

**ANALYSIS OF FACTORS THAT AFFECT THE
HEALTH CARE SYSTEM IN THE THIRD
WORLD COUNTRIES – THE CASE OF MALAWI**

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ANALYSIS OF FACTORS THAT AFFECT THE HEALTH CARE SYSTEM IN THE THIRD WORLD COUNTRIES – THE CASE OF MALAWI

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Declaration

I declare that this dissertation is my own unaided work. It is being submitted in partial fulfilment of the requirements for the degree of MBA in the University of Malawi and it has not been submitted before for any degree or examination in any other university.

NAME:.....

SIGNATURE:.....

DATE:.....

Certificate of Approval

We declare that this dissertation is from the candidate's own work and effort. Where he has used other sources of information, it has been acknowledged. This dissertation is submitted with our approval.

First Supervisor's name:.....

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Date:.....

Second Supervisor's name:.....

Signature:.....

Date:.....

Head of Department's Name:.....

Signature:.....

Date:.....

Dedication

This dissertation is dedicated to my mum, Mary Mponda, who throughout my childhood inspired me to work hard and to excel in all I set out to do in life. Despite that now she is old and with dementia, I want to say to her that I will always keep her words and pass them on to her grandchildren.

Mum, I love you.

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Abstract

Good health is paramount to each and every individual; as such countries strive to deliver good health services. Available information however indicates that health indicators in developing countries are far from satisfactory. This research was set out to unveil factors that affect the health care system in these third world countries. The study specifically focussed on finding out what influence the number of health personnel and the quantity of health resources has on the health care system and what is the quality of health care services offered in the health facilities. The Servqual Model was employed as a tool in the combined study design. Data was collected from two private hospitals and two mission hospitals.

A combined research design was used in order to meet the following study objectives: first, to determine the influence of the number of health personnel and the quantity of resources on the health care system, second, to determine the quality of health care services offered in the health facilities. The approach was also used in order to increase reliability and validity of the findings from the following research sites: Mwaiwathu Private Hospital, Chitawira Private Hospital, Mlambe Mission Hospital and Malamulo Mission Hospital. Data from these sites was collected through the use of questionnaires that were administered to participants that consented to be part of the study. Some data was collected from the internet, text books, research papers, articles, electronic journals and surveys. This data was entered and analysed using excel and statistical package for social science (SPSS) Packages. The research used the Servqual Model in order to establish whether that which is provided in both the Private and Christian Hospitals Association of Malawi institutions is quality care.

The analysis of this study has established that the health care system is understaffed and that the few health personnel available are negatively affected because they are unable to cope up with the high volume of patients per health personnel. It was further established that the number of health personnel and quantity of health

resources affects the quality of health care delivery. It further established that the level of health care delivery in private hospitals is better than that of mission hospitals. By extrapolation of these results, it was concluded that public hospitals anchor the table. This situation can be addressed by attaining sufficient human resource levels, training of health personnel, establishment of health care delivery standards, improved resource allocation and management and increasing level of public awareness on health rights.

The study has concluded that the more the number of health personnel and the greater the amount of health resources available, the better the quality of health services offered. It has also concluded that the quality of health care is best in private hospitals while in mission hospitals they offer better quality of services and in public institutions, good quality of service is offered.

Recommendations have been made in regard to attaining sufficient human resource levels, training of health personnel, establishment of health care delivery standards, resource allocation and management and on public awareness on health rights.

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Abbreviations and Definitions

ADRA	Adventist Development and Relief Agency
AIDS	Acquired Immunodeficiency Syndrome
CHAM	Christian Hospitals Association of Malawi
CPH	Chitawira Private Hospital
ECM	Episcopal Conference of Malawi
GAP	Global Aids Program
H.V.P	Human Papiloma Virus
MCC	Malawi Council of Churches
MOH	Ministry of Health
MPH	Mwaiwathu Private Hospital
NGO	Non Governmental Organisation
POW	Program of Work
PRSP	Poverty Reduction Strategy Paper
S.M.	Sevqual Model
SOPHA	Strengthening of Public Health Association
S.P.S.S.	Statistical Package for Social Science
TB	Tuberculosis
UNAIDS	United Nations and AIDS. Joint United Nations Program on HIV/AIDS
USAID	United States Agency for International Development.
V.I.A.	Visual Inspection with Acetic Acid.
W.H.O	World Health Organisation.

Care:	Is a Serious attention or thought.
Consumer	An individual with a budget which can be spent on a range of goods and services available on the market. The budget allocation is chosen according to the preferences of the consumer in order to maximize his/her function.
Economy:	Control and management of the money, goods and other resources.
Health:	A state of complete physical, mental and social well-being
Healthcare	An industry associated with the provision of medical care to individuals by specialist providers, such as Nurse /Midwives, Doctors and Paramedics.
Infant Mortality:	The deaths among children between birth and one year of age. It measures the number of these deaths per thousand live births.
Life Expectancy:	Time period in years that a baby is expected to live after it has been born alive.
Maternal Mortality:	women death associated with pregnancy
System:	A group of things or parts working together in a regular relation. There are three major components that make up the healthcare system: Facilities (for example hospitals, and skilled nursing facilities), Practitioners (medical doctors and nurses) Entities (medical supplies).

- Third World:** Are countries that are economically underdeveloped. Examples of such countries are: Asia, Africa, Oceania and Latin America. Common characteristics of such countries are: poverty, high birth-rates and economic dependence on the advanced countries.
- Servqual Model** A tool for measuring service quality as a gap between expectation and perception in service organisations.

Chapter One

1.0 Introduction

1.1 Background of the Study.

Since 1964, issues concerning health and health care facilities that are managed by governments and private institutions have taken centre stage generating great interest and concern amongst researchers across the globe. Most research has focused on how effectively governments spend money allocated to health facilities and the study of crucial components of the health care system (Meijer 2000, Groenewegen, 2005, and Brundtland, 2002). This development in part has unearthed a number of other related issues that have concluded in widespread deliberations that have not reached a consensus.

Of late, particularly over the past two decades, research efforts and publications have seen a drift from mere definitions and general analysis of health care systems to more specific and rigorous explanations usually with a focus on performance of health care systems from the perspective of users. However, such studies have been carried out in developed countries. In view of the foregoing, it can be extrapolated that there still exists a lot of untapped valuable information on factors that affect the health care system in developing economies.

1.2. Health and Malawi

In Malawi, health was emphasised as early as 1964, when the first National Health Plan was formulated. Following this, a number of government health units and programs under the auspicious of the donor community were introduced (Lewis-Lettington 2004). A close look at the past 20 years affirms Malawi's effort to achieving good health. Several programmes were introduced such as the Save the Children (USA) Program,

Adventist Development and Relief Agency International program, Strengthening of Public Health Association Program, Global AIDS Program, and a related program called Malawi National Tuberculosis Program.

Save the Children USA, was introduced in 1983 to deal with health, education, humanitarian food relief and capacity building activities of the nongovernmental organisations (NGOs) serving children and adults (Stalin, 2002). Adventist Development and Relief Agency International (ADRA) programme, was introduced in 1998, with the aim of providing reproductive health care and health education. Thereafter, Strengthening of Public Health Association (SOPHA) Program was established in 2000 with the objective of bridging the interests of the entire public health community in Malawi in order to represent the views of this constituent at all levels.

AIDS being one of the major health problems, had attention from different angles. Global AIDS Program (GAP) initiated in Malawi, in 2001. The aim was to work hand in hand with the National AIDS Commission and the Ministry of Health to develop the national HIV/AIDS policy (UNAIDS 2004). The Malawi National Tuberculosis Control Program established in 2002, was another initiative. Its aim was to reduce the burden of ill health due to Tuberculosis (TB) by improving case detection, quality of diagnosis and treatment outcomes, providing home basic care using community “guardians” and observe and follow up TB patients (UNIADS, 2004).

Further initiatives included Management Sciences for Health, established in 2003. It aimed at reducing childhood morbidity and strengthening health care system, preventing and managing of childhood illnesses, increasing malaria prevention activities and decentralising the district health system (Thetard, 2005). The USAID Program, introduced in 2002, had objectives of promoting economic growth, democracy and governance, health and family planning. In 2004, the Ministry of Health Program of Work (POW) initiative was introduced with the assistance of external partners. The objective of the POW is to implement the Essential Health Package designed to deliver a prioritised package of services. The focus is on the major causes of morbidity and

mortality in and an Emergency Human Resource Programme aiming at doubling the number of nurses and tripling the number of doctors in Malawi's public health service, Grant (2005).

Of importance to this study is the fact that despite all these initiatives, there seems to be unfavourable indicators in the health sector.

1.2.1 The Health Care Delivery System in Malawi

Formal health care services in Malawi are delivered by three main agencies namely: Ministry of Health (MOH), Christian Health Association of Malawi (CHAM), Non – Governmental Organisations (NGOs) and the Private Sector (Grant and Logie, 2005). All health personnel that provide health services in the mentioned institutions register with the regulatory bodies' prior practice. Some of the bodies are, Nurses and Midwives Council of Malawi, Pharmacy Medicines and Poisonous Board of Malawi, and Medical Council.

1.3. Ministry of Health (MOH).

The Ministry of Health, which directly falls under the government of Malawi, provides about 60 percent of health services in the country. According to the Poverty Reduction Strategy Paper (PRSP, 2002 cited by M.O.H, 2004) the goal and policy of the Ministry of Health (MOH) is “to raise the level of health status of all Malawians by reducing the incidence of illness and occurrences of premature deaths in the population”. The ministry offers two types of health services namely: curative and preventative. The preventative services are concerned with environmental improvements, education of the community in nutrition, family planning, hygiene, personal health and vaccination and inoculation. These services are offered at the central hospitals, district hospitals, rural hospitals, health

centers and health posts by community health nurses, surveillance assistants, medical assistants, and public health assistants.

Curative services are offered in the same mentioned health facilities. These services are concerned with the treatment of patients who already have a diagnosable medical or surgical complaint, and are managed under strict supervision of Medical doctors, Specialists, (in gynaecology, medicine, surgical and paediatrics to mention a few) Nurses, Clinical Officers, and Medical Assistants, Malawi government (2002).

1.3.1 Christian Health Association of Malawi (CHAM).

CHAM, which provides 37percent of health services in the country, receives some funding from the government. Furthermore, CHAM, which is an ecumenical umbrella organization of church, based health facilities in Malawi, owned by two mother bodies: Episcopal Conference of Malawi (ECM) and Malawi Council of Churches (MCC), coordinates under one umbrella the work of different denominations in the health field and serves as liaison between the churches and the government health authorities. This association operates 152 fee paying health units. These represent 18 different churches and church organizations. Just like the MOH, CHAM provides both curative and preventative services to the citizens. However, Grant and Logie (2005) argue that there are differences in capacity to deliver care between CHAM and MOH hospitals, highlighting that CHAM is much better equipped with resources for service delivery.

1.3.2 Non- Governmental and Private Sector

The non-governmental organizations and the private sector, which are owned by private individuals and organizations, offer the remaining 3 percent of services. It mainly deals with curative services. There are about 33 private practitioners in Malawi, operating their private care services in the urban areas of the three regions of Malawi, which are: the south, center, and north (Jefferys 2004).

