in the improvement of public services (McIntyre, 2002; Van Ransburg and Four, 1994). The Government indicated transformed South Africa will be evaluated by the effectiveness of service delivery. The satisfaction rate of patients in healthcare services has a direct impact on healthcare seeking behaviours because a satisfied patient is more likely to continue consulting the facilities. Zapka and colleagues (1995) stated satisfied patients are more likely to complete treatment regimens, be compliant and cooperative.

The findings of the present study showed a healthcare satisfaction rate of 76.6 %. However, this satisfaction rate might not be a true reflection on the quality of healthcare systems because if people are used to one healthcare facility it will be difficult for them to make a comparison about quality standard. For example, if a certain household is used to consulting a

public healthcare facilities and due to healthcare financing they are unable to consult private medical care, it might be extremely difficult for them to measure the quality standard of the public healthcare sector. The satisfaction rate varies in public and private healthcare sector with those in the private healthcare sector reporting to be very satisfied when compared with public healthcare user. The dissatisfaction rate in the study was indicated to be 5 % and this showed those who were discontent with the service they received from the healthcare providers. Hence, these respondents are more likely not to consult the healthcare facilities they visited when ill because of the quality of service delivery and the discontinuation may affect their health negatively especially those who cannot afford private healthcare.

Table 4.20: Assessment of satisfaction rate of South African healthcare patients

Patients Satisfaction	Frequency	Percentages
Very satisfied	7605	76.6
Somewhat satisfied	1496	15.1
Neither satisfied nor dissatisfied	248	2.5
Somewhat dissatisfied	211	2.1
Very dissatisfied	358	3.6
Don't Know	9	.1
Total	**9927**	**100%**

4.23 Reasons for not consulting healthcare facilities

South Africa households are affected by a number of factors in healthcare utilization or in reporting health illness. One of the main objectives of this study was to indentify the factors that obstruct South African households in consulting healthcare facilities. The finding of the present study depicted in Table 4.18 revealed a proportion of 70 % did not report illness because they did not see the reason to do so. User fee (14.5 %) is another factor identified

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from the present study which indicated that they did not consult because it is too expensive; even though primary healthcare is free in South Africa, there are indirect costs involved in healthcare seeking.

The distance factor to healthcare facilities is assumed to have an impact on healthcare seeking behaviours especially for those living in sparsely populated areas where distance between the area of residence and facilities is large (Bentham *et al.,* 1985; Bronstein *et al.,* 1990). Fiedler (1981) confirmed that along with fees for services and the availability of a regular physician, distance to provider is the major correlate of utilization especially for rural residents. The findings of this study showed distance to be among factors that hinders South Africa households not to consult. A proportion of 7.4 % indicated that they did not report illness because the healthcare facilities are too far.

Table 4.21: Reasons for not consulting healthcare facilities

Reason for not consulting	Frequency	Percentages
Too expensive	341	14.4
Too far	175	7.4
Not necessary	1653	69.9
Don't know	27	1.1
Others	358	7.2
Total	**2554**	**100%**

4.24 Regression Analysis

The previous exploration in this study utilised cross tabulation to investigate the bivariate relationship. In the present section distinction will be made between dependent and

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independent variables to test hypotheses. Logistic regression is utilized to observe the influence of the independent variables on the dependent variables. The use of the logistic regression is based on the fact that the dependent variables are dichotomous .The regression model consists of two dependent variables namely the consultation of health care facilities and also type of health care facilities consulted. The independent variables that were utilized in the regression model are population group, income, gender, and highest level education, age and medical aid and monthly Salaries.

4.23.1 Consulting Health care facilities taking into Account income

The results of the regression model for those who consulted health care facilities taking into account income categories indicates that gender, marital status, age , and income are not significant in the model this therefore demonstrates that these variables do not affect the consultation of health care facilities. This model confirms the results of the chi-square test of association that gender and marital status in South Africa does not affect illness reporting. The results demonstrate that province of the household is significant in health care consultation specifically those that residences in Eastern Cape and Free State have significance in consulting of health care service. The regression model demonstrate that those who residences in Eastern Cape are 2.5 times likely to consult than those in the North West ,while those in Free State are 3 times likely to consult that those in North West. The Wald test which tests the unique contributor of each independent variable in the regression model was 3.8 and 4.5 for Eastern Cape and Free State respectively.

The population group is also indicated to be significant in health care consultation especially African and Coloureds. The results demonstrated that Africans are 5 times more likely to consult health care facilities as compared to white population. This regression model

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confirms the chi square results that demonstrate a strong relationship in population grouping and health care consultation. The Wald test for African population was very strong because it was 10.83 while for coloured population was 5.052. The model also indicates medical aid coverage to be of significance in health care consultation with Exp (B) of 2.8 and this indicates that medical aid holders are 2.8 times likely to consult that non- medical aid holders.

4.23.2 Consulted Health care facilities taking in Account Salaries

The regression model in table 4.2 indicates that province, gender, marital status, does not affect consultation of those who have monthly salaries, the model demonstrates that monthly salary does not affect illness reporting. This model also indicates just as the model above that medical aid coverage plays a significant role in health care consultation, the odd ratio of medical aid holder is 2.4. This therefore demonstrates that medical aid holders are more likely to consult health care facilities that non –policy holder. The Wald test was also indicated to be very strong for medical aid holders who consulted health care facilities. Population group in this model is also indicated to play a major role in consultation with Indian population being more likely to consult than the white population. The odd ratio for the Indian population in the regression model is 5.213 this therefore demonstrates that the Indian population is 5 times more likely to consult than the white population group. The African and coloured are indicating to be 2 times likely to consult than the white population. The results confirm the results of the chi- square test of association that there is a relationship in health care consultation controlled for medical aid coverage. The models has some interesting finding in consultation patterns of different age group the results indicate that there is a significance in consulting of adult age group and they are less likely to consult as compare to the elderly population.

4.20.4 Private Health care consultation with Monthly Salaries

The findings of the regression model for those who consulted private health care facilities indicates that gender and monthly salaries do not have a significant role in consultation of the private health care centres. The results demonstrate that those who reside in Kwazulu Natal are likely to consult health care facilities as compared to North West residents. The regression model also demonstrate a significance in private health consultation for those who are married and widowed and that they are 2 times more likely to consult private health care facilities than those that are single .The Wald test for these two categories of marital status was very strong. The regression model demonstrates interesting findings on population group and all the population groups where significant in private health care consultation. The Black/African, Indian and coloured population are less likely to consult private health care facilities than the white population. The odd ratio for African population is 0.358, Coloured population 0.197 and for the Indian population is 0.308. These results therefore demonstrate that the white population is more likely to consult private health care centres compared to other racial groups. Medical aid coverage in this model is shown to be significant in private health care consultation medical aid coverage holders being 19 times more likely to consult private health care facilities. The Wald test in medical aid coverage in private health care consultation is indicated to be very strong being 144.27 this clearly demonstrates the medical aid coverage is a dominating factor in private health care consultation in South Africa. The model demonstrates that children and adult age groups are more likely to consult private health care facilities as compared to adult age group. The odd ratio for the children age group was 2.45 and for adults was 1.717. This therefore indicates that are children 2 times more likely to consult private health care facilities than the elderly population whilst the adult age group is more 1.7 times likely to consult health care facilities.

4.20.5 Public health Care consultation with monthly Salaries

The regression model on public health care consultation is an overturn of the regression model of those who consulted private health care facilities. The respondents who reside in Kwazulu Natal are demonstrated to be more likely to consult public health care facilities than those who reside in North West province. Those who are widowed and married where demonstrated to be less likely to consult private health care facilities than those who are single. The population group is also indicated to play a significant role in consultation of public health care. Coloureds, Indians and Africans are more likely to consult public health care facilities than the white population. On the other hand medical aid holders are less likely to consult public health facilities as compared to non-medical aid holders.
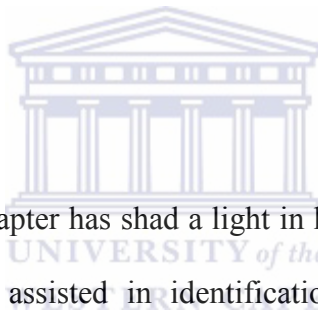
4.21 Conclusion

The analysis conducted in this chapter has shad a light in health seeking behaviours of South Africa households. Is has also assisted in identification of proxies that that directly influences the decision of illness reporting and the they type of health care facilities that are consulted by households taking into account different demographic variables. In the next chapter a thorough discussion will be conducted using the findings of this chapter.

CHAPTER 5: DISCUSSION OF RESULTS

5.1 Introduction

This emphasis of the study was on health seeking behaviours of South African households and the assessment of factors that affect utilization of healthcare services. The key problem this study aimed to tackle is the effect of medical aid coverage on healthcare seeking behaviours, which is limited to certain households in South Africa .The study therefore aimed at profiling health seeking behaviours of medical aid holders and non medical aid holders. The influence of other attained proxies of healthcare seeking such as the socio-demographic variables and other variables related to healthcare seeking such as type of healthcare facilities consulted, the type of illness suffered from and the quality of service received from the healthcare centres consulted were also evaluated in this study. Therefore, this section of the thesis discusses the findings from the analysis done in Chapter 4. This chapter is divided into sections and each section elaborates on the significance of the study.

5.2 Major procedures followed in the research design

This study of health seeking behaviours is quantitative as it utilizes variables and tests hypotheses. The utilization of the General Household Survey of 2007 for the analysis was aimed at achieving the objectives of the study. Being quantitative research, the relationship between identified independent and dependent variables were determined. In this study, the independent variables used include demographic variables such as province, gender, age, population group and marital status. While, dependent variables were health seeking related variables such as the medical aid coverage, type of illness suffered from, healthcare facilities consulted, illness reporting, quality of health care and satisfaction rate of service received and

.More so, the data from this study was used in the establishment of associations between independent variables and dependent variables. The measurements of the variables were defined and then statistical methods were utilized to test the relationship between dependent variables and independent variables. This type of research was of importance because it facilitates the purpose of the study which is to profile health seeking behaviours and healthcare utilization of South Africa households using the General Household Survey of 2007.