1.4 Statement of the Problem

There are three components that make up the health care delivery system and these are: facilities, practitioners and entities (Wellmark, 2004). For a health care system to give up to date quality, efficient and effective services to its citizens, there has to be a good balance on these three components. In the case of Malawi health care system, the Ministry of Health (MOH) with the cooperating partners have made efforts to increase the number of health facilities, trained more health personnel, and also provided entities. The World Bank Report (1996) observed improvements being made by the MOH in its health care system. It established that Malawi has a better physician/population ratio of 1: 11,340 than the region's average of 1: 15,008. Countries with similar GNP/capita had also a higher ratio of 1: 12,178. Access to safe water of total population was also above average at 53percent as compared to the region 39.2percent, and that spending on health was above average at 5.5percent as compared to 4.3 percent of neighbouring countries.

Health indicators of Malawi, however, do not reflect these efforts. Malawi has among the worst health indicators (164th out of 175, according to UNDP's Humanitarian Development Index). Maternal mortality rate has almost doubled. It was at 1120 per 100,000 live births in 2000, and was 1800 per 100,000 live births in 2003. Under five mortality stood at 175 and infant mortality was at 110 as in 2004. Life expectancy stood at 40 years in 2004 dropping from 46 years in 1990. This shows that there are factors that are contributing to these poor health care indicators. This study derives its motivation to qualitatively and quantitatively analyse the factors that are affecting the health care system in the third world countries, the case of Malawi.

1.5 Research Questions

1. What influence does the number of health personnel and the quantity of health resources have on the health care system?

2. What is the quality of health care services offered in the health facilities?

1.6 Research Objectives

The purpose of this study is to provide an analysis of factors that affect the health care system in the third world countries-the case of Malawi. The following are the specific objectives:

1. To analyse the influence of the number of health personnel and the quantity of health resources on the health care system.
2. To evaluate the quality of health care services offered in the health facilities.

1.7 Significance of Study

Several research studies have been carried out in developed countries on health care systems including Meijer, 2000; Migdail, 2000, and Groenewegen, 2005. Some studies have examined health service delivery (Stilwell et al 2003) but there is no evidence of a study that has analysed factors that affect the health care system in third world countries, in particular. Gaps appear to exist in the health care studies carried out above. Furthermore, the authors who conducted the studies above have different social and cultural background. This provides gaps arising from social and cultural differences. A study conducted by authors with similar cultural and social background is well placed to unearth hidden information. Therefore the results of this study will enlighten policymakers and hospital administrators about any service gaps.

1.8 Limitations

The limitation of this study is that the researcher was denied access to a government hospital that was scheduled to be part of the study. However, efforts were made to contact the Ministry Headquarters in order to seek consideration that an approval be granted. Approval was still denied. This means 60 percent of the health delivery service was not represented in the study.

1.9 Organization of the Study

The rest of the study is organised as follows: Chapter two discusses literature review and the choice of the Servqual model. Chapter three describes the methods and measurements used for the study. Chapter four looks at data analysis, Chapter five presents discussions of findings and Chapter six, presents the conclusions, recommendations and aspects of further research.

Chapter Two

2.0 Literature Review

2.1 Introduction

The purpose of this chapter is to examine the body of knowledge on factors that affect the health care system particularly in third world countries. The literature review includes sections on: theoretical literature review that explains terms and concepts that have been used in the research. This is followed by practical literature review that presents and analyses research findings on practitioners and entities.

2.2 Health Care System Defined

2.2.1 *Health Care*

In order to appreciate the health care system, it is important to examine what the term healthcare means. According to Wikipedia Encyclopaedia (2006), health care is defined as a general term that refers to the delivery of medical services by specialist providers such as midwives, doctors, and nurses. Miffin (2002) defines health care as the prevention, treatment and management of illness and preservation of mental and physical well being through services offered by the medical and allied health professions. The European Parliament (1998) define healthcare as any type of service provided by professionals and paraprofessionals with an impact on health status. From the above it can be appreciated that health care is the prevention, treatment and management of illnesses of individuals.

2.2.2 Health Care System

Healthcare system is the organization providing the health care services. This organization is a formal structure for a defined population, whose finances, management, scope and content, is defined by law and regulations. Therefore, the health care system comprises of three major components namely facilities, practitioners and entities. Facilities include hospitals, ambulatory surgery centers, district hospitals, health centers and health posts. Practitioners comprise of physicians, nurses, pharmacists, dentists, radiologists and paramedics, while entities include finances, drugs, infusion therapies, medical equipment such as beds, x-ray machines, Scanning machines, autoclaves and all surgical equipment to mention a few (WHO, 1998, Blue, 2004).

2.3 Facilities

Infrastructure is the lifeline to many other things in a society such as, health care, education, jobs and trade (Wolfowitz 2005). Gilson et al (2003) agree with Wolfowitz (2005) and demonstrate that quantity of health care facilities affects the quality of services offered. Studies show that health infrastructure has influence on the efficiency and effectiveness of a health care system in order for it to produce good health outcomes for its citizens (Shah, 2006). Mtonya et al (2005) also agree with the above authors and state that the health infrastructure in Malawi consists of dispensaries, clinics, health centers, community, district and central hospitals which are linked by a referral system.

Medicins Sans Frontiers (2004) are of the same opinion as Shah (2006) that health infrastructure has an influence on outcomes of health care systems, by arguing that one of the reasons for the poor state of health is that Malawi's health infrastructure is weak, unable to cope with the burden of chronic illnesses and that access to health care in the rural areas is low. Only 54 percent of rural population have access to formal health services within 5-kilometre radius. Fishbein (2001) carried out a study that agrees that it is not only Malawi that has poor infrastructure but the whole continent of Africa. This

study revealed that there was lack of adequate, affordable and reliable infrastructure services to majority of Africans. Further analysis revealed that many women walk long distances to the nearest water supply, which were usually unsafe or had inadequate water for their needs. Local roads were impassable especially during the rainy season. There were no telephone or communication facilities for many kilometres. In addition, lack of electricity prevented health clinics from stocking refrigerated medicines. The study further noted that two thirds of the continent's population lacked adequate sanitation services.

2.4 Practitioners

Health practitioners are all individuals encompassed to provide improvement of health to all populations through protection and health promotion activities. It also, includes the not-for-profit public sector, informal health care sector, and the traditional healers. Human resources for health are all the stock of individuals involved in the prevention, diagnosing and treating of illnesses in the formal health sector (W.H.O, 2002, Beaglehole 2003).

It is important to note that proper execution of any health related programs requires health professionals (Lethbridge, 2004). The greater the number of human resources for health, the better the population health indicators. Human resources for health significantly affect population health especially the maternal mortality, (Anand and Bearnighusen, 2003). Asgodom (2006) concurs with Lethbridge (2004) and highlights the fact that, in Africa, after most countries gained independence, they were faced with a shortage of required skills and as a result, they invested heavily in development of human resources.

2.4.1 Training

Proper training for the human resource for health is crucial for good health delivery. Properly trained practitioners will offer good service hence contributing positively to the health status of a nation. For this to be practical good human resources policies must be pursued in the health sector. Research has proved that, paying attention to the human resource policy is very important to the success of the performance of the health care system. Findings of a study carried out by (Ritta-Lissa, 2004, Buchan, 2004, and Beaglehole and Dal Poz, 2003) revealed that human resources managers for health needed skills for identifying factors that critically influence the health worker's motivation and performance.

Human resource managers for health need skills to evaluate the status of human resources for health's quality, availability and distribution. Research findings of a study carried out by Ritta-Lissa, (2004) and Olsen et al (2005) revealed that Northern Tanzania experienced a low availability of qualified health care staff. Most qualified staff were concentrated in centralised locations while the rest were inequitably and inefficiently distributed in rural areas at lower-level services. Further analysis of this study indicates that there was a statistical correlation between availability of qualified human resources and use of services,

Other studies show that human resources competence is gained in the health care profession through pre-service education, in service training and work experience, and this determines the ability and readiness of health workers to provide quality services Kak, Burkhalter and Cooper (2001). Further analysis of these studies show that there are factors that affect provider competence. A provider can have knowledge and skills but poorly utilise it because of unavailability of drugs, equipment and organisational support.

2.4.2 Motivation

Several researchers such as Beaglehole and Dal Poz (2003) Buchan, (2004) reveal that a well-motivated and appropriately skilled and deployed workforce is crucial to the success of health delivery system. The major players in the health delivery service are doctors, nurses, pharmacist and paramedics. However doctors and nurses are usually central in analyzing state of health care system (Gillespie, 2001). The emphasis in motivation is therefore focused on these practitioners.

In Mali it was established that several factors were responsible for motivating and demotivating health workers. These are responsibility, recognition, salary and training. These motivating factors were influenced by job descriptions, supervision, continuous education and performance appraisal. Demotivating factors were attributed to the lack of recognition, lack of material resources and equipment (such as blood pressure machines, bandages gloves and delivery kits), Beaglehole & Dal Poz, (2003) Buchan, (2004), and Dieleman et al (2006).

Krogstad and Hofoss (2006) conducted a study in order to explore the domains of work that are important for job satisfaction among doctors, nurses and auxiliaries. Data was collected from 1814 doctors, nurses and auxiliaries working at eleven Norwegian hospitals. The findings revealed that local leadership domain predicted high job satisfaction for all the three groups. Further analysis suggested that professional development is important for Doctors and Registered Nurses. Feedback from the nearest superior was the major explanation for job satisfaction. In addition, professional development and quality of local leadership also contributed to better satisfaction on the job.

Dieleman (2003) conducted a study that explored strategies that influence staff motivation in better performance in the health settings. Findings of the study indicated that motivation is influenced by both financial and non financial incentives and that the main motivating factors for health workers were; appreciation by managers, colleagues

and the community, a stable job, income and training. However, discouraging factors were related to low salaries and difficult working conditions.

2.4.3 Brain Drain

According to Dodani (2005), brain drain is defined as “the migration of health personnel in search of better standards of living and quality life, high salaries, access to advanced technology and more stable political conditions in different places world wide”. Around the 1960s, in Africa, the human resources flight or brain drain was noticed. The Economic Commission for Africa (ECA) reported that between 1960 and 1975 alone, about 27,000 highly qualified Africans left the continent for the west and the number is reported to have increased to 40,000 between 1975 and 1984.

Brain drain has an impact on health systems in developing countries: service deficits and reduced service quality especially for the most vulnerable rural populations. In order to discover the predisposing factors responsible for brain drain, Padarath and Chamberlain (2004) carried out a study in developing countries on migration of human resources for health. The findings revealed four factors that are responsible for migration: which are push and pull factors as well as stay and stick factors. Push factors are those that encourage health workers to leave their country such as remuneration and salaries, lack of job satisfaction, high levels of poverty, work associated risks, lack of further education and career development opportunities. Pull factors include higher quality of life, freedom of speech, and education opportunities for children. While stay factors are, the development of new and social and cultural bonds, and the risk of disruption to the education of the children. Stick factors include rewards and incentives, strong social and cultural ties and patriotism, cost of relocation and requalification, the need to learn a new language and costly immigration procedures.