The design of the study was cross sectional, with sampling done by random selection of those who were ill one month prior the survey and the survey. The survey was conducted by Statistics South Africa by means of a personal interview using the household questionnaires. The main aim of the survey was to acquire data from the respondents with questions relating to their background, past experiences and attitudes. Data was analyzed with a statistical program SPSS by means of descriptive and inferential statistics. Statistical relationships were tested by utilizing Chi square, Phi and Cramer's V, Lambda and Eta to test association between variables. The analysis of the study incorporates all nine provinces of South Africa. The data file used in the study was obtained in SPSS format which made it possible for statistical analysis to be conducted. The format of the data was extracted from the section of the questionnaire related to person files.

5.3 Incidence of illness

Healthcare seeking behaviours are actions taken by referring to a healthcare centre when a person is confronted with illness. Health seeking behaviours exclusively depends on the incidence of illness. Incidence of illness is defined as frequency of a disease appearing in a particular population or area. Incidence of illness is of importance in policy formulation because it enlightens policymakers of effective action that needs to be taken for development of healthcare systems. The analysis conducted in this study showed low incidence of illness.

The main reason for low incidence of illness in this study is the reference period of illness which is one month prior the survey. This period makes it difficult to observe the health seeking patterns of South African households because it is very short.

The significance of the type illness individuals suffered from in this study is associated with the decision of the person in consulting healthcare centres. The prevalence of flu and acute respiratory disease was the highest illness suffered by South African households. However, the high prevalence in flu and acute respiratory and low prevalence of HIV/AIDS in this study raised some questions. The literature as reviewed in Chapter 2 revealed South Africa is currently faced with one of the highest prevalence of HIV/AIDS in the world. Hence, the results of this study do not match the current trends of HIV/AIDS in South Africa as this study is expected to confirm this by observing a high prevalence of those who suffered from HIV/AIDS.

A possible elucidation for the low prevalence of HIV/AIDS in this study is the stigma still attached to the disease which makes it difficult for people to explicitly disclose their status. Secondly, there are opportunistic diseases that are directly linked with HIV/AIDS that people may suffer from without exactly knowing their HIV/AIDS status. Hence, this study associated the high prevalence of flu and acute respiratory illness with HIV/AIDS opportunistic disease that the populace might have suffered from without knowing that it is HIV/AIDS-related. Another explanation in low prevalence of HIV/AIDS is the reference period of illness which is one month prior the survey. The analysis also revealed noticeable low prevalence of sexually transmitted diseases which does not draw a parallel with the recent findings of the Medical Research Council (MRC) that South Africa is faced with massive burden of STIs. The possible explanation for the low prevalence in sexual transmitted infections/sexual transmitted diseases (STIs/STDs) is the fact that these diseases are directly linked with unprotected sex which in turn makes it difficult for a person to openly

pronounce that he/she engaged in unprotected sex. Another explanation for this might be due to lack of awareness of the symptoms of STIs/STDs. More so, the study showed a low prevalence in diarrhoea and depression among South African households.

5.4 Health care consultation according to illness

The present study show illness reporting varies according to the type of illness individuals suffered from. Our findings revealed high reporting of those who suffered from HIV/AIDS and TB. The implication is that healthcare centres of South Africa are heavily burdened by those who are suffering from these diseases. More so, this means that individuals who suffered from these sicknesses inevitability see the need to consult healthcare facilities when ill. Therefore, the analyses demonstrate that South African households recognize the significance of HIV/AIDS and TB in their health status and this compels them to consult healthcare facilities.

A consultation rate of more than 70 % was shown for individuals who suffered from severe trauma, diabetes and low/high blood pressure. This is generally a good rate of consultation and demonstrates how the individuals recognize the importance of consultation when suffering from these diseases. On the other hand, a low consultation of healthcare facilities was shown for individuals who suffered from flu and acute respiratory illness. This is because individuals who suffered from the flu and acute respiratory illness do not see the importance of consulting healthcare services. A possible explanation for this behaviour might be connected to the frequency of this illness which may lead to people not seeing the importance of consultation when suffering from the infection.

5.5 Prevalence of illness according to age

The present study also revealed the prevalence of sickness varies according to age. Flu and acute respiratory illness is common to those who are in the age group of 0-14 years

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(children). This was confirmed by literature that this illness is common in childhood stages as children are more vulnerable to colds. However, the low consultation of those who suffered from flu/acute respiratory infections therefore expresses a concern in healthcare status of age group 0-14 years. The earlier discussion showed a linkage between HIV/AIDS opportunistic diseases and acute respiratory infection hence, the proportion of adults and the elderly population might include those actually suffering from HIV/AIDS without knowing. More so, an interesting result was observed for the prevalence of HIV/AIDS in the different age groups as the findings revealed the elderly population had the highest prevalence in HIV/AIDS. This result is a complete contradiction of every available study that has ever been conducted which showed highest prevalence of HIV/AIDS among the adult population. This raises serious questions but a possible explanation for this may be due to the stigma attached to this killer disease in South Africa. Hence, the adult population in our study still sees HIV/AIDS as an embarrassment, thereby leading to the non-disclosure of their HIV/AIDS status.
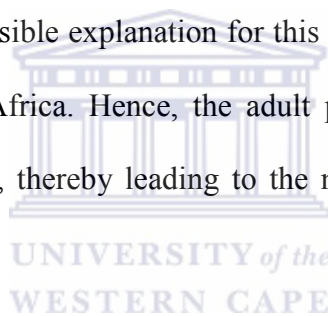
5.6 Type of healthcare facilities consulted

The type of healthcare facility is a very important aspect of healthcare seeking behaviours because the quality of the service offered to a patient determines the continuance of utilization of those services. This therefore directly impacts the utilization of healthcare services. The type of healthcare facilities in this study include the public healthcare which consisted of the public hospitals and public clinics; the private healthcare consisted of private clinics and private hospitals, over-the-counter health services such as pharmacy were also included in the analysis and then, the informal healthcare which includes traditional healers. The study aimed to examine the distribution of healthcare service in South Africa. Results from the present study show South African households utilize public healthcare facilities more than private healthcare facilities. The implication of this is that the public healthcare

sector of South Africa is over-utilized while on the other side, the private healthcare sector is under-utilised.

Illness is an unforeseen incident and the results from our study demonstrate that South Africa householders cannot afford the user fees paid for consultation in private healthcare hence; this indisputably affects the quality of service delivery in healthcare services and has serious implications on healthcare utilization. The over-utilization of public healthcare sector in South Africa raises some questions in equality of distribution of healthcare services for the entire population. This therefore demonstrates that the Healthcare Charter of 2004 aimed at strengthening healthcare services and also measure the degree of transformation in the health sector in the following areas: access to healthcare services, equity in healthcare, quality of care, sustainability and efficiency, public-private interactions and black empowerment needs to re-assessed by the Department of Health. The over-utilization of the public healthcare sector result in poor quality service which then affects efficiency and effectiveness of public health sector; resulting in South African households delaying or not consulting healthcare facilities. The results of the analysis therefore showed there is a major imbalance in healthcare services of South Africa.

5.8 Medical aid and type of health facility consulted

One of the research questions this study aimed to answer is the impact of medical aid coverage on healthcare consulting and the types of healthcare centres South African households consult. This research question resulted in the study hypothesizing "*that medical aid coverage positively influence consultation rate with medical aid holders consulting more as compared with non-policy holder*s." The result of our analysis revealed limited access in medical aid coverage, with more than seventy percent South Africa populace not holding medical aid. The implication of the analysis is that those with medical aid coverage are more likely to consult private healthcare facilities, while on the other hand; non-medical aid

holders are more likely to seek medical help from the public healthcare facilities. This therefore clearly demonstrates that medical aid coverage plays a significant role in consulting the private healthcare. Therefore the issue of medical aid coverage is a major cause of inequality because those with medical aid are in a better position of private healthcare facility. This therefore clearly shows an imbalance in healthcare access of South Africa citizen because majority of them cannot afford medical aid coverage. This issue poses a question in healthcare status of non-medical aid holders as majority access public healthcare centres which are over-utilized. A Chi-square test of association was used to test the relationship between medical aid coverage and the type of healthcare facilities. The results reveal a significant relationship with strong association between the two variables. A logistic regression analysis indicates that medical holders are twice more likely to consult healthcare centres when ill than non-medical aid holders. Hence, this confirms that the hypothesis proposed in this study is true, and that medical aid coverage ultimately influences consultation of healthcare services because medical aid holders are two times likely to consult healthcare facilities. Therefore medical aid acts as a constraining factor in equitable access in health care. In light of this adversary effect the national health insurance present itself as a valuable policy instrument as it open up more access which facilitates masses of people to wider health care coverage.

5.9 Healthcare utilization by gender controlled for medical aid coverage

Overall, the study attempted to answer the research question "*Are there gender variations in illness reporting and are there any differences in the type of health care consulted by males and female?"* The present study also aimed at profile health seeking behaviours according to gender taking into account the effect of medical aid coverage. This research question then led in provision of the following tentative answer that serves as a hypothesis "*Gender differentials exist in healthcare seeking behaviours i.e. women consults more as compared to*

men". The results of a chi-square of test of association reveal that there is not statistical relationship between males and females. This implies that gender in the context of South Africa does not influence the level of healthcare utilization for both medical aid holders and non medical aid holders. A possible explanation for the insignificance of gender in healthcare consultation in South Africa shows significant role the government has played in gender equality which substantiate equally access of health care centres. The equality in accessibility of healthcare services in males and females is also measured by the minimal variation in medical aid coverage distribution. This indicates that the above stated hypothesis is not confirmed in this study. Therefore, based on the GHS survey of 2007, gender does not influence utilization of healthcare facilities in the context.