The impact of the push and pull factors are massive, the World Health Organisation (cited by Padarath and Chamberlain 2004) assert that 31 countries in Africa do not meet the ‘Health for all’ standard of a minimum of one doctor per 5000 people. The World

Health Organization also established that in the 1980s the doctor population ratio was 1: 10,000 in Sub-Sahara compared to 1: 1400 in all developing countries and 1: 300 in industrialized countries. In the 1990s the situation deteriorated further, the doctor's population ratio in Malawi, Mozambique and Tanzania was 1: 30,000 or more, while in Angola, Lesotho, Zambia and the Democratic Republic of Congo the ratio stood at 1:20,000. Further analysis established that in the 1980s, the nurse population ratio in Africa was 1: 2100 compared to 1: 1700 persons in all developing countries and 1: 170 in industrialized countries.

Apart from losing health personnel to foreign countries, health institutions also suffer internal waste. Studies indicate that the subSaharan African countries waste their human resources stock in spite of having increased demand for health services (Dovlo, 2005). A desk review was carried out in order to suggest data types for use in measuring various forms of "wastage" (Dovlo, 2005). Findings revealed that there are two forms of wastage: first, "direct" wastage, this is defined as avoidable wastage, which is on the increase due to loss of staff through emigration and death. The Second, is "indirect" wastage, this is defined as loss in output and productivity. The results point out that the loss comes about because of the following factors: health professionals misapplied skills, absenteeism, poor support and lack of supervision.

Direct Wastage is the loss of health professionals that is considered to be over and above the norm, this is mainly through emigration and death. Hence this represents complete loss to the health sector. It is however important to note that direct wastage presents in many forms such as movement from health into non health professions. In Ghana for instance, a cohort study of 192 doctors, found that two doctors changed professions completely to full time ministers of religion. Other forms are emigration / brain drain of health professionals, work induced injury, accidents and deaths. All these cause premature loss from the work (Dovlo, 2005).

Indirect Wastage unlike the direct wastage represents inefficient use of health professionals that are employed, including inappropriate use of their skills. This also

involves the “ghost workers” that restrict room for new employment. Indirect wastage takes on several forms as well and some of them include; wastage through unemployment of available staff, wastage as ineffective staff use, for instance, Malawi delegates to a meeting in Republic of South Africa, said that trained midwives avoid postings to labour and delivery wards for fear of possible risk of exposure to HIV infected blood. Consequently, less qualified staff members are left to offer their services in these wards. There is also wastage that arises from poor skills/cadre mix, from low health worker performance and output, which arises from a low value and quality of work expected from competent staff, time wastage that occurs through carrying basic administrative tasks and from absenteeism (Dovlo, 2005).

2.5 Entities

Entities are all the items such as finances, drugs, infusion therapies, and medical equipment to mention a few, that assist the health professionals to provide quality service through their use of these items in their services.

2.5.1 *Financial Resources in Health*

The World Health Organization (W.H.O) conducted an evaluation of world health care systems of one hundred and ninety one member states. W.H.O’s objective was to find out how effectively governments spent money on health and how public health systems prevent illness. Sub-Saharan Africa ranked lowest in provision of quality healthcare. However, countries with abundance of wealth and technology also had a shortfall of supplying adequate health care needs for their populations. It can therefore be concluded that it’s not how much funding a health system has, but how effectively that funding is utilized. These findings suggest that the ability to use less financial resources effectively yields good healthcare outcomes. The study for example reveals that the United States of America ranked lowest, while having highest health expenditure (Meijer, 2000, Kumar

and Odzama, 2004). Tanzania's Ministry of Health and Canada's International Development Research Center (2004) conducted a study in order to test a proposition that was produced by the World Development Report in 1993. The proposition suggested that:

“Mortality and morbidity rates in developing countries could be significantly reduced even with modest resources if health care funding was allocated to cost effective health interventions more in line with the prevailing local “burden of disease”

The results of this study showed that new means of planning lead the district health teams to budget proportionally to address major contributors to mortality, in addition, it was discovered that extra funding in the health system was essential in order to increase capacity, to allow for better training of personnel, for deployment of resources such as drugs, better clinical practice all these at the end, increased patient satisfaction. The overall result was that there was decline in mortality in the two districts. From the foregoing, it is seen that apart from funding being an essential issue in health care systems, what matters most is how the funding is utilized in order to produce positive health outcomes for health care systems by allowing these systems to have all the necessary resources such as drugs.

2.5.2 Drugs

Drug including medical equipment and other medical devices are essential infrastructure elements for the delivery of health care services. The insufficiency of drugs in health institutions is attributed to several factors by different researchers.

Wang (2004) is of the opinion that not much attention in terms of planning incorporation and management of drugs is given. Mtonya et al (2005) share the same views as Wang (2004) that drugs and medical equipment have received less attention in terms of planning and management. Mtonya et al (2005) illustrate that a study carried out in Malawi revealed that the Central Medical Stores, which is a unit of the Ministry of

Health, mandated for the procurement, distribution and management of medical consumables and equipment has been unable to replenish stocks of drugs and medical supplies. This is due to lack of financial means, not having full control over the drug tendering process, lack of adequate skilled manpower to conduct its routine operations and sufficient vehicles for the timely distribution of drugs

Rodriguez (2006) is of a different view from Wang (2004) and Mtonya et al (2005). He contends that it is doubtful that medical equipment, drugs and other medical devices receive less attention in terms of planning and management. He bases the argument on the global study conducted on corruption in health systems that revealed corruption in health systems of both rich and poor countries. In Cambodia, the health budget disappears before the Ministry of Finance pays it to the Ministry of Health. Banda (2006) agree with Rodriguez (2006) and highlights that the Malawi government impounded over 20 million government drugs that were stolen by a businessman. The impounded drugs include donor –funded Antiretroviral drugs, HIV testing kits, drugs and equipment that are always in short supply in hospital s, such as gloves, band aids, plaster of paris and X-ray developers and films.

2.5.3 Equipment

Medical equipment is one of the essential infrastructure elements for the delivery of health care services. However, in spite of its importance, some have argued that it has not received much attention in terms of planning and management (Wang, 2004).

Dailard (2003) highlights Wang's (2004) observations that medical equipment has received less attention in terms of planning and management. It was further shown that lack of medical equipment has an adverse effect on health care system. A study was conducted by Dailard (2003) whose results revealed that the Human Papiloma Virus (HPV) infection was high in women in Sub-Saharan Africa because there was failure to receive timely screening of precancerous cervical lesions because of lack of diagnostic equipment. In the case of America and other developed countries, results revealed that

Pap smear tests were widely available and as a result the death rate of women because of HPV was low.

While lack of proper equipment is indeed a major factor in health care delivery, authorities are supposed to pay more attention by exploring alternative means that can serve the same purpose. A study carried out by Jeronimo (2005) on 1, 921 women from 1999 to 2000, whereby vinegar was used to wash the cervix and then viewed with the naked eye to see whether the protective tissue layer of the cervix turned white, indicated that Visual Inspection with Acetic Acid (VIA), for positive women, their results were known immediately. Consequently, such women received timely special counseling, while those who had a pap smear done returned for results later. Analysis of this study showed that VIA could be used at all levels of health care systems especially in developing countries such as Latin America, and Sub-Saharan Africa in order to diminish the probability of losing women due to lack of diagnostic resources. This emphasizes that alternative ways need to be explored through continued research in the medical institutions of poor countries.

From the foregoing, it is clear that health outcomes of patients that are managed at various health care systems, depends on the availability of adequate medical resources. At the same time, there is a growing scarcity of resources necessary to meet populations' healthcare demands (Ernst and Young, 2003).

2.6 Health Care and Quality of Service

Management of the major components, which are facilities, entities and practitioners, is profound to the effectiveness of health care systems. Usually the health indicators of a particular nation measure the efficiency of health care systems.

It has been observed that Healthcare systems in third world countries are struggling as indicated by the world health report (2004). The report evaluates health care systems of developed and developing countries using the four principles of health systems, which are leadership, service delivery, resource provision and financing. However the Organization of Economic Cooperation and Development (OECD) evaluates health systems using other indicators. They identified the following (a) health status (b) health care resources and utilization (c) health expenditure and financing (d) non medical determinants of health (e) demographic and economic context

Health financing and service delivery are essential factors influencing health indicators. Good health indicators show the efficiency of the health care system. Good health service delivery is measured by the quality of the health service offered. Analysis reveals that any service organization ought to be concerned with the quality of service it offers to its clients, because clients naturally have perceptions and expectations of any service that is offered to them (Asubonteng, et al, 2004, & Cook et al 1999).

2.6.1 Models for Measuring Quality of Service

Measuring quality of service is a complex and difficult exercise. However, several models have been developed such as the Carter model, the Gronroos model, Kano model and the Servqual model in order to assist in evaluation of service delivery.

The Carter model is an instrument used to define and measure Islamic Banking service quality. This model defines customer satisfaction as perceived service quality, which is the gap between expected service and perception of service actually received. It is the first approach to add and mix the customer's religious beliefs and cultural values with other quality dimensions, such as customer's satisfaction and service encounter, (Othman and Owen, 2006). The Gronroos model however, attempts to explain the quality of a given service as perceived by customers. It does so, by examining two dimensions which are technical quality and functional quality. Technical quality is, what the customer receives, or in other words, the technical outcome of the process while functional quality

is how the customer receives the technical outcome or their expression of how the service has been performed. The Kano model is another quality management and marketing technique that is used for measuring client happiness. It recognizes six categories of quality attributes. Three of these attributes that influences customer satisfaction are basic factors, excitement factors and performance factors. Basic factors cause dissatisfaction if they are not fulfilled, while excitement factors cause satisfaction if delivered and performance factors, (Lee, J. 2006).

Buttle (1996) (cited in Shahin, 2004) argues that the Servqual model will predominate as a service quality measure compared to the above models, until a better but equally simple model emerges. Therefore, this study will use the Servqual Model as recommended by Buttle (1996) in order to help explain factors that affect health care systems.

2.6.2 The Servqual Model

The Servqual Model (SM) is the model that measures service quality as a gap between expectation and perception in service organization (Chang et al, 2002). Parasuraman, Zeithaml and Berry (1985) (cited in Chang and Cheng 2002) state that the SM has five gaps: (a) the gap between management perceptions of consumers' expectations and expected service, (b) the gap between management perceptions of consumers' expectations and the translation of perceptions into service quality specification, (c) the gap between the translation of perceptions of service quality specification and service delivery, (d) the gap between service delivery and external communications to consumers and (e) the gap between the consumers' expected level of service and the actual service performance. Furthermore, consumers' asses service quality using the following: tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding.

The Servqual model is reliable and valid when considered as an instrument defining quality under three rather than five factors. The three factors are: responsiveness, empathy and assurance dimensions. Reasons given in support of these three factors are:

clients want to receive information in a timely manner by competent and courteous professionals. Resources are also reported to be one of the most important factors constituting quality service, and therefore are added to the three factors (responsiveness, empathy and assurance) (Andaleeb and Simmond 1998, quoted in Cook, Coleman and Heath, 1999).