5.10 Healthcare utilization by population group controlled for medical aid coverage

An attempt to answer the research question "*What is the effect of ethnicity in illness reporting and does ethnicity effects private and public healthcare consultation*"? was embarked upon. This question was aimed at identifying the healthcare seeking patterns across the different population groups. The results showed that African medical aid holders are motivated to consult as compared to other racial groups, while the white population indicates less illness reporting especially non medical aid holders. The low consultation rate of white non-medical aid holders is a clear indicator that medical aid coverage is a contributing factor in non consultation. More so, the low consultation rate of the white population clearly indicates that medical aid coverage an encouraging factor in healthcare consultation in their populace. The Indian populace indicated not to be highly affected by the issues of medical aid coverage because the proportion of consultation for both medical aid holders and non medical aid holders does show minimal variation. Therefore this reveals that there are variation in health care consultation for both medical aid holders and non medical holders across the ethnicity groups. The statistical test that was utilized indicates a relationship between the population

group and healthcare consultation controlled for medical aid coverage. The analysis indicates that there was a significant relationship between the two variables controlled for medical aid. The chi-square value indicates a strong relationship between the variables. Hence South African context, population group is a significant factor in healthcare consultation and medical aid coverage varies according to ethnic groups. The logistic regression model also confirmed that the Indian populace is more likely to consult healthcare facilities than any other population while the white populace is less likely to consult healthcare facilities. The findings further revealed that even though the white populace is less likely to consult healthcare facilities, majority of them consult private healthcare. This can be explained by the fact that majority of the white population has medical aid cover thereby enabling them to consult private healthcare facilities. More so, this points to the fact that the white population is more likely to afford medical aid coverage than any other population in South Africa context. The findings of this study reveal how equality along the ethnic line are still persistent in South Africa hence access to medical health services is depending on access to wealth and where one lives.

5.11 Health care utilisation by age controlled for medical aid

The research question "*What is the effect of age in health seeking behaviours patterns in adults as compared to adolescents*:"? was answered by results from the present study. The findings of the study demonstrates that the children age group general consult more as compared to other age groups .The reason is that children are more susceptible to diseases and are responsibility of older people such as parents or guardians to take them for consultation when ill. The consultation of the elderly population with no medical aid holders was also indicated to be high as this age group is also highly vulnerable to sickness. Statistical significance in healthcare consultation across the different age groups controlled for medical aid coverage was performed. The analysis showed a significance in age group

and illness reporting because (P>0.05) for both medical aid holders and non policy holders. The results of a logistic regression showed the elderly population is more likely to consult as compared to the adult age group. A possible explanation is that the elderly population is more vulnerable to sickness because of their weak immune systems and this may compel them to consult healthcare facilities almost every time they are ill. On the other hand, logistic regression indicated the elderly population is less likely to consult private healthcare facilities even though there are more likely to consult. This obviously demonstrates that medical aid coverage is less accessible to the elderly population even though they are vulnerable to illness. In essence, this propels them to consult the private healthcare sector which becomes overcrowded due to large numbers. The analysis also demonstrates that the children age groups are more likely consult private healthcare sectors than the elderly population. These clearly showed children are more likely to afford private health centres and that they have more access to medical aid coverage.

5.12 Health care consultation by province controlled for medical aid

The study attempts to answer the research question: *Are there variations in patterns of healthcare seeking behaviours across the provinces of South Africa?* Variations in the type of healthcare consulted across the provinces are identifiable for both medical aid holders and non medical aid holders. Medical aid holders of the Northern Cape and Limpopo provinces were shown to utilize public healthcare facilities more than other provinces. Hence, it can be implied that provinces dominated by rural areas show a high use of public healthcare facilities despite of the medical aid coverage. This therefore raises questions as regards the type of medical aid coverage these individuals were holding because medical aid coverage differs in terms of benefits. The high use of public healthcare facilities of non medical aid holders in less industrialized provinces raises a question in over-utilization of public healthcare facilities in those areas as regards overcrowding by healthcare users. Furthermore,

less industrialized provinces might be faced with poor service delivery in healthcare facilities because even medical aid holders utilize government services to a certain extent and hence, burdens the available infrastructure in public healthcare facilities. The study showed medical aid holders in industrialized provinces such as Gauteng and Western Cape utilize less of public healthcare facilities. These show medical aid holders in these provinces receive more quality healthcare services in private healthcare than the less industrialized provinces. These analyses display the unequal distribution of healthcare services between medical aid holders and non medical aid holders across the provinces in South Africa. Consequently, the healthcare status across these provinces is unequal as such.

Furthermore, our findings revealed that non medical aid holders in Northern Cape and Kwazulu Natal rely more on public healthcare facilities. This clearly showed non-medical aid holders in these provinces are not capable of paying the user fees of the private healthcare facilities. On the other hand, there is low utilization of public healthcare facilities among non medical aid holders of Gauteng province and Free States. The implication is that a proportion of household members in Gauteng and Free State can pay the expense of private healthcare consultation. The statistical relationship between provinces and the type of healthcare facility consulted controlled for medical aid was assessed. The results indicated a significant relationship between the variables existed. The logistic regression demonstrates that the populace of Free State and Eastern Cape are more likely to consult than the North-West. On the other hand, those in Kwazulu Natal are less likely to consult private healthcare facilities as compared to those in North-West. This clearly demonstrates that the majority of the population on Kwazulu Natal cannot afford private healthcare facilities and thus, will rely more on public healthcare facilities.

5.13 Main reasons for not consulting healthcare facilities in South Africa

The main reasons for not consulting healthcare facilities were investigated in this research by attempting to answer the question: "*What is the main reason for South African households not consulting? Is it expensive to consult or is it an issue of accessibility which means health services are far from households' geographic areas, or is it that households do not see the need to consult*" Based on this question, the following hypotheses were tested (1.) "*The rate of consultation is negatively influenced by the distance households have to walk to healthcare facilities i.e. South African households not consulting was due to healthcare facilities being far*". (2.) "*User fees such as transport costs and payment for healthcare service negatively influence healthcare utilization.* Our results show 70 % of South Africa households do not consult healthcare facilities mainly because they do not see the need to do so. This proportion raises serious concerns on awareness of the importance of healthcare consultation among South Africans. This high proportion is also a demonstration that the population does not see the significance of reporting illness which may also be as a result of the type of illness they suffered from. More so, the high proportion of those who do not see the necessity of consulting healthcare centres when ill also raise some concerns on the past experiences these individuals had at the healthcare facilities. There is a greater likelihood that this attitude of not seeing the need to consult when ill may be as a result of past experiences they had at the healthcare facilities. Furthermore, our results showed households do not consult healthcare facilities because they are too expensive, which means user fees are also a determining factor in healthcare consultation. The results therefore validate the hypothesis of household members not consulting healthcare facilities because of user fees to be true. More so, our analysis also indicates that distance influenced households' decision not to consult healthcare facilities because 7 % of those who did not consult healthcare centres were due to the

distance to healthcare facilities hence, confirming the hypothesis proposed that households do not consult because of the distance.

5.14. Conclusion

The findings of the this study will be summarised in the next chapter and recommendation on how to improve the health seeking behaviours of South Africa Households will be listed.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Confirmation of hypotheses

The overall empirical results will be summarised in this section of the study. The objective of the research was to evaluate the health seeking behaviours of South African households and why households delay or rather do not seek medical care. Health seeking behaviours were investigated through variables such as type of healthcare consulted, illness reporting, experiences in healthcare centres, medical aid coverage, and satisfaction with healthcare services. These healthcare seeking variables were associated with demographic variables such as age, gender, level of income, marital status, ethnicity, level of education and province.

Through the statistical data on illness reporting, it can be deduced that general medical aid holders consult more than non medical aid holders. However, there are observed disparities in consultation among medical aid holders and non medical aid holders according to the demographic variables. The chi square indicates no significance in healthcare consultation in males and females because the chi-square test showed no significant relationship existing between the variables. The hypothesis proposed in chapter one that there are gender variation in health care seeking is considerable not true according to findings of this study. The explanation for the lack of confirming the hypothesis of gender variation in health care seeking is because of the government intervention in reducing gender inequality. Hence, this study found no gender differential existing in healthcare seeking behaviours. Therefore equally access in health care seeking result in roughly in minimal variation in health care utilisation.

Population groups are confirmed to be significant in healthcare seeking because chi-square and lambda reported a statistical relationship between the variables. The study shows that

African and Coloured population both medical aid holders and non medical policy holders consult more than the white populace. The consultation rate of the white population for non-medical aid holders was particularly low as compared to that of medical aid holders. Hence, it can be concluded that medical aid coverage is a strong determinant of illness reporting among South Africans.

Regarding to the type of healthcare facilities consulted, the study showed that medical aid holders consult private healthcare facilities more as compared to non medical aid holders. Hence, it can be concluded that medical aid coverage is of major significance in consultation of private healthcare centres as it enables an individual to pay the user fees of private health facilities. Conversely, this leads to over-utilization of public healthcare facilities and the under utilization of private healthcare facilities as observed from the study. The underlying factor in under-utilization of private healthcare facilities in the context of South Africa is because of the limited access in medical aid coverage. More so, empirical evidence shows disparities in healthcare facilities consulted by different population groups. Coloured and Black population groups are more likely to consult public healthcare facilities while whites and Indians are likely to consult private healthcare facilities. This can be attributed to the apartheid history, which is the underlying cause of the disparities observed and also in the standard of living in terms of class. The effect of the apartheid is more dominant in unequal distribution of medical aid coverage with the whites and Indian population having more access to medical aid coverage than the coloured and black population. The level of income was also hypothesised to be a factor in health care consultation with those in the lower quintile /quartile consulting more compared to those in the lower quintile. The logistic model in appendix 5 and 6 indicates no statistical relationship between income and health care

consultation. The possible explanation for these findings is that illness is an unpredictable event so even households in higher quintile (4th and 5th) with no medical aid lack the financial means to consulting health care facilities.