However, Myerscough (2002) has criticized the Servqual Model (SM), by disagreeing with Cook, et al (1999) on validity, by highlighting that there is significant difference between an individual's expectations for service quality and the perceptions of service performance. Therefore, based on this argument, the calculations of the gap score of the model are inappropriate. Other studies have also criticized the model, Teas, et al (1993) cited in Shahin, (2004). Their criticism of the model is due to the fact that it only addresses the human aspects of quality service.

Supporters of the SM, state that it is valid and reliable despite that its five variables are not consistent across all service industries. They indicate that the SM is helpful to managers in identifying the direction in which the firm should move and the elements that need to be considered in drawing up strategies in service improvements. Furthermore, the model works well with both qualitative and quantitative input and provides clear results through identifying gaps between what the consumer expects and what they actually get. Therefore, the results are expected to show what actions might make rapid improvements possible.

2.7 Chapter Summary

The review of the above literature reveals that there are several factors that affect the health care system in third world countries. It is also coming out clearly that there are some major disagreements on health resources, particularly on drugs for instance, Wang (2004) and Mtonya et al (2005) share the same views that not much attention in terms of

planning, incorporation and management of drugs is given. Myerscough (2002) and Cook (1999) disagree on the Servqual Model, saying there is significant difference between individuals' expectations and the perceptions of service performance.

However, agreements are observed in the following areas: Wolfowitz (2005) and Gilson et al (2003) agree that quantity of healthcare resources affects the quality of services offered. Other researchers agree that a well motivated and appropriately skilled and deployed health workforce is crucial to the success of the healthcare system (Krogstad et al (2006). Furthermore, Dieleman (2003) agrees with the Krogstad (2006) and further highlights that health workers motivation is influenced by both financial and non financial incentives.

This literature review has also unearthed some gaps, as observed by Asgodom (2006) that in Africa, after most countries gained independence, they were faced with shortage of skilled health personnel. In addition, there is lack of attention on the human resource policy which is very important to the success of the performance of the healthcare system (Buchan, 2004).

However, for improvements to occur in the health care system, it largely depends on adequate, well trained and motivated human resources for health to implement all health related programs, requiring health professions. As can be seen, currently the Sub-Saharan region is facing a health workforce crisis and Malawi is no exception. For instance, the region has a population of 682 million people and with only 750,000 health workers.

Chapter Three

3.0 Methodology

3.1 Introduction

The purpose of this chapter is to describe the methods and procedures used to conduct this research study. It commences with a description of the research design, followed by sample, research description, and development of the instrument with validity. Also outlined is the data collection followed by data analysis, limitations, ethical considerations and finally the chapter summary.

3.2 Design

A research design is a set of instructions that tell the investigator how data are to be collected and analyzed in order to answer a specified research problem. According to Saunders et al (2003) there are two major types of research design, namely experimental and non-experimental design.

This study used the combined research design in order to meet the study's objectives and to increase the reliability and validity of the findings. According to Saunders et al (2003) the combined approach appreciates both the phenomenological and positivist philosophies. The phenomenological philosophy believes that the world is socially constructed that science is driven by human interest and that the researcher is part of the world being investigated. The philosophy values research findings derived from this approach because data is collected from real life settings that reveals depth of understanding and richness of detail. The positivist philosophy views reality as having the ability to be observed and measured, and it involves the use of numerical measurement and statistical analysis.

3.3 Research Description, Instruments Development and Data Collection

3.3.1 *Research Description*

Four hospitals were identified for this research. These sites included a government hospital, a private urban hospital, a semi-urban mission hospital and a rural mission hospital. These institutions were written the attached letters of introducing the research to them and seeking permission to use their institutions as research sites. Consent forms for prospective research participants (See Appendix 4) as well as the questionnaire for the participants (See Appendix 2) and the key informants (See Appendix 3) were enclosed. Permission was granted by telephone by three hospitals allowing the researcher to proceed.

3.3.2 *Development of the Research Instrument*

See research instruments as attached in Appendix 2 and 3 these were developed to explore factors that affect the health care system as per perception of the users. These research instruments were developed using knowledge obtained from the literature review.

The instrument in Appendix 2 for patients has two sections, A and B, while the one in Appendix 3 for key informants has one section.

The first section surveyed demographic characteristics of the interviewees. Under this section, the researcher obtained information under the following subheadings: gender, marital status, relationship to person paying hospital bills, age category, education, religion, employment and income, earnings and source of income. The answer was obtained from the participants by their ticking the appropriate answer.

This second section firstly addressed the patients' perception of the facilities they were using in terms of physical facilities, equipment and appearance of personnel. There were five response categories for the answers they were to circle: well cared for (value =1),

modern and abundant in supply (value =2), very good (value=3) neutral (value =4) and bad (value = 5).

Secondly, the section addressed ability of the facilities in terms of performing promised services dependably and accurately. This was done by examining the following areas: competency of personnel, number of people visiting the hospital, behavior of personnel, type of services offered responsiveness and empathy. Patients responses were in five categories: good (value=1), very good (value=2), neutral (value=3), bad (value =4) and very bad (value= 5).

Thirdly, the research instrument in Appendix 4 was for key informants. This was developed using closed and open-ended questions.

3.3.3 Validity of the Instrument.

Validity is the ability to assess whether the researcher is actually measuring what they set out to do. There are four types of validity, which the researcher can use, which are face validity, content validity, criterion and concurrent validity. This research used content validity because it requires one to seek the opinion of experts in the field and this is what the researcher did. This research study wanted to use information that was certified by experts as being valid (Saunders et al, 2003). The instrument developed in appendix 3 was used for the first time, there was need to check it if it was to measure the attributes it was intended to measure. Content validity was checked by giving the instrument to the two-research supervisors and a colleague who graduated with an MBA four years ago for their critique and assessment. Each of the three individuals provided their results on the instruments and modifications were made where necessary.

3.3.4 Pilot Study

The purpose of the pilot study was to test the questionnaire for its feasibility, reliability and validity. Ten patients from Malamulo mission hospital were invited to participate and they accepted to do so. The purpose of the study was explained to each participant and they were asked to sign the consent form. In case of illiterate participants, questions were read to them and their answers were written down on their behalf. The literate ones were given the questionnaire to complete. It was discovered that the questionnaire took about 10 minutes to be administered and that two questions were not clearly understood by the participants. As a result, three extra open ended questions were developed in order to provide clarity.

3.3.5 Data Collection

Data can be collected from participants using questionnaires, interviews and observations. According to Polit et al (2001) a questionnaire is a printed form designed to obtain information through participant's written or verbal respondents. The advantages of using this method is that it is a quicker and cheaper method of obtaining big diverse data, it allows for complete anonymity and there is no interviewer bias. Examples of types of questionnaires include, highly structured, structured, semi structured and unstructured open ended. An interview is a method of data collection based on oral questions. It can be achieved either by telephone contact or face-to-face interview. The advantages of interviews are that the response rate is high, participants' level of understanding can be observed, unclear questions can be clarified, rich and complex data can be obtained, Wangenigen (2004). Observation is a method of data collection that uses direct observation of subjects' behavior. The advantages of this method are that behavior is easily studied and depth and variety of information is obtained, Polit et al (2001).

This research used questionnaires to collect data from the research participants. The questionnaire was used as one of the reliable methods of collecting data as it provided a

good opportunity for simple contact to large numbers of patients quickly, easily, and efficiently. It is easy to replicate the questions because all participants were asked the same questions in the same way. It further provide better exploration on how respondents feels about a particular topics and their strengths to contribute to reliability, validity and perceptions of fairness, Saunders et.al (2003)

3.3.5.1 Secondary Data Sources

Secondary data was collected from the Internet, various textbooks, research papers, articles, electronic journals, and government publications. These were obtained from the Ministry of Health Headquarters, the libraries of Polytechnic and Chancellor College (constituent colleges of the University of Malawi).

3.4 Sample

According to Saunders et al (2003), sampling is a process of selecting subjects that are representative of the population being studied. There are two broad types of sampling designs, which are probability sampling and non-probability sampling. Probability sampling is a technique, in which every element has an equal chance of being selected for the sample. Examples of this technique are: simple random, stratified random, systematic random and cluster samplings. The advantage is that the technique allows findings to be generalized to the population. Non-probability sampling is a method that not every element of the population has an opportunity of being selected. The examples of this technique are: convenience / accidental sample, purposive sample, and quota sampling to mention a few. The advantages are that the technique concentrates on specific cases and in depth analysis of the specific is done; the other advantage is that it is cheap and feasible.

Non-probability sampling is the design that was chosen for this research. The target sample for this study was in two groups. The first group comprised a hundred and fifteen individuals that reported to the Out Patient's Department (OPD) of the selected hospitals (Mwaiwathu, Mlambe, Chitawira and Malamulo hospitals). The second group comprised of four Hospital Administrators and seven key informants of the same institutions under study.

Selection of participants to be interviewed was done using non-probability sampling design and the specific type used was convenience / accidental sampling. According to Trochim (2002), convenience sampling is a technique that allows the researcher freedom to choose whoever is readily accessible or available for inclusion in a study. This method was chosen because it is easy to constitute and effect and also because this technique is used in a combined research strategy, which is the strategy for this study.

A total of one hundred and fifteen patients and eleven key informants were therefore invited to participate in the study. This sample size was arrived at because of the availability of time and finances that were available to the researcher.

3.5 Data Analysis

Data was entered and analyzed using Statistical Package for Social Sciences (SPSS). Quantitative data were analyzed using univariate and multivariate statistics. According to Polit et al (2001) univariate data analysis involves the analysis of a single variable through the use of descriptive statistics such as the calculations of: frequencies, percentages, means, median, mode and standard deviations. Furthermore, frequencies and percentages can be graphically expressed as tables, charts or graphs.

Multivariate statistics refers to analysis dealing with three or more variables simultaneously. Qualitative data from the key informants was analyzed by coding it into

broad categories of similar items. In checking factors that affect health care, content analysis was used. Thus all factors were being weighed according to the number of times it has been mentioned.

3.6 Limitations

The researcher was denied access to using Queen Elizabeth Central Hospital as one of the research sites.

3.7. Ethical Consideration

In order to ensure protection of subjects, permission was sought at institutional and participant level. Participants were informed about the study, its purpose and implications. They were also made aware that their participation would be voluntary and that anonymity would be maintained. The participants who consented to be part of the study were given consent forms to sign (See Annex 2).

At institutional level, permission was sought from the hospital Administrators of the hospitals that were to be used for the study, (see Annex 1). The letters to these hospitals contained the type of subjects that would be included in the study, information on the purpose of the study as well as implications. The institutions were assured of continuous anonymity of the names of all the subjects that participated in the study.

3.8 Chapter Summary

The research used the combined research design in order to meet the study objectives and to increase reliability and validity of the findings from the following research sites:

Mwaiwathu private hospital, Chitawira private hospital, Mlambe mission hospital and Malamulo mission hospital.

Data was collected from the research sites through use of questionnaires that were administered to all participants that consented to be part of the study. Secondary data was collected from the Internet, various textbooks, research papers, articles, electronic journals, government publications and surveys.

All collected data was entered and analysed using excel and Statistical Package for Social Science.

The study experienced one major limitation in that the researcher was denied access to Queen Elizabeth Central Hospital as one of the research sites.

Chapter Four

4.0 Findings

4.1 Introduction

This chapter presents the findings of the study. The presentation is divided into seven main categories comprising characteristics of sample, tangibles, quality of service, overall impression, key respondents, statistics from institutions and chapter summary. The data was collected from 115 respondents and 11 key informants of the four hospitals that were under study.

4.2 Characteristics of Sample

4.2.1 Marital status, Age and Education

The sample for Mwaiwathu private hospital comprised 53 percent females and 47 percent males, with 93 percent of these being Malawians and seven percent were foreigners. Figure 4-1, shows that 80 percent were between the ages of 21 to 40, 13 percent from 41 to 50 and seven percent from 51 to 60. The sample had 80 percent of married people, 13 percent were single and seven percent widowed. The educational level of the sample ranges from 37 percent attaining primary school, 34 percent secondary education, 21 percent attained technical and university education and eight percent have never had any education.

The participants of Chitawira private hospital were composed of 40 percent males and 60 percent females. The male married respondents were 67 percent while 33 percent were single. Figure 4-1, shows that 33 percent of the respondents were in the age bracket of 41 to 50 years, and 47 percent are between 21 to 40 years of age. In terms of academic achievement, 6.67 percent attained primary school, 40 percent had been through secondary education, 33 percent through technical college and 20 percent in the university

Characteristics of Mlambe mission hospital show that 98 percent were Malawians and two percent foreigners. The marital status indicates that 82 percent were married, 12 percent were single, four percent widowed and two percent separated. The participant's age bracket from 21 to 40 years was 78 percent and 12 percent from 41 to 50 years. Educational level of the sample, 78 percent had attained primary and secondary education, 14 percent technical college, four percent university and another four percent no education. The participants from Malamulo mission hospital comprised of 42 percent males, 58 percent females and all were Malawians. 58 percent were between the ages of 21 to 40 years. As shown in figure 4-1, 22 percent were between 41 to 50 years and 14 percent 51 to 60 years. Of these participants, 72 percent are married, eight percent separated, another eight percent single and the rest were divorced and widowed. 80 percent of the participants have attended primary and secondary education, 17 percent have had no education and three percent have attained technical college.

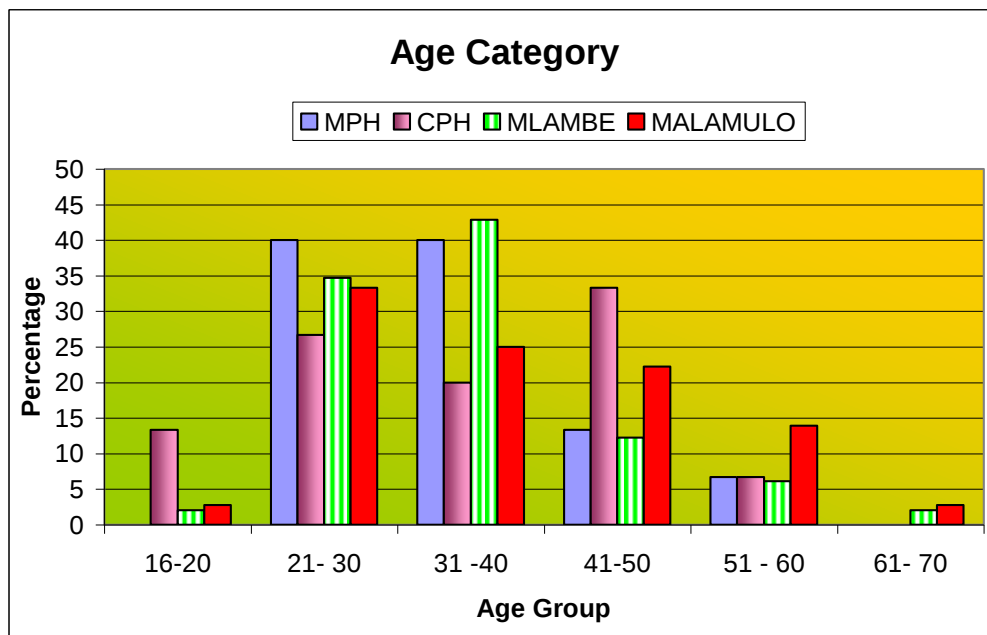


Figure 4-1 **Characteristics of Sample –Age Category**

4.2.2. Level and Source of Income

Figure 4-2 shows the level and sources of income. The employment and income levels of Mwaiwathu private hospital reveal that 60 percent of the respondents have their income coming from their main occupation, while 13 percent comes from sales of goods and seven percent comes from their pension. The respondents' annual earnings fall into the following categories: 20 percent have their earnings in the range of MK 0-36, 000.00; 6.67 percent in the range of MK36, 000 – 144,000.00; 46.67 percent in the range of MK144, 000 – 600, 000.00 and the rest 26.67 percent earn over MK 600,000.00. Chitawira private hospital had also 60 percent of the respondents getting their income through employment as professionals and clerical jobs, 27 are unemployed and the rest their income is through business. Through these avenues, the respondents' earnings fall within the following: 47 percent earn about MK36, 001 to 144,000, 20 percent earn above MK600, 000 and the rest earn between MK144, 001 to 600,000.

For Mlambe mission hospital, 35 percent of respondents' income is through small-scale businesses, 12 percent were working as drivers, 10 percent had professional jobs and 18 percent were unemployed. Annual earnings of the working class and those doing small scale businesses is from MK36, 000 to MK144, 000 representing 72 percent and 22 percent earn from MK144, 001 to MK600, 000 and only 2 percent earn over MK600, 000.

At Malamulo mission hospital however, 50 percent of the respondents' income is through small-scale businesses and agriculture, only 16 percent are employed, as drivers and clerks while 25 percent are unemployed. The annual earnings of this sample are as follows: 47 percent of the sample earns within the range of MK0 -36, 000.00, 31 percent with the range of MK36, 000.00- 144,000.00; and 6 percent within the range of MK144, 000 – 600,000.00.

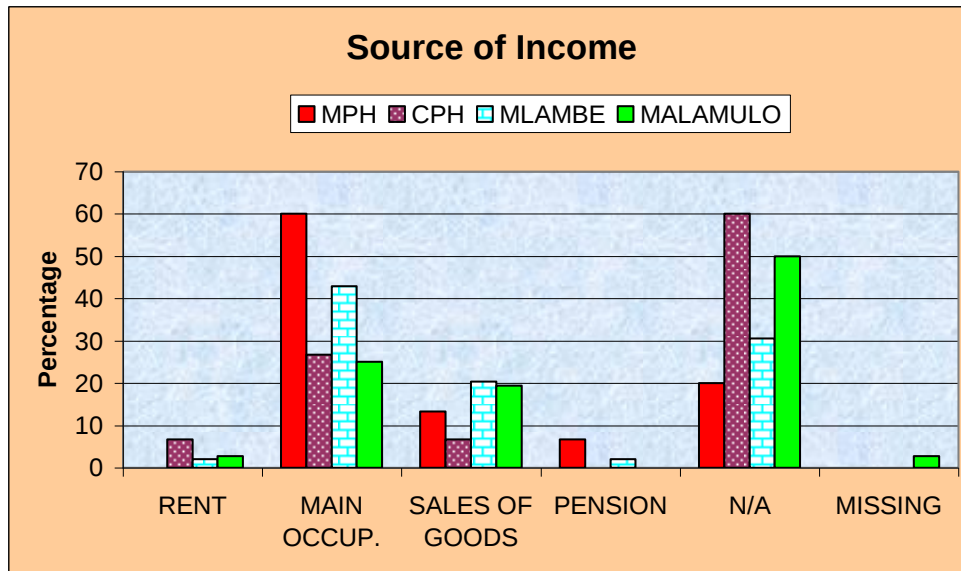


Figure 4-2 Source of Income

4.3 Tangibles

As per Servqual Model, service quality was assessed using the following: tangibles, reliability responsiveness, competence, behaviour, empathy, type of service and how often patients visit a facility. Under tangibles the following were assessed: physical facilities, appearance of personnel and equipment. Patient's perceptions of the hospital in terms of the tangibles are presented below:

4.3.1 Physical Facilities

Figure 4-3 shows details on physical facilities of the four hospitals. It shows that 80 percent of the respondents are of the view that the surroundings, of Mwaiwathu private hospital buildings and the internal environment of the hospital are well cared for and attractive while 13 percent are neutral. At Chitawira private hospital also 80 percent of the respondents say that the physical facilities are well cared for, while 7 percent say that the surroundings are very good and another 7 percent are neutral, while 6 percent never responded. At Mlambe mission hospital, 82 percent of the respondents are of the view

that the surroundings, hospital buildings and the internal environment of the hospital are well cared for while 12 percent are neutral. 6 percent say the physical facilities are bad. While at Malamulo 84 percent of the respondents are of the view that the surroundings and the internal environment of the hospital is well cared for, 8 percent are neutral and another 8 percent say the physical facilities are in bad shape

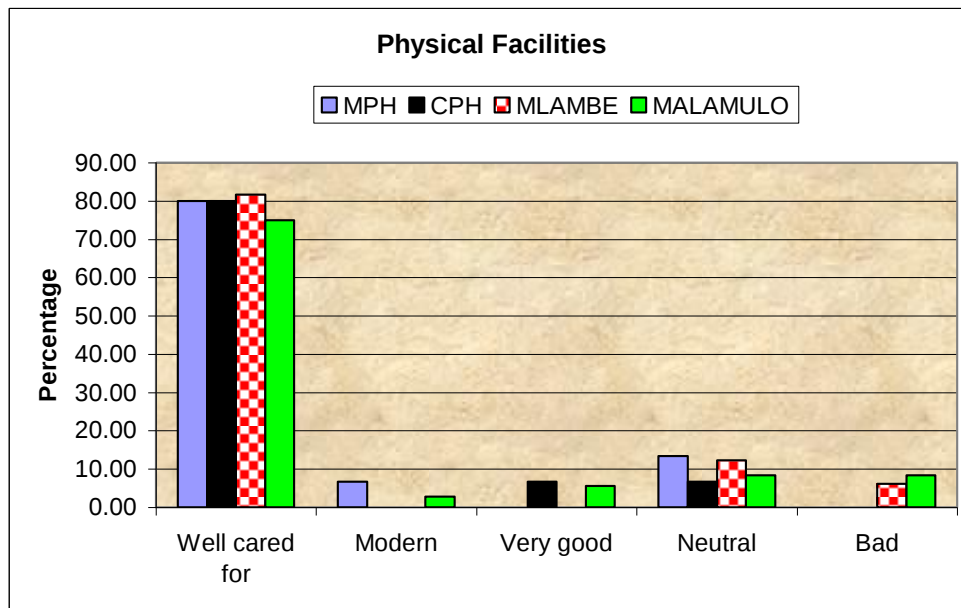


Figure 4-3 Physical Facilities

4.3.2 Personnel Appearance

Personnel appearance of hospital personnel from all the four hospitals is shown on figure 4-4. It shows that 60 percent of the respondents' view that the health personnel at Mwaiwathu private hospital are well groomed, (thus 33 percent well cared and 27 percent modern) and 33 percent say it's very good while 7 percent are neutral. Most of the respondents at Chitawira private hospital perceive that the personnel at this facility are well groomed and cared for (well cared for, modern and very good). Most of the respondents, 73 percent of Mlambe hospital say the health personnel are well groomed and 20 percent are neutral while 4 percent view them as bad. The respondents, 74

percent of the patients at Malamulo mission hospital are of the view that the health personnel are well groomed while 17 percent are neutral and 7 percent say its bad.