The healthcare centres are inferred to be overcrowded by those who suffer from HIV/AIDS, TB and severe cough. The study showed that seventy percent of South African household members do not see the need to consult healthcare facilities when ill. User fees and the distances travelled to the healthcare centres hinder South Africans from consulting healthcare facilities. More so, some dissatisfaction in healthcare service delivery, unavailability of drugs and the long waiting time were also shown to be prominent factors for non-consultation. However, majority of those who indicated long waiting times are public healthcare users; this is primarily caused by the over-utilization of these healthcare facilities.

Overall, illness reporting in South Africa is influenced by population group; age of a person is a determinant factor of healthcare seeking. Education, gender and marital status do not significantly affect illness reporting, while healthcare centres in the country are overcrowded by those suffering from TB and HIV/AIDS. The main reason of household members not reporting illness ranges from not seeing the need to consult; healthcare are far and expensive. More so, majority of public healthcare users' experiences long waiting time before receiving services, there is shortage of drugs and unclean facilities.

6.2 Recommendations

Health of the citizens of a country determines the rate of growth witnessed by that country. Health is wealth, and as such further investigation still need to be done concerning health seeking behaviours of South Africans, especially on improving factors leading to households not consulting healthcare services. The government has done remarkably well in the transformation of the healthcare systems of the country after the apartheid era; however, strategies should be put in place to reduce the disparities in access of private and public healthcare centres. The government needs to focus on increasing access of medical aid coverage because the disparities between private and public healthcare facilities are determined by medical aid coverage. Therefore, to balance the over-utilization of public healthcare facilities and under-utilization of private healthcare, the National Health Insurance is a good initiative as it would easily improve the health status of the country because medical healthcare centres will be more accessible to majority of the population.

Prevalence of illness as observed from the study was very low as a result of the reference period. Even though the reference period (one month prior the survey) is advantageous for the respondent as they can easily recall when they were sick, it is very short to critical assess healthcare behaviours of a populace because of the small sample size. Hence, I propose that the reference period be increased to three months instead one month.

The GHS data of 2007 excluded a very important variable in their data: the stratum of rural and urban area. The omission of this variable makes it difficult to profile health seeking behaviours of rural and urban area. Access to healthcare facilities varies according the place of residence hence, this study could not profile the illness reporting and the type of healthcare facilities consulted by urban and rural dwellers. Therefore this study recommends that in

future, these variables be included in GHS as this information will enable the government to know exactly where to improve healthcare systems.

Furthermore, the GHS does not make a distinction in the type of medical aid coverage household members held. The benefits of medical aid coverage differ according to type e.g. Discovery Medical Aid benefits are absolute different from Ingwe Medical Aid. This somehow can influence the health seeking behaviours of South Africans. Hence, I propose that the General Household Survey have variables that will identify the name of medical aid or have a variable with common medical aids in South Africa.

Due to limitation of data an investigation of interaction along the ethnic lines could not be explored. Therefore any research endeavour can investigate interactions among traits of South Africans. For example it is unlikely that older black women with little education living in rural area, who have access to medical aid through a son or a daughter who is working, will have the same access to or consideration of health seeking as a young Indian man living tertiary education living in an urban setting who gets medical aid through his own employment. Therefore it is not just each of these traits alone that make a difference but the way they combine is very imperative.

References

Abdulraheem, S. (2007). Health Needs Assessment and Determinants of Health-Seeking Behaviour among Elderly Nigerians: A House-Hold Survey. *Annals of African Medicine. 6(2):58-63.*

African National Congress, (1994). The Reconstruction and Development Programme. A policy framework Johannesburg: Umanyano: Publications for the African National Congress.

Afrimap and Open society for South Africa: Effective Service delivery in Education and Health Sector.2005.

Ahmed, S. M., Adams, A. M., Chowdhury, M., & Bhuiya, A. (2000). Gender, socioeconomic development and health-seeking behaviour in Bangladesh. *Social Science & Medicine,* 51(3) 361-371.

Akin, J.S., D.K. Guilkey and E. H. Denton (1995). "Quality of services and demand for health care in Nigeria: A Multinomial Probit Estimation". Social Science and Medicine, 40(11): 1526-1537.

Annandale E, (1998), "The sociology of health and medicine", *Polity Press*, USA.

Andersen, R. & Neumann, J.F. (1975) Societal and individual determinants of medical care utilization in the United States. Milbank Memorial Fund Quarterly/Health and Society, 51(2):95-124.

Andale, S. S. (1998). Determinants of customer's satisfaction with hospitals: a managerial mode. *International Journal for Healthcare quality,* 11(6): 181-187.

Arhin-Tenkorang, D. (2001). Mobilizing Resources for Health: The Case for User Fees Revisited. Working Paper No. 81. Cambridge MA: Center for International Development.

Baldwin-Ravage, L., Grouchy, J. & London, L. (1999). *An ambulance of the wrong colour: health professionals, human rights and ethics in South Africa.* Cape Town. Desktop publishers.

Bledsoe,C.H.,Casterline J.B, Joshon-Kunn, J.A, & Haaga,J.G.(eds) 1999.Critical Perspective on Schooling and Fertility in Developing World. *National Academy Press.* Washington DC,USA.

Benatar, S. R., & Van Rensberg, H.C.L. (1995). Health care services in a new South Africa. *Hastings Center Report*, 25 (4): 16-21.

Bentham, G. & Haynes, R. (1985). Health person mobility and use of health use of health service in rural Norfolk. *Journal of rural studies,* 1(3): 231-239.

Bertakis, K. D., Azari, R., Helms, L. J., Callahan, E . J. & Robbins, J. A. *(2000).* Gender Differences in the Utilization of Health Care Services. *Journal of Family Practice*, 49(2)

Balabanova D. and M. McKee. (2002) "Understanding informal payments for health care: the example of Bulgaria". Health Policy, 62(3): 243.

Bonilla, E. & Rodriguez, A. (1993). Determining malaria effects in rural Colombia*. Social Science and Medicine,*37(9): 1109-1114.

Bosanac, E. M, Parkison, R. C. Hall, D. S. (1976). Geographic access to hospital care: a 30 minute travel time standard. *Med Care*, 14(7): 616-24.

Bourne, P. A. (2009). Impact of poverty, not seeking medical care, unemployment, inflation, self reported illness and health care insurance on mortality in Jamaica. *North American Journal of Medical Science,* 1(3): 99-109.

Bradshaw, D. (1997). The broad picture: Health status and determinants in South Africa Health Review. Durban. Health System Trust. 1-16.

Bradshaw, D., Groenewald, P., Laubscher. R., Nannan, N., Nojilana. B., Norman, R., Pieterse, D. and Schneider, M. (2003). Initial Burden of Disease Estimates for South Africa, 2000. *South African Medical Journal*, 93(9): 682-688.

Braveman, P. (2006). Health disparities and health equity: concepts and measurement. *Annual Review of Public Health*, 27: 167-194.

Bravemen, P. (2004). Defining equity in Health. *Health Policy and Development*, *2*(3): 180-185.

Breveman, A. Shelton, C. (2001). Structural Adjustment and Health: A Literature Review of the Debate, Its Role Players and Presented Empirical Evidence**.**Geneva.Commission on Macroeconomics and Health, WHO.

Bronsteain, J. M. & Morrissey, M. A. (1990). Determinats or rural travel distance for obstetrics care. *Medical care,* 28(9): 853-865.

Canadian Council on Social Development and the United Way of Greater Toronto (2002). *A Decade of Decline: Poverty and Income Inequality in the City of Toronto in the 1990s*. http://action.web.ca/home/uwgt-sn/attach/Decade_Exec_Summary.pdf (accessed on 10May 2010).

Centri/Fin Mark Trust (2009). Demand-side analysis of the medical scheme coverage and aces in South Africa .July 2009 Prepared for the centre for financial regulation and Inclusion centre and Fin mark Trust by Eighty 20.

http://www.finmarktrust.org.za/documents/DSA_medicalschemes.pdf (Accessed June 15 2010).

Chen, A., Jose, J. & Scarce, E. (2006). Effects o f Family Structure on Children's Use of Ambulatory Visits and Prescription Medications. Health Services Research. 41(5):1985-1914.

Chetty, K. S. (1992). *Urbanisation and Health: evidence from Cape Town*: *The Apartheid City and Beyond.* London: Routledge

Christiana, E. & Okojie, E. (1994). Gender inequalities of health in the third world. *Social Science Medicine*, 39(9): 1237-1247.

Clearly, P. D. Mechanic, D. & Greenley, J. R. (1982). Sex Differences in Medical Care Utilization: An Empirical Investigation. *Health Social Behaviour,* .23(1): 6–19.

Collins, D., Quick, J. D., Musau, S. N., Kraushaar, D. & Hussein, I. M . (1996). The fall and rise of cost sharing in Kenya: the impact of phased implementation. *Health Policy and Planning,* 11:52-63.

Cooper, C., Motal, S., Schinder, J., Mc Corn, C. & Rastomo, B. (1984.) Health South Africa Institute for race Relation. 482-508.

Conner, M. & Sparks, P. (1995) The Theory of Planned Behaviour and Health Behaviours, in Predicting Health Behaviour (Conner, M. & Norman, P. eds.). Buckingham: Open University Press.

Cornia, G. A., Patel, M. & Zagonari, F. (2002). The Impact of HIV/AIDS on the Health system and Child Health. In: *AIDS:* Public Health Policy and Child Well-Being. www.unicef-icdc.org (Accessed 20th August 2010).