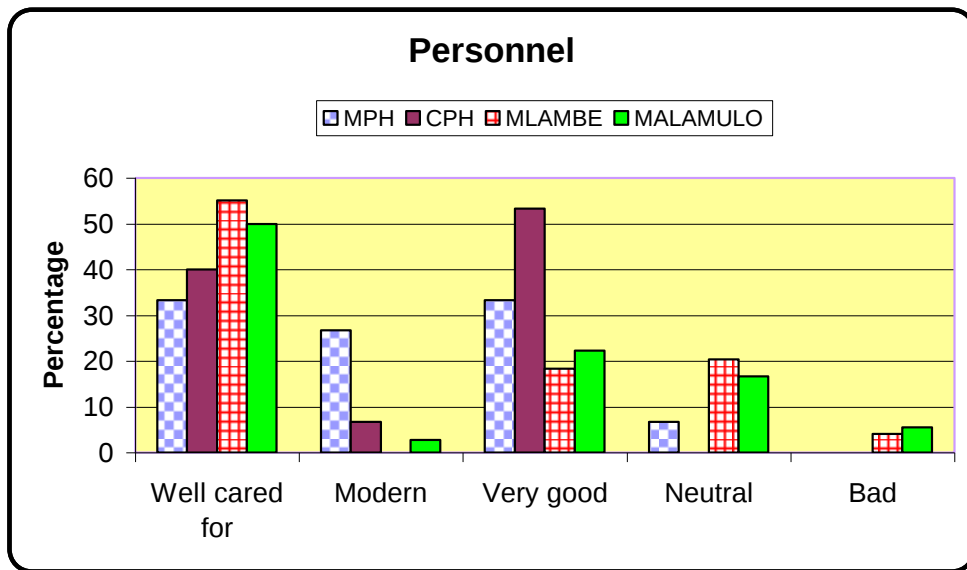


Figure 4-4 Personnel Appearances

4.3.3 Equipment

Most respondents, 73 percent, indicate that Mwaiwathu private hospital has modern equipment that is abundant in supply while 27 percent are neutral. At Chitawira private hospital about 53 percent of the respondents indicate that the hospital equipment used is very good and 40 percent state that it is abundant in supply and is modern while 7 percent are neutral. At Mlambe mission hospital, 71 percent of the respondents reveals that the institution has modern equipment and which is abundant in supply while 18 percent are neutral and 10 percent indicate that situation of equipment in the hospital is bad. Many respondents at Malamulo mission hospital, 58 percent, reveal that the entity has modern equipment and is abundant in supply, 25 percent are neutral and 17 percent indicate that situation of equipment in the hospital is bad.

4.3.4 Reliability

Figure 4-5 presents findings on reliability per institution. About 47 percent of the patients mentioned that when they visit Mwaiwathu private hospital, it takes minutes before medical practitioners attend to them, and 33 percent say they take hours before they are attended to. An assessment made on the reliability of Chitawira private hospital in providing services dependably was rated 80 percent by the respondents. They perceive that they are attended to within minutes of reporting to the facility when affected by various ailments whereas 20 percent stated that it takes hours to be assisted when they report to this facility.

At Mlambe mission hospital only 35 percent of the respondents revealed that they receive attention from health workers within minutes of arrival and 59 percent indicate that they receive medical attention within hours. Malamulo mission hospital reliability assessment exposed that 39 percent of the respondents indicated being attended to within minutes whenever they report to the facility while 36 percent reported that they are attended to within hours. Nevertheless, 11 percent of the respondents reported that being attended within days.

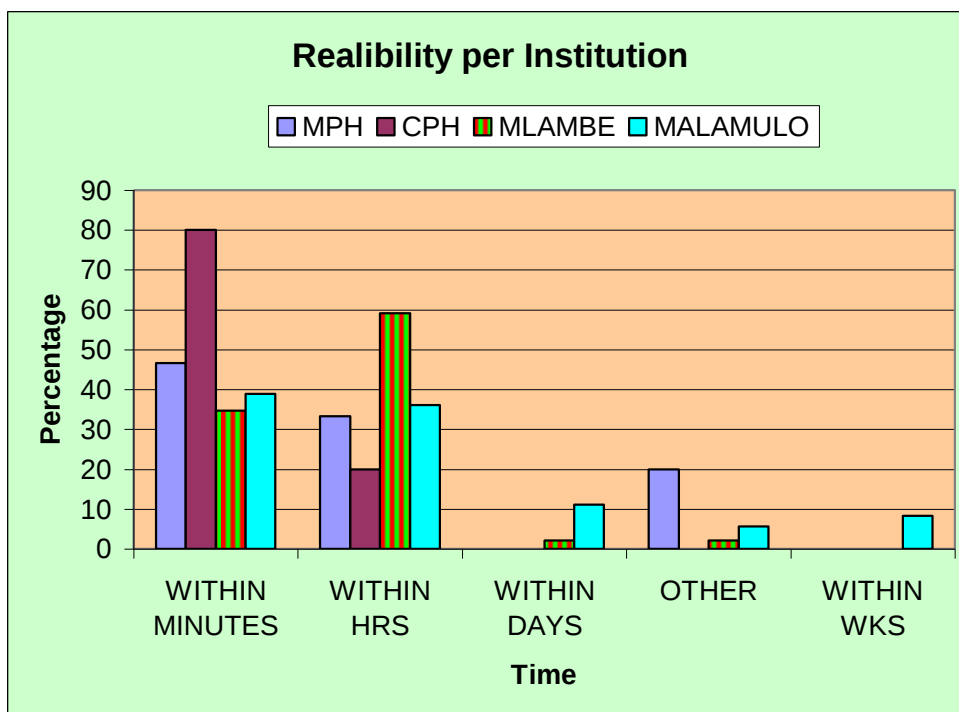


Figure 4-5 Reliability per Institution

4.4 Quality of Service

The following are the patients' perceptions of the ability of the hospital to perform the promised services dependably and accurately. The following aspects were used: competency of personnel, number of people visiting the hospital, behaviour of personnel, type of services offered responsiveness, and empathy.

4.4.1 Competency of Personnel

Competency of personnel per institution is presented in figure 4-6 below. It show that 80 percent of the respondents rated competency of the health personnel at Mwaiwathu Private Hospital as good, (67 percent good and 13 percent very good), while 20 percent respondents stated it to be bad. 93 percent of the respondents at Chitawira private hospital show that the health personnel at the institution demonstrate competency, thus 20 percent

very good and 73 percent view it as good. 7 percent were neutral in their response. Only 57 percent of the respondents at Mlambe mission hospital however pointed out that the health personnel providing health care services are competent, 30 percent were neutral and 10 percent indicated that the competency is bad. Two thirds (66 percent) of the respondents pointed out that the health personnel providing health care services at Malamulo mission hospital are competent, 22 percent were neutral and 10 percent indicated that the competency is bad.

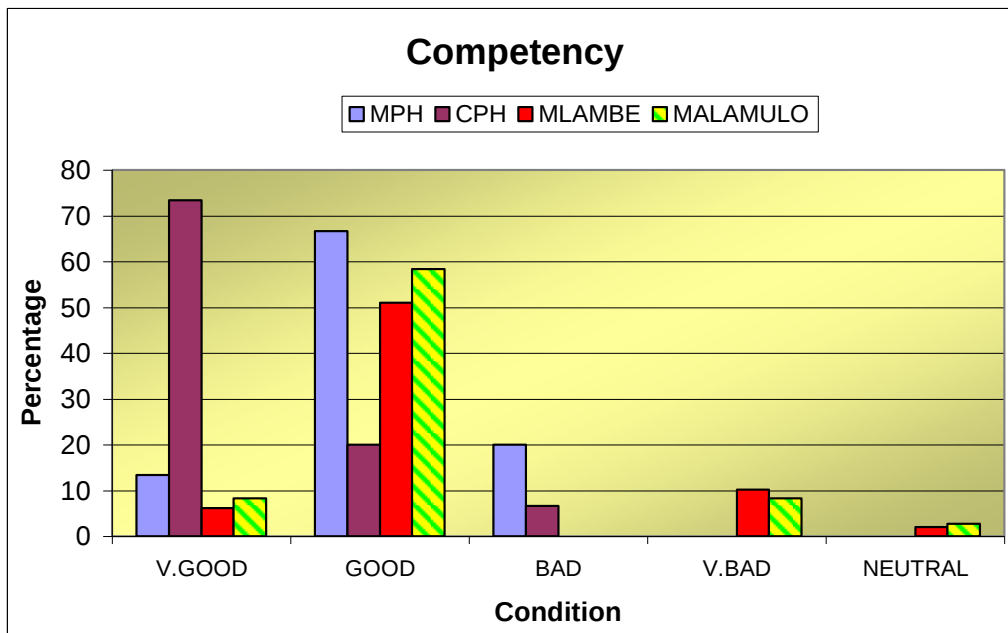


Figure 4-6 Competency of Personnel per Institution

4.4.2 Number of Visits

Over 60 percent of the respondents at Mwaiwathu private hospital indicate that the number of people who visit the hospital is good and 20 percent say it is bad as shown in figure 7 below presenting number of visits per institution. On the number of patients that visit Chitawira private hospital, 73 percent of the respondents were of the opinion that the hospital is well patronised. About 63 percent of the respondents indicate that the number of people or patients who visit Mlambe mission hospital is good, ten percent were bad.

Most of the respondents, 82 percent indicated that the number of people or patients who visit Malamulo mission hospital is good and four percent said it is bad.