Cunningham, P. J. & Hahn, B. A. (1994). The Changing American Family: Implications for Children's Health Insurance Coverage and the Use of Ambulatory Care Services. The Future of Children. *Critical Health Issues for Children and Youth,* 4(3): 24-42.

 De Beer, C., Buch, E. & Mavrandow, J. (1988) : Health Care in South Africa : How far from Health Care for all ? *Centre for the study of Health Policy*, 7-32.

De Beer, J. (1984). The South African disease: Apartheid, Health and health services. Johannesburg: South African Research services.

De Bruyn, J., McIntyre, D., Mthethwa, N., Naidoo, K., Ntenga, L., Pillay, P. & Pintusewitz, C. (1998). *Public expenditure on Basic social services in South*. An FFC Report for UNICEF and UNDP. http://www.ffc.co.za/docs/reports/other_reports/1998/undp_report.pdf (accessed on 14 June 2010).

Debas, H. T., Gosselin, R., McCord, C. & Thind, A. (2006). *Surgery in Disease Control Priorities in Developing Countries*, (2nd ed). New York: Oxford University Press.

Van der Stuyft, P. and Molima, K. (1996) Using community health workers for malaria control: experience in Zaire. Bulletin of the World Health Organization 74(4),423-430.

Department of Health South (2003) African Health and Demographic Survey. http://www.doh.gov.za/facts/sadhs2003/main.html (Accessed on 29 May 2010).

Department of   health (1977). *A guide to the Health Act 63 Of 1977*: Pretoria ; Government Printer.

Department of   Health (2001). Public-Private interactions: Background paper for National Health Summit. http://www.doh.gov.za/docs/misc/hsummit01/section2d.pdf (Accessed on 10March 2010).

Department of Health (1997). A social health insurance scheme for South Africa: Policy Document.

Department of Health (1997). White paper for the transformation of the health system in South Africa. Pretoria: Government Printer.

http://www.info.gov.za/whitepapers/1997/health.htm (accessed on 2 August 2010).

Department of Health (1998) South *African Health and Demographic Survey*. Pretoria. Department of health: Strengthening the social contract: Partnership and the Health charter-A discussion Paper draft (December 2004,p6).

Department of public service and Administration (2007).Batho–Pele "People First: White Paper on transforming Public service delivery.

http://www.dpsa.gov.za/documents/acts&regulations/frameworks/white-papers/transform.pdf [Accessed: June 2010]

Develay, A., Sauerborn, R. & Diesfeld, H. J. (1996). Utilization of health care in an African Urban Area: Results from a household survey in Ouagadougou, Burkina Faso. *Social Science and Medicine, 43(11)*:1611-1619.
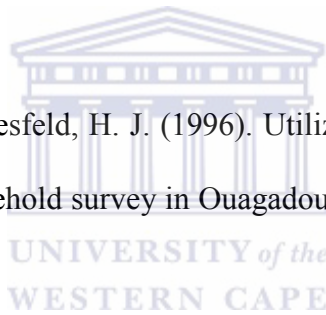
Development and Health-Seeking Behaviour in Bangladesh. *Social Science and Medicine, 51*: 361-371.

Dlamini, T., (Executive producer) (July 9 2007). *South African Broadcasting Corporation.* (Radio broadcast). Johannesburg.

Dorrington, R.,E ,Johson L.F , Bradshaw Danel.D .The Demographic Impact of HIV/AIDS in South Africa, National and Provincial Indicators for 2006.Cape Town ;Centre for Actuarial Research, South Africa Medical Research Council and Actual Society of South Africa.

Doyal, L. (2000). Gender equity in health: Debates and dilemmas. *Social Science and Medicine,* 51: 931-939.

Duflo, E. (2003).Grandmothers and granddaughters: Old-age Pensions and Intra household Allocation in South Africa. *The World Bank Economic Review*. 17(1): 1-25.

Ekwempu, C. C. & Maine, D. (1990). Structural Adjustment and Health in Africa. Lancet, 336: 56–57.

English, M. C. F. Lanata, I. Ngugi. & Smith, P. (2006). *The District Hospital In Disease Control Priorities in Developing Countries*, (2nd ed). New York: Oxford University Press.

Evans, R., Barer, M. and Marmor, T. (eds) (1994) Why are some people healthy and others not? The determinants of Health of Populations. Aldine de Gruyter, NY, USA.

Farrell, C. (1999). The Patients Charter: A Tool for Quality Improvement. *International Journal of Health Care Quality Assurance,* 12(4):12-14.

Federal Interagency Forum on Child and Family Statistics (1998). America's Children: Key National Indicators of Well-Being, 1998. Federal Interagency Forum on Child and Family Statistics, Washington, DC: Government Printing.

Fosu, G. B. (1994). Childhood morbidity and health services utilization: cross-national Comparisons of user-related factors from DHS data. *Social Science and Medicine*, 38:1209–1220.

Filmer, D. (1999).The structure of social disparities in education; Gender and Wealth, Policy research report on Gender and Development. Working Paper No.5 (http:www.worldbank.org.gender) World Bank, Washington DC.

Foster, G.M. (1987) World Health Organization behavioural science research: problems and prospects. Social Science and Medicine 24(9), 709-717.

Gakidou, E. E., Murray, C. J. L., & Frenk, J. (2000). Defining and measuring health inequality: an approach based on the distribution of health expectancy. *Bulletin of the World Health Organization*, *78*(1): 42-54.

Garenne, M. & Pison, G. (1997*). Prospective Community Studies in Developing Countries.* Clarendon: Oxford University Press.

Gardee, M.R., (1977).An aspect of community medicine. The medical care implications of manpower and other resources, with rural black population as an example. *South African Medicine Journal* 52(2):362-367.

Giang, K. B. Allebeck, P. (2003). Self-Reported Illness and Use of Health Service in a Rural District of Vietnam: findings from an epidemiological field laboratory. *Scandinavian journal of Public Health*, 31(62): 52-58.

Gilson, L. & McIntyre, D. (2001) *South Africa: Addressing the legacy of apartheid.* In Evans, T., Whitehead, M., Diderichsen, F., Bhuiya, A. & Wirth, M. (Eds.) Challenging inequities in health: From ethics to action. New York, Oxford University Press.

Gilson, L. & McIntyre, D. (2004). Removing User Fees for Primary Health Care: Necessary but Not Enough by Itself: www.equinethealth.za (accessed on 25 June 2010)

Gilson, L. (1997). The lessons of user fee experience in Africa, Health Policy and Planning, 12 (4): 273–285.

Gold, M. (1998). Beyond coverage and supply: Measuring access to health care in today's market. *Health Services Research,* 33: 625-652.

Goldman DP, Smith JP. (2002). Can patient self-management help explain the SES health gradient? U S A. *Pub Med,* 14 (99):10929–10934.

Goude, J., McIntyre, C. D. & Mbatandsha, S. (2001). Private Sector Financing South Africa Health Review. Durban .Health systems Trust.

Gwatkin, D. R. (2002). *Reducing health inequalities in developing countries.* Oxford Textbook of Public Health (4th edition.). New York: Oxford University Press.

Hausmann-Muela, S. Muela, R. J. (2003). Recipe Knowledge: A Tool for Understanding Some Apparently Irrational Behaviour. *Anthropology and Medicine*, 10(1):87-105.

Hibbard, J. H. & Pope, C. R. (1983). Gender roles, illness orientation and use of medical services. *Social Science Medicine,* 17(1):29–37.

Hirschowitz, R. & Orkin, M. (1995). A national household survey of health inequalities in South Africa. The Community Agency for Social Enquiry (CASE) for the Henry J. Kaiser.

Hutchinson, P. (1999). "Health care in Uganda; selected issues". World Bank discussion paper No. 404.
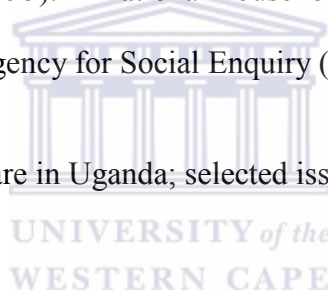
Family Foundation, Menlo Park, CA. inequality: an approach based on the distribution of health expectancy. Bulletin of the World Health Organization, 78(1): 42-54.

Jaouadi, I., (2010).Gender Differences in Health Status, Health care Access and Utilisation in Tunisia. International Conference on Women and Youth in Arab Development.

Johnson, M. P., Schmidt, I., Sparring, V. & Tomson, G. (2006). Gender Equity in Health Care in Sweden – Minor Improvements since the 1990s. *Health Policy*, 77(1):24-36.

Joseph, E. A. & Bantock, P. R. (1982).Measuring Potential Physical Accessibility to General Practitioners in Rural Areas: A Method Case Study. *Social Science Medicine*, 16(1):85-90.

Kawachi, I. & Kennedy, B. P. (2002). "T*he Health of Nations: Why Inequality is Harmful to Your Health"*. New York: USA New Press.

Leon, N. & Mabope, R. (2005). Health System Trust National Department Nepal. *Social Science & Medicine*, (12): 2486-2494.

Lindelow, M. (2005). The Utilization of Curative Healthcare in Mozambique: Does Income Matter? *Journal of African Economies*, 14(3): 435-482.

Litvack, J. & Bodart, C. (1993). User fees plus quality equals improved access to health care: Results of a field experiment in Cameroon. *Social Science and Medicine*, 37: 369-383.

Loupe, S. & Quill, B. E. (2002). Handbook of Rural Health. *Health Education Research,* 17(3): 374-376.

MacMahon, S. & Rodgers, A. (1993). The Effects of Blood Pressure Reduction in Older Patients: An Overview of Five Randomized Controlled Trials in Elderly Hypertensive. *Clin Exp Hypertens,* 15: 967–978.

Makinen, M. (1999). "Conventional wisdom and Empirical data on Inequalities in Morbidity, Use of services and Health Expenditures". PHR, USAID, Washington, D.C. Mbanefoh and Soyibo.

Marmot, M. & Wilkinson, R. G. (1999). *Social Determinants of Health*. (1st Ed.). New York: Oxford University Press.

Martine Visser, M. & Booysen, F. (2004). Determining of choice of health facility utilised by Individuals in HIV/Aids affected households in the Free State Province of South Africa. Ninth Annual conference of econometric modelling for Africa

http://www.commerce.uct.ac.za/economics/Conferences/2004/AES2004Conference/Papers/Visser-Booysen%20final.pdf (Accessed June 20, 2010)

Mc Coy D., Harrison D,Bamford L, Donohue S,Nxumalo Z, Radebe G. (1998)The development of district health system in South Africa: lesson learnt from the expansion of ISDS. Durban .Health System Trust.

McIntyre, D. & Gilson, I. (2002). Putting equity in Health onto the Social Policy Agenda: Experience from South Africa. *Social Science Medicine,* 54: 1637-1656.

McIntyre, D. Bloom, G. Doherty, J. & Brijlal, P. (1995). Health expenditure and finance in South Africa. Durban: Health Systems Trust and World Bank.

Meyers, D. K. (2000) State of the World's Mothers 2000. A Report by Save the Children. http://www.eric.ed.gov/PDFS/ED442560.pdf (Accessed 4th August 2010).

Ministry of Public Health (2001). *The 30 Baht Project.* Health Reform Forum. March-April, 2001.

Moir, J.S., Tulloch, J.L., Vrbova, H., Jolley, D.J., Heywood, P.F. and Alpers, M.P. (1985) The role or voluntary village aides in the control of malaria by presumptive treatment of fever. 2. Impact on village health. Papua New Guinea Medical Journal 28, 267-278.

Moses S, Manji F (1992). Impact of user fees on attendance at a referral centre for sexually transmitted diseases in Kenya. *Lancet*; 340:463–66.

Moss, N. E. (2002). Gender equity and socioeconomic inequality: a framework for the patterning of women's health. *Social Science and Medicine*, 54(5): 649-661.

Murray, C. J. L., Gakidou, E. E. & Frenk, J. (1999). "Health inequalities and social group differences: what should we measure?" *Bulletin of World Health Organization, 77*(7): 537-543.

Mwenesi, H. A (1993*). Mother's Definition and Treatment of Childhood Malaria on the Kenyan Coast*. Ph.D. dissertation, University of London.

Nandakumar, A. K., Reich, M. R., Chawla, M., Berman, P., & Yip, W. (2000). Health Reform for Children: The Egyptian Experience with School Health Insurance. *Health Policy,* 50(4): 155–70.

Nash, D. & Gilbert, C. (1992). Women's Access to Health Care in Developing Countries. *Social Science and Medicine,* 35(4):613-617.

Naylor, C.D. 1988.Private medicine and privatisation of health care in South Africa. *Social Science and Medicine,* 2(11):1153-1170.

Nitai, C. Ataharul, I. M., Islam, C. R., Wasimul, B., Hanum, H. A. (2003). Determinants of the use of maternal health services in rural Bangladesh. *Health promotion international*, 18(4): 327-337.

Nussbaum, M .C. (2000). Women and Human Development. The Capabilities Approach. UK. Cambridge University Press.

Nyamongo, I.K. (2002) Health care switching behaviour of malaria patients in a Kenyan rural community. Social Science & Medicine, 54:377-386.

Ojanuga, D. N. & Gilbert, C. (1992). Women's access to health care in developing countries. *Social Science & Medicine,* 35(4):613-617.

Okjie, C. E. (1994). Gender Inequalities of Health in the Third World. Social Science and Medicine (39) 9:1237-1247.

Olufanke, A. A. & Koch, F. (2008). *Dynamic Health Care Decisions and Child Health in SouthAfrica.* University of Pretoria. http://www.up.ac.za/dspace/bitstream/2263/8981/1/Alaba _Dynamic%282008%29.pdf (accessed on 15 September 2010).

Pillay P. (1984) The distribution of medical manpower and health care facilities in South Africa. Second Carnegie inquiry into poverty and development in Southern Africa. Confrence Paper 167.Cape Town: SALDRU.

Pokhrel, S. & Sauerborn, R. (2004). "Household Decision-making on child health care in developing countries: The case of Nepal", *Health Policy and Planning.*19 (4):218-233.

Puoane, T., Tsolekile, L., Sanders, D. & Parker, W. (2008.) Chronic Non-Communicable Diseases, in South African Health Review. Chapter 5: 73-87. Durban: Health Systems Trust.

Russell, M. (2000). "Community Based Care and Support Services in South Africa." Paper presented at the 13th International AIDS Conference, Durban July 9-15.

Romanow, R. J. (2002). Building on values: The future of health care in Canada. Ottawa, Ontario. Commission of the Future of health Care in Canada.

Russell, S. & Gilson, L. (1997). User Fee Policies to Promote Health Service Access for the Poor: a Wolf in Sheep's Clothing? International Journal of Health Services, 27(2): 359–379.

Sarkisian, C. A., Hays, R. D. & Mangione, C. M. (2002). Do Older Adults Expect to Age Successfully? The association between expectations regarding aging and beliefs regarding health-seeking behaviour. *Journal of the American Geriatrics Society,* 50(11): 1837–1843.

Sen,A.(1999) Development as freedom. Oxford University Press, Oxford, UK.

Scott, K. (2002). "A Lost Decade: Income Equality and the Health of Canadian." Paper presented at The Social Determinants of Health Across the Life-Span Conference, Toronto, and November 2002.

Sherina, M, Rampal, L. S. Aini, M. M. & Norhidayati, H. (2005). The Prevalence of Depression Among Elderly in an Urban Area of Selangor, Department of Community Health, Faculty of Medicine and Health Sciences, University Putra Malaysia. *The International Medical Journal,* 4(2): 57-63.

Shung-King, M., McIntyre, D. & Jacobs, M. (2005). Healing Inequality: Targeting health care for children. In**:** Leatt A & Rosa S (eds) Towards a Means to Live: Targeting poverty alleviation to make children's rights real. Cape Town: Children's Institute, University of Cape Town.

Simpson, G., Bloom, B., Cohen, R. A., & P. E. Parsons. (1997). Access to Health Care. I. Children". National Center for Health Statistics. *Vital Health Statistics,* 10 (196).

Smith, M. D. (1992). *The Apartheid City and Beyond Urbanization and Social Change in South Africa.* London: Routledge

Smith, M., Solanki, G., & Kimmie, Z. (1999). The Second Kaiser Family Foundation Survey of Health Care in South Africa. Henry J. Kaiser Family Foundation, Menlo Park. http://www.kff.org/southafrica/1513-index.cfm Accessed on the 7th April 2010.

Soderlund, N., Schierhout, G. & Van den Heever, A. (1998). *Private Health Care in South Africa*. Technical report to chapter 13 of the 1998 SA Health Review. Durban**.**

South Africa (1997a). *White Paper for Transformation of Health systems in South Africa, South Africa*, Pretoria. Government Printer.

South Africa info (2004). The official gateway, Health care in South Africa. Retrieved from http://www.safrica.info/ess_info/sa_glance/health/health.htm , on June 30, 2004.

Starfield, B., Cassady, C., Nanda, J., Forrest, C. B. and Berk, R. (1998). "Consumer experiences and provider perceptions of the quality of primary care: implications for managed care." Journal of Family Practice 46(3): 216-26

Statistics South Africa (2003). General household survey.
http://www.statssa.gov.za/publications/statsdownload.asp?PPN=p0318&SCH=3102
(Accessed 3rd June 2010)

Tamiru, M. & Haidar, J. (2010). Hospital Bed Occupancy and HIV/Aids in Three Major Public Hospital of Addis Ababa. Ethiopia International Journal of Biomedical Science 6(3):195-201.

Thomas, S., Muirehed, D., Doherty, J. & Muheki, C. (2000).Public sector Financing. South Africa Health Review. Durban health systems Trust Chapter 5.

Tipping, G. & Segall, M. (1995). *Health Care Seeking Behaviour in Developing Countries: an annotated bibliography and literature review* Development Bibliography 12. Institute of Development Studies, Sussex University.

Tollman, S. M., Kark, S. L., Kark, E. (1997). The Pholela Health Centre: understanding health and disease in South Africa through community-oriented primary care (COPC). In: das Gupta M, Aaby P, Garenne M, Pison G, eds. *Prospective Community Studies in Developing Countries.* Oxford, England: Clarendon Press.

148

Tshabalala, M. (2002). Quality improvement in primary health care settings in South Africa

UNICEF (1990) Women and children in Tanzania: A situation analysis. Dar es Salaam: The Government of the United Republic of Tanzania and United Nations Children's Fund.

Van Rensbururg, H. C. & Fourie, A. (1994). Inequalities in South Africa Health care .Part 1.The problem Manifestions and Origins .*South African Journals*, 84: 95-99.

Van Rensburg. H.C., Fourie, A & Pretorious E,(1992)Health Care in South Africa: structure. and dynamics .Pretoria; Academia

Vaughan, J. P., Karim, E. & Buse, K. 2000. Health care systems in transition III. Bangladesh, Part l. An Overview of the Health Care System in Bangladesh, *Journal of Public Health* 22: 5–9.

Venter, E. H. (1990). Introductory Speech: budget vote national health and population development. *Hansard* , 93(4): 83-94.

Verbrugge, L. M. (1982). Sex Differentials in Health. *Public Health Report*, 97(5):417-37.

Verbrugge, L. M. Wingard, D. L. (1987). Sex Differentials in Health and Mortality. *Women Health,* 12(1): 03–45.