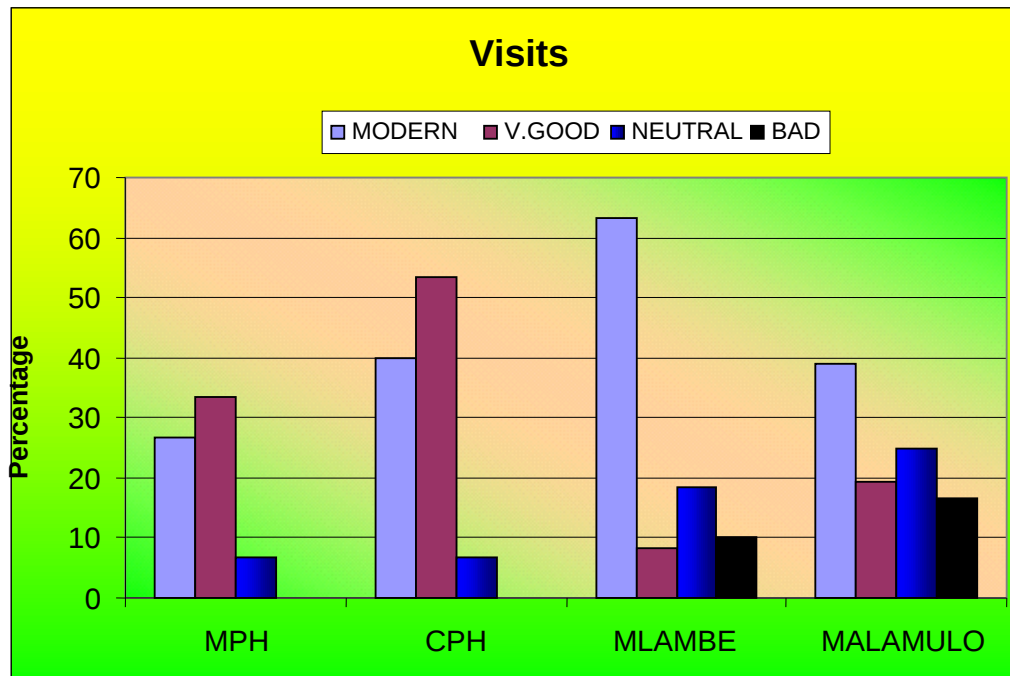


Figure 4-7 Number of Visits per Institution

4.4.3 Behaviour of Health Personnel

With regard to the behaviour of health personnel, 87 percent of the patients perceive the health personnel's behaviour of Mwaiwathu private hospital to be good, (thus very good plus good) while 7 percent were bad and 6 percent never responded. As shown in figure 4-8 presenting the behaviour of health personnel per institution, 80 percent of respondents viewed the behaviour of health personnel at Chitawira private hospital as good (thus very good plus good) while 20 percent observe it as bad. At Mlambe mission hospital, 53 percent of the patients perceive the behaviour of health workers as good while 35 percent were of the view that it as bad and about 10 percent perceive it as very bad. The behaviour of health personnel at Malamulo mission hospital was perceived by 58 percent as good while 30 percent think it is bad and 4 percent perceive the behaviour to be very bad.

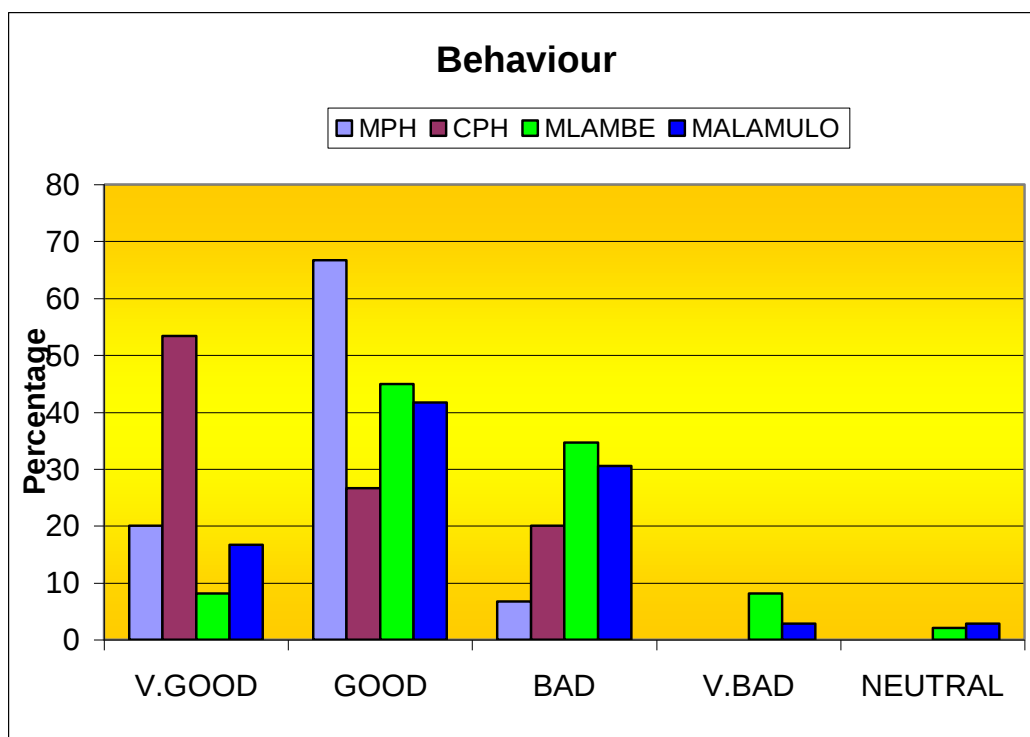


Figure 4-8 Behaviour of Health Personnel per Institution

4.4.4 Type of Services

The patients' rate 93 percent the types of services offered by Mwaiwathu private hospital as good and 7 percent of the patients never responded. On type of services offered at Chitawira private hospital, 80 percent of the respondents point out that the services are good and 20 percent are neutral. While the type of health services offered at the Mlambe mission hospital are rated good by 81 percent of the respondents, neutral by 12 percent and bad by 2 percent. The type of health services offered at Malamulo mission hospital are rated good by 83 percent of the respondents, bad by three percent of the patients and 11 percent were neutral.

4.4.5 Responsiveness

Figure 4-9 shows responsiveness per institution level. Responsiveness of the health personnel towards patients was perceived as very good by 60 percent of the respondents

at Mwaiwathu private hospital while 20 percent rated it good. At Chitawira, 93 percent perceive that the responsiveness of the health personnel is good (thus very good and good) and 7 percent view it as bad. Responsiveness of the health personnel towards patients was perceived good by 53 percent while 12 percent of the respondents at Mlambe were of the opinion that it is bad (thus bad plus very bad) whereas 33 percent of the patients were neutral. Responsiveness of the health personnel towards patients was perceived good by 58 percent of the respondents at Malamulo mission hospital and 13 percent of the respondents were of the opinion that responsiveness is very bad at the same time as 17 percent were neutral.

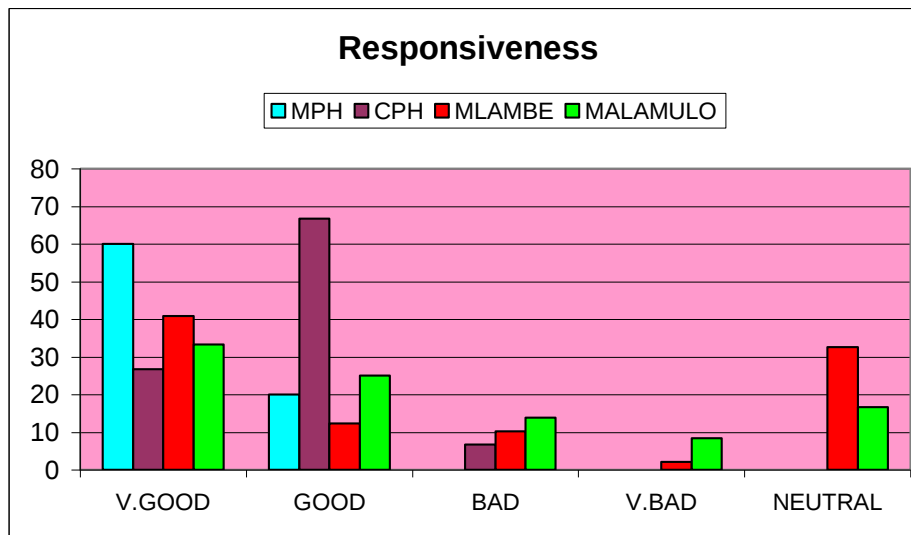


Figure 4-9 Responsiveness of Institutions

4.4.6 Empathy

Findings on Empathy are presented in figure 4-10. Patient's responses demonstrate that the health personnel (86 percent) that provide health services at Mwaiwathu private hospital have empathy. This, (86 percent) was the same at Mlambe mission hospital while ten percent of patients at this institution were neutral. At Malamulo mission hospital, 92 percent, of the patient's responses demonstrate that the health personnel that provide health services to them at express empathy while six percent of patients reported

the contrary. Respondents at Chitawira private hospital however indicated 100 percent satisfaction on empathy.

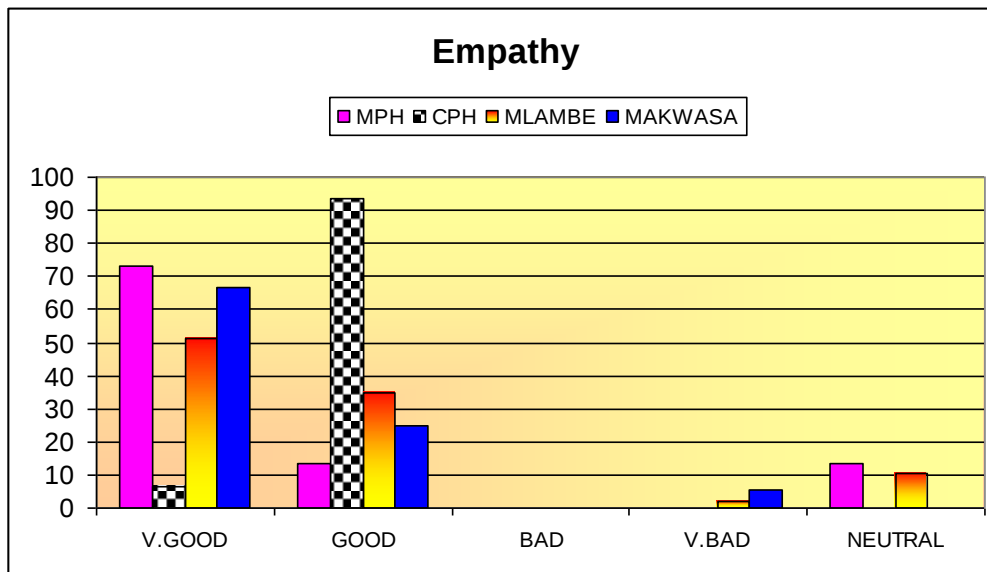


Figure 4-10 Empathy per Hospital Level

4.4.7 Summary on Quality of Service

Figure 4-11 provide summarised findings from the four institutions under study and categorised into CHAM and Private Hospitals. The results indicate that private hospitals rank higher in all categories of competency, behaviour of health personnel, empathy and quality of care provide than CHAM institutions. The results further reveals that despite the above, the number of visits to CHAM is higher than that of private hospitals.