Visser, M. & Booysen, F. (June-July 2004). Determaning of choice of health facility utilised by Individuals in HIV/Aids affected households in the Free State Province of South Africa. Ninth Annual conference of econometric modelling for Africa. Retrieved on 9th May 2010 from

http://www.commerce.uct.ac.za/economics/Conferences/2004/AES2004Conference/Papers/Visser-Booysen%20final.pdf

Vlassoff, C. (1994). Gender Inequalities in Health in the Third World: Uncharted ground. *Social Science & Medicine*, 39(9):1249-1259

Vlassoff, C., Hardy, R. & Rathgeber, E. (1995). Towards the Healthy Women Counselling Guide. Geneva: WHO/TDR.

Wadee, H., Gilson, L., Thiede, M., Okorafor, O. & McInytryre, D. (2003). Health inequity in South Africa and the public and private mix.

http://www.unrisd.org/unrisd/website/document.nsf/(httpPublications)/890762B189D36924C 1256DB90030161B?OpenDocument (Accessed July 10, 2010).

Waldron, I. (1983). Sex differences in illness incidence, prognosis and mortality: issues and evidence. *Soc Sci Med,*17:1107–1123.

Waldron, I. (1983). Sex Differences in Illness Incidence, Prognosis and Mortality: Issues and Evidence. *Social Science Medicine,* 17(11): 07–23.

Waldron, I. (1983). Sex Differences in Illness Incidence, Prognosis and Mortality: Issues and Evidence. *Social Science Medicine,* 17(11): 07–23.

Weller, S. C., Ruebush, T. R. & Klein, R. E. (1997). Predicting Treatment-Seeking Behaviour in Guatemala: A comparison of the Health Services research and Decision-Theoretic approaches. *Medical Anthropology Quarterly*, 11(2):224-245

Whitehead, M. (1994). Who Cares About the Equity in the NHS? Biomedical Journal .308(1):1284-7.

Whitehead, M., Dahlgren, G. & Evans, T. (2001). Equity and health sector reforms: Can low-income countries escape the medical poverty trap? *Lancet*, 358(9284): 833-836.

Williams, D. R. (1990). Socioeconomic Differentials in Health: A Review and Redirection. Social Psychology Quarterly, 53(2): 81-99.

Wilkinson, D., Sach, M. E. & Karim, S. S. (1997). Examination of attendance patterns before and after the introduction of South Africa's policy of free health care for children under 6 years and pregnant women. *British Medical Journal,* 314(7085):940-941.

World Health Organization (1997) Gender and Health a Technical Paper. Retrieved on 16 April 2010 from http/www.who.int/frh-whd/GandH/Ghreport/gendertech.htm

Yates, R. (2006). International Experiences in Removing User Fees for Health Services – Implications for Mozambique. DFID Health Resource Centre.

Y Yach D, Tollman SM. Public health initiatives in South Africa in the 1940s and 1950s: lessons for a post apartheid era. Am J Public Health. 1993; 83(7):1045.

ates, R., Kirunga, C., Oliveira-Cruz, V., McPake, B. & Nazerali, H. (2005). *Health care outputs have doubled in Uganda: What has been the role of health financing reforms?* Paper for the Conference: Health Financing in Developing Countries at CERDI, France December 2005.

Yoder, R. (1986). Are People Willing and Able to Pay for Health Services? Social Science and Medicine 4(1): 35–42.

APPENDICES

Appendix 1: Consultation of health care facilities by education levels attained for medical aid coverage

Appendix 2: Type of healthcare consulted by gender controlled for medical aid coverage

Appendix 3: Type of healthcare consulted by provinces controlled for medical aid

Appendix 4: Type of healthcare consulted by level of education for medical aid coverage

Appendix 5: Regression model for those who consulted facilities taking into account Income

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Appendix 7:   Regression model of private health care consultation with Monthly Salaries

Appendix 8:   Regression model of public health care consultation with Monthly Salaries

Appendix: 9 Statistical Relationship Between the type of Health care consulted and Demographic Variables

Appendix: 10.Data and methods used in their collection

Appendix 1: Consultation of health care facilities by education levels attained for medical coverage

Medical aid	Consulted a health worker	Highest level of education obtained					
		No schooling	Primary	Secondary	Diploma/ Certificate	Degree	Postgraduate
Yes	Yes	241 91.3 %	256 87.7 %	736 86.6 %	22 88.0 %	59 92.2 %	176 87.6 %
	No	23 8.7 %	36 12.3 %	112 13.2 %	3 12 %	5 7.8 %	25 12.4 %
	Total	264 100 %	292 100 %	848 100 %	25 100 %	64 100 %	201 100 %
No	Yes	2407 81.6 %	2343 79.7 %	3364 77.2 %	9 64.3 %	30 62.5 %	81 77.9 %
	No	541 18.4 %	596 20.3 %	996 22.8 %	5 35.7 %	18 37.5 %	23 22.1 %
	Total	2948 100 %	2939 10 0%	4360 100 %	14 100 %	48 100 %	104 100 %

Appendix2: Type of healthcare consulted by gender controlled for medical aid

Medical Aid	Type of Health Care	Gender	
		Males	Females
Yes	Public	75 10.2 %	100 11.4 %

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	Private	631 85.7 %	757 86.4 %
	Other	30 4.1 %	19 2.2 %
	Total	736 100 %	876 100 %
No	Public	2383 72.6 %	3654 74.1 %
	Private	813 24.8 %	1178 23.9 %
	Other	86 2.6 %	96 1.9 %
	Total	3282 100 %	4928 100 %
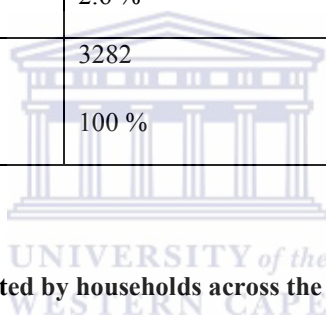
Appendix3: Type of healthcare consulted by households across the provinces controlled for medical aid

Medical aid	Type of healthcare	Province								
		WC	EC	NC	FS	KZN	NW	G	M	L
Yes	Public	9 4.1%	17 10.1%	25 16.3%	20 11.9%	31 14.0%	21 11.5%	23 8.3%	16 11.45	13 15.7 %
	Private	204 90.4%	148 88.1%	122 79.7%	138 82.1%	188 84.7%	161 88%	240 86.3%	120 85.7%	67 80.7 %
	Other	4 1.8%	3 1.8%	6 3.9%	10 6.%	3 1.4%	1 0.5%	15 5.4%	4 2.9%	3 3.6 %
	Total	217 100%	168 100%	153 100%	168 100%	222 100%	183 100%	278 100%	140 100%	83 100 %

No		WC	EC	NC	FS	KZN	NW	G	M	L
	Public	503		958	502	479	1445	712	454	480
		78%		71.1%	83.8%	62.3%	81.9%	70.6%	64.1%	67.5%
	Private	138	360	95	270	282	285	226	211	125
		21.1%	26.7%	15.9%	35.1%	16.0	28.3%	31.9%	29.7	19.2
	Other	12	30	2	20	37	11	22	20	22
		1.8%	2.2%	0.3%	2.6%	2.1%	1.1%	4.0%	2.8%	3.4%
	Total	653	1348	599	769	1764	1008	708	711	652
		100%	100%	100%	100%	100%	100%	100%	100%	100%

WC= Western Cape; EC= Eastern Cape; NC= Northern Cape; FS= Free State; KZN= KwaZulu-Natal; NW= North West; G= Gauteng; M= Mpumalanga; L= Limpopo

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Appendix4: Type of healthcare consulted by level of education attained for medical aid coverage

Medical aid	Type of healthcare	Highest level of education obtained					
		No Schooling	Primary	Secondary	Diploma/Certificate	Degree	Postgraduate
Yes	Public	9 4.1 %	17 10.1 %	25 16.3 %	20 11.9 %	31 14.0 %	21 11.5 %
	Private	204 90. 4%	148 88.1 %	122 79.7 %	138 82.1 %	188 84.7 %	161 88.0 %
	Other	5 2.1 %	7 2.8 %	12 2.9 %	0 0 %	2 3.4 %	7 4.0 %
	Total	217 100 %	168 100 %	153 100 %	168 100 %	222 100 %	183 100 %
No	Public	503 13.8 %	958 71.1%	502 83.8%	479 62.3%	1445 81.9 %	712 70.6 %
	Private	138 21.1 %	360 26.7 %	95 15.9 %	270 35.1 %	282 16.0 %	285 28.3 %
	Other	49 2.1%	38 1.6 %	87 2.6 %	1 11.1 %	1 3.3 %	5 6.3 %
	Total	653 100 %	1348 100 %	599 100 %	769 100 %	1764 100 %	1008 100 %

Appendix5: Regression model for those who consulted facilities taking into account Income

	B	S.E	Wald	df	Sig	Exp
Province			12.887	1	0.024	
W.C	0.045	0.507	0.008	1	0.930	1.046
E.C	0.887	0.453	3.844	1	0.050	2.429
E.C	0.871	0.522	2.788	1	0.095	2.389
N.P	1.192	0.557	4.579	1	0.320	3.289
KZN	0.715	0.441	2.631	1	0.105	2.045
Gender :Female	0.168	0.206	0.666	1	0.414	1.183
Marital Status			2.060	1	0.725	
Married	0.282	0.283	0.989	1	0.320	1.326
Living together	0.168	0.427	1.55	1	0.694	1.183
Widowed	0.449	0.350	1.643	1	0.200	1.566
Divorced	0.481	0.746	0.416	1	0.519	1.618
Population group			11.123	1	0.011	
African	1.524	0.463	10.831	1	0.001	4.590
Coloured	0.998	0.444	5.052	1	0.0025	2.712
Indian	1.723	0.910	3.588	13	0.058	5.601
Income			12.693	1	0.472	
Income(1)	0.993	0.935	0.996	1	0.318	2.542
Income(2)	-0.526	0.971	0.293	1	0.588	0.591
Income(3)	-0.171	0.935	0.03	1	0.855	0.842
Income(4)	-0.482	0.938	0.290	1	0.590	0.618
Income(5)	0.241	0.895	0.070	1	0.791	1.272
Income(6)	0.364	0.903	0.147	1	0.702	1.413
Income(7)	0.346	0.898	0.164	1	0.685	1.438
Income(8)	0.039	0.901	0.002	1	0.966	1.039
Income(9)	0.082	0.895	0.008	1	0.927	1.085
Income(10)	-0.066	0.893	0.005	1	0.941	0.936
Income(11)	0.598	0.905	0.437	1	0.508	1.819
Income(12)	0.197	0.923	0.466	1	0.831	1.218

	B	S.E	Wald	df	Sig	Exp
Income(13)	0.169	0.974	0.030	1	0.862	1.184
Medical Aid	1.053	0.366	8.238	2	0.004	2.867
Age group			4.766	1	0.092	
Children	0.162	0.316	0.261	1	0.609	1.176
Adults	-0.404	0.246	2.630	1	0.105	0.668
Constant	-1.241	1.089	1.299	1	0.254	0.286

Appendix6: Regression model for those who consulted facilities taking into account Salaries

	B	S.E	Wald	df	Sig	Exp
Provinces			4.083	5	0.538	
W.C	0.189	0.348	0.294	1	.588	1.208
E.C	0.223	0.285	0.615	1	0.433	1.250
N.P	0.511	0.347	2.167	1	0.141	1.667
F.S	0.420	0.330	1.622	1	0.203	1.522
KZN	0.126	0.272	0.215	1	0.643	1.134
Gender :Female	-0.67	0.136	0.241	1	0.623	0.935
Marital Status			3.095	4	0.542	
Married	-0.279	0.194	2.060	1	151	0.757
Living together	-273	281	0.943	1	0.331	0.761
Widowed	-0.260	0.217	1.435	1	0.231	0.771
Divorced	0.043	0.339	0.011	1	0.915	1.043
Population group 1			13.483	3	0.004	
African	0.947	0.241	11.368	1	0.001	2.579
Coloured	0.808	0.294	7.535	1	0.006	2.244
Indian	1.651	0.671	6.057	1	0.014	5.213
Total Salary	-0.052	0.059	0.784	1	0.376	0.949
Medical Aid	0.882	0.251	12.392	1	0.000	2.417
Age group			8.369	2	0.015	
Children	-0.280	0.222	1.595	1	0.207	0.756
Adults	-0.472	0.167	8.319	1	0.004	0.624

	B	S.E	Wald	df	Sig	Exp
Constant	0.738	0.432	2.925	1	0.087	2.092

Appendix7: Regression model for those who consulted Private health care facilities taking for those with salaries.

	B	S.E	Wald	df	Sig	Exp
Province			37.911		0.00	
W.C	0.169	0.384	0.195	5	0.659	1.185
E.C	0.085	0.305	0.078	1	0.781	1.089
E.C	-0.570	0.380	2.248	1	0.134	0.565
N.P	0.502	0.334	2.259	1	1.33	1.652
KZN	-0.751	0.038	5.939	1	0.15	0.472
Gender :Female	-0.079	1.55	0.236	1	0.608	0.924
Marital Status			14.888	4	0.005	
Married	0.717	0.223	10.299	1	0.001	2.048
Living together	-0.123	0.378	0.107	1	0.744	0.884
Widowed	0.708	0.244	8.388	1	0.004	2.030
Divorced	0.327	0.393	0.690	1	0.406	1.387
Population group			18.674	3	0.00	
African	-1.026	0.363	8.012	1	0.005	0.197
Coloured	-1.626	0.381	18.167	1	0.000	0.308
Indian	-1.176	0.623	3.560	1	0.059	1.024
Salary	0.023	0.065	0.130	1	0.719	19.443
Medical Aid	2.967	0.247	144.127	1	0.000	
Age group			14.215	2	0.001	
Children	0.898	0.248	13.104	1	0.000	2.454
Adults				1	0.005	1.717
Constant	-0.654	0.515	1.612	1	2.04	0.520

Appendix8: Regression model for those who consulted Public health care facilities for those with salaries

	B	S.E	Wald	Df	Sig	Exp
Province			43.528	5	0.000	
W.C	-0.195	0.381	0.175	1	0.675	0.853
E.C	-0.145	0.302	0.232	1	0.630	0.865
E.C	0.536	0.378	2.014	1	0.156	1.709
N.P	-0.592	0.331	3.198	1	0.074	0.553
KZN	0.763	0.305	6.242	1	0.012	2.144
Gender :Female	0.009	0.153	0.004	1	0.952	1.009
Total Salaries			13.169	4	0.010	
Marital Status	-0.601	0.220	7.429	1	0.006	0.548
Married	0.264	0.379	0.486	1	4.86	1.302
Living together	-0.678	0.240	7.981	1	0.005	0.508
Widowed	-0.492	0.379	1.682	1	0.195	0.612
Divorced			19.934	3	0.000	
African	1.136	0.375	9.193	1	0.002	3.113
Coloured	1.725	0.392	19.329	1	0.000	5.615
Indian	1.353	0.639	4.487	1	0.034	3.868
Total Salaries	0.000	0.000	0.722	1	3.96	1.000
Medical Aid	-3.108	0.262	140.435	1	0.000	0.045
Age group			12.775	2	0.002	

Appendix: 9 Statistical Relationship Between the type of Health care consulted and Demographic Variables

Bivaraite relations	Variables Controlled	Chi-square	Value	Lambda	Value	Cramer's V	Values
Province	MAH	P<0.05* 0.001	40.11	P<0.05 0.000	0.005	P<0.05* 0.001	0.158
	NMAH	P<0.05* 0.001	236.419	P<0.05 0.002	0.013	P<0.05* 0.001	0.170
Gender	MAH	P>0.05 0.069	5.360	P>0.05 0.116	0.001	P>0.05 0.069	0.058
	NMAH	P>0.05 0.072	5.236	P>0.05	0.00	P>0.05 0.072	0.025
Level of Education	MAH	P>0.05 0.080	16.761	P>0.05 0.090	0.00	P>0.05 0.069	P>0.05 0.080
	NMAH	P<0.05* 0.000	124.463	P<0.05* 0.001	0.00	P<0.05* 0.000	P<0.05* 0.000
Population	MAH	P<0.05* 0.000	54.708	P<0.05* 0.000	0.028	P<0.05* 0.000	0.184
	NMAH	P<0.05* 0.000	189.234	P<0.05* 0.000	0.007	P<0.05* 0.000	0.152
Age Groups	MAH	P<0.05* 0.027	10.966	P<0.05* 0.018	0.00	P<0.05* 0.027	0.083
	NMAH	P<0.05* 0.000	21.638	P<0.05* 0.000	0.00	P<0.05* 0.000	0.051
Marital Status	MAH	P>0.05 0.418	5.236	P>0.05 0.	0.00	P>0.05 0.148	0.050
	NMAH	P<0.05*	8.160	P<0.05*	0.317	P>0.05*	0.063

		0.00		0.00		0.000	

❖ MAH= Medical Aid Holders

Appendix: 10.Data and methods used in their collection

The General Household Survey of 2007 used a multi-stage stratified sample which was drawn using probability proportion to size (PPS) principle for data collection. The sample was drawn from the master sample (MS), used by Statistics South Africa for its household survey. The master sample itself was drawn from database of enumeration areas (EA) as outline for Census 2001. A PPS sample of primary sampling units (PSU) was drawn in each stratum, with the measure of size being the number of households in the PSU. Altogether, approximately 3000 PSUs were selected. In each selected PSU, systematic sampling of ten dwellings units was done thus, resulting in approximately 30000 dwelling units.

Stratification of sample was done for all nine provinces of South Africa and according to the fifty-three district councils within the provinces. Two stages of sampling were used in the design. Firstly, probability proportion to size sampling techniques and secondly, the systematic selection of dwelling units as secondary sampling units (SSU). Population coverage in this study includes private households in all the nine provinces of South Africa and residents in workers' hostels. The survey does not cover other collective living quarters such as students' hostels, old age homes, hospitals, prisons and military barracks

Moreover, data collection was done by asking particular questions pertaining to healthcare seeking beginning with medical aid coverage and the response being a yes or no according to the codes. Focus on healthcare seeking question such as "*Did you suffer from any illness or injuries during the last month*" were also coded as yes or no. This question was of importance in this research because it determined the sample size of the study. The question "*what kind of illness did you suffer from*" was also included in the survey as to enable the study to profile incidence and prevalence of illness of South Africa household. This question will also assist

the study to evaluate the type of healthcare facilities householders are likely to consult when confronted with illness. The question "*during the last month did you consult a healthcare worker such as nurse, doctor or traditional doctor as a result of illness*" is of importance in this study as it will assist the study to indentify the type of healthcare giver consulted by these individuals. Also in identification of the health care facility consulted the question "*where did you consult*" was posed. The main aim of this question was in the grouping of healthcare facilities visited i.e. private healthcare and public healthcare facilities. The questions also included an evaluation of the experiences of healthcare users. This is necessary as to know the quality of healthcare service delivery both in public and private healthcare centres.

There are dynamic involved in non-consultation of healthcare services and the question aimed at investigating the factors was included in the questionnaire as "*Why did you not consult any health workers during the past month*"? Various reasons were listed in the questionnaire for the respondents such as healthcare services being too expensive, too far and not necessary. Through this information, the study was able to determine healthcare seeking behaviours of South African households.