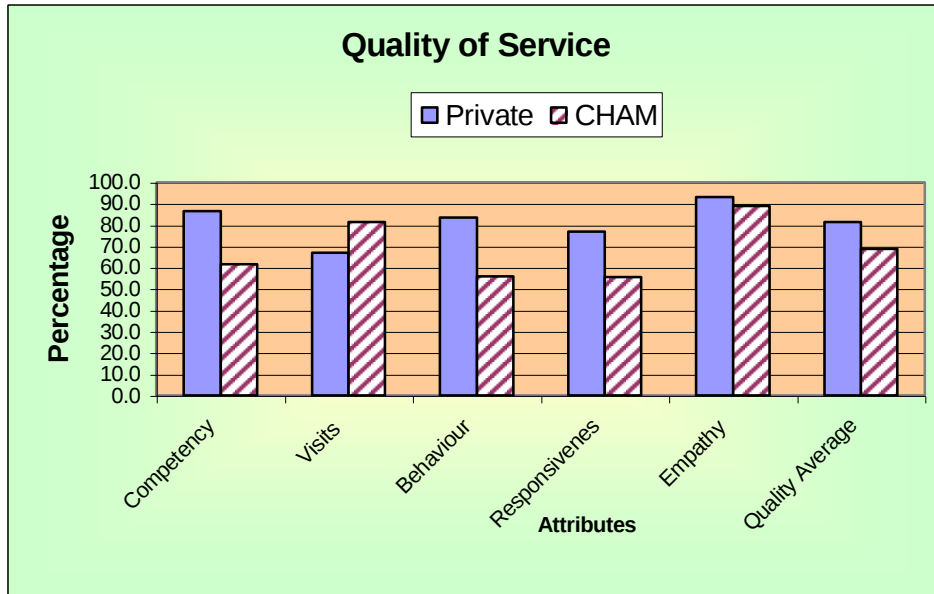


Figure 4-11 Quality of Service in CHAM and Private Hospitals

4.5 Overall Impression

The respondents were asked open-ended questions whose objectives were to elicit more information about factors that affect the health care system. The first question wanted the patients to give their impressions of all aspects of the hospital. The second one wanted the patients to explain their experiences in terms of services offered.

The results obtained from the two questions were analysed and coded. After coding, the first question produced nine categories: those patients whose perception had no problem with all aspects of the hospital were coded good, those patients who perceived services as going down were coded services going down, some codes are self explanatory and these include, bad behaviour of staff, shortage of staff, shortage of equipment, some patients considered the pricing of services of the hospital as being on the higher side, were coded as expensive, for those patients that answered the questions but did not provide relevant information were coded as not valid, and those patients who perceived

that the hospital does not provide them security around the hospital , were coded as no security.

The second question also produced nine categories that include: good, the patients that found that their expectations of the service were not met by the facility were coded as unsatisfactory. Other categories that were also mentioned were such as shortage of staff, lack of equipment, shortage of drugs, not valid, not answered, expensive. Patients that perceived that the services were not offered in time to patients when they visit the facilities, were coded as, delay in attending to patients.

The following paragraphs present responses to the two questions as coded above.

4.5.1 Generally Good

The respondents from Mwaiwathu private hospital, 7%, perceive the health care services offered as good, while 80 percent of respondents from Chitawira private hospital perceive the health care services to be good as well. The respondents from Chitawira private hospital cited good communication that exists between the health providers and themselves as one of the reasons while adequate variety of drugs was the other reason for rating this hospital as good in providing health care. Mlambe mission hospital respondents 25 percent indicated that their impression of all aspects of the hospital is good citing that the facility offers better services than government hospitals. As for Malamulo mission hospital, 42 percent of the respondents say that all aspects of this facility are good.

4.5.2 Standards Deteriorating

The patients (67 percent) at Mwaiwathu private hospital indicate that the services are going down with 47 percent of them citing that the facility is under staffed and the few workers available over-work, consequently it takes long to be reviewed by practitioners when one visits the facility with various ailments. Six percent of the respondents indicated that the facility has inadequate modern equipment that is why it keeps referring

patients for foreign treatment. Another 20 percent perceive that the hospital has an expensive billing system while 13 percent of respondents indicated that the facility delays in attending to critically ill patients particularly in the emergency section. Delays in honouring appointments made by patients were another experience noted by the respondents. In the case of Chitawira private hospital, only 13 percent of the respondents mentioned that they are dissatisfied and the main reason mentioned is shortage of staff and high staff turn over of health personnel.

Respondents (31 percent) at Mlambe mission hospital point out that health care service is going down because of poor management. An example was cited that Europeans used to manage the hospital very well. About 22 percent of the respondents cited several reasons that are causing services to go down. These include shortage of staff and equipment, shortage of doctors, for example there was one doctor available for so many patients to review. Furthermore, dirty surroundings, reliance on trainees to offer services to patients when they are inexperienced without proper supervision and reporting late for duties on part of staff, were amongst other reasons cited. A rather minor group of six percent say services are going down because of the bad behaviour of staff that do not treat nor communicate appropriately to the patients.

About 20 percent of the patients' at Malamulo mission hospital point out that service of the facility is going down. The respondents cited examples, as hospital uses incompetent trainees to do their practices on patients, and inadequate security. They mentioned that two mothers had their newborn babies stolen at the hospital by unknown people. Five percent indicated that services are going down because of shortage of staff.

4.5.3 General Experience

Most of the respondents of Mwaiwathu private hospital (60 percent) mentioned that they enjoy pleasant experiences of services they receive from the hospital while 20 percent indicated that the facility produces exorbitant hospital bills on discharge. Kenya was cited as an example that has a more advanced health care system than this hospital and

yet its billing system is reasonable. While 67 percent of the respondents expressed that their experiences with Chitawira hospital are generally good because health providers give adequate attention to their patients as a result; the patients mentioned that they personally refer their colleagues to this facility. Another reason given for the good experience is that immunosuppressed patients are given superior quality of services. However, 20 percent of the respondents expressed dissatisfaction. The main reason given for this experience was that some health providers are rude to patients particularly when they report to the facility during odd hours. Some patients mentioned that their dissatisfaction was in the over prescribing of drugs. Understaffing was cited by 13% of the respondents as another reason.

The respondents (37 percent) of Mlambe mission hospital show that they have good experiences of all aspects of the hospital they cite that they are offered better services than in the government hospitals. A number of respondents, 29 percent, remarked that services offered by Mlambe mission hospital have not been satisfactory. They cited the following as reasons: expensive hospital bills for services rendered, poor communication between the health providers and the patients, low motivation of health workers, qualified health workers are reluctant to use their skills and inadequate resources. Eight percent of the respondents say Mlambe mission hospital has inadequate hospital equipment and two percent say inadequate drugs. Ten percent of the respondents declare that Mlambe mission hospital is under staffed and as a result have a high tendency of using trainees. The experiences of 31 percent of the respondents reveal that the services offered by Malamulo mission hospital are good because they normally stock most of the drugs needed by the patients. They attribute this sufficient stock of drugs to appropriate use of money paid by patients which they think is unlike in government hospitals. However, 14 percent pointed out that their experience is that they have not been satisfied by the services offered. Reasons cited for the cause of dissatisfaction includes expensive pricing of health services that is prohibitive of the rural poor to benefit from their health services, 17 percent expressed this concern and that health workers take a long time before they attend to a patient when he/she reports to the facility.

4.6 Key Respondents

In order to elicit more information about the real nature of the problem under study, the key informants were asked open-ended questions covering the following areas; opinion of the health care system in Malawi, factors that need to be considered in order to attract health personnel into the health work force, factors that can improve the health indicators of Malawi, description of major factors that affect the health care system, description of the behaviour of the health personnel, description of their motivation and if the available material resources allows them to work the way they were trained. The responses of the key informants are categorised into entities, practitioners and facilities.

4.6.1 Entities

Key respondents were asked through an open-ended question to explain if the available material resources allowed them to provide their services the way they were trained to. Findings illustrate that 75 percent of the respondents perceive that they have limited supplies of material resources due to lack of funds and that most of their equipment is outdated, while 25 percent say that they have almost all the necessary equipment that they need to provide their health services.

Figure 4-12 illustrate the availability of material resources in the healthcare system. The same coding of above average, meaning material resources in the facilities was modern and abundant in supply, average, implying the resources they are adequate, old and well maintained and below average implying the material resources are not available, low in supply and are out of order, cannot be maintained due to lack of funds.

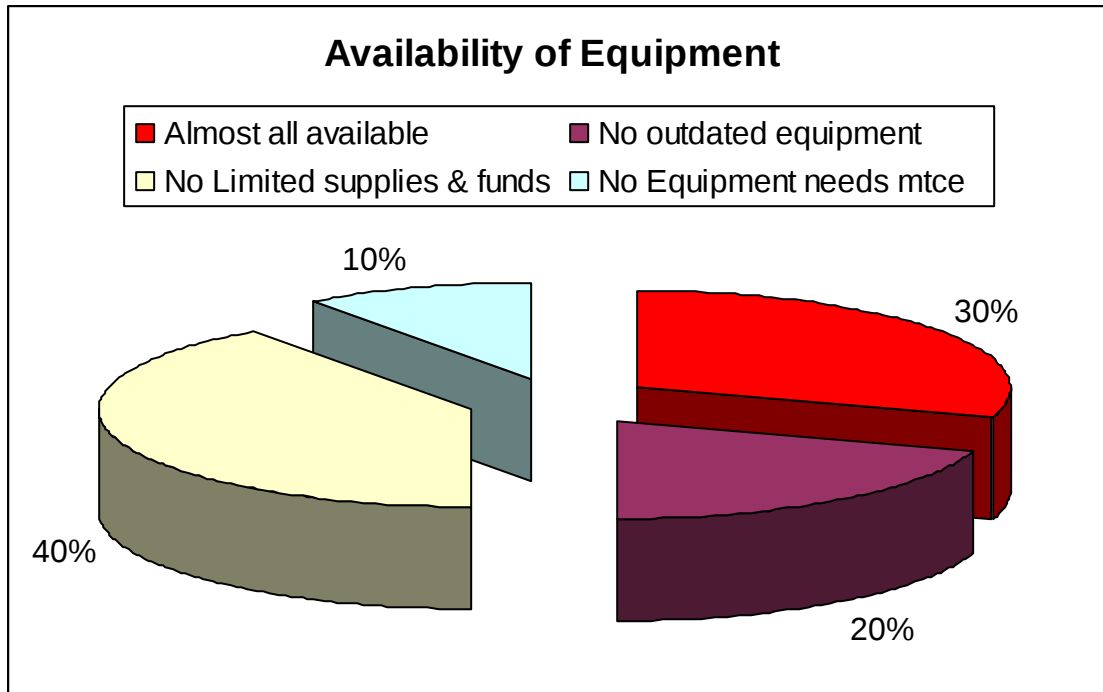


Figure 4-12 **Availability of Equipment in the Healthcare System**

4.6.2 *Factors that are Affecting the Health Care System*

In an open ended question in establishing major factors that are affecting the health care system, lack of resources was cited 30 percent of the time as a reason, inadequate funding 6.7 percent poor infrastructure 6.7 percent, poor capacity building 3.3 percent and salaries for health workers was 19 percent while 15percent was attributed to lack of adequate health personnel in the facilities. HIV/AIDS, which is reducing the number of health personnel through death, therefore affecting the quality of care provided in hospitals, was cited by 10 percent. Looking at the figures above lack of resources is coming to 43.4 percent as presented in figure: 4-13 considering that inadequate funding and poor infrastructure are all caused by lack of resources. Poor capacity building and lack of adequate personnel are giving us in the graph below 20 percent.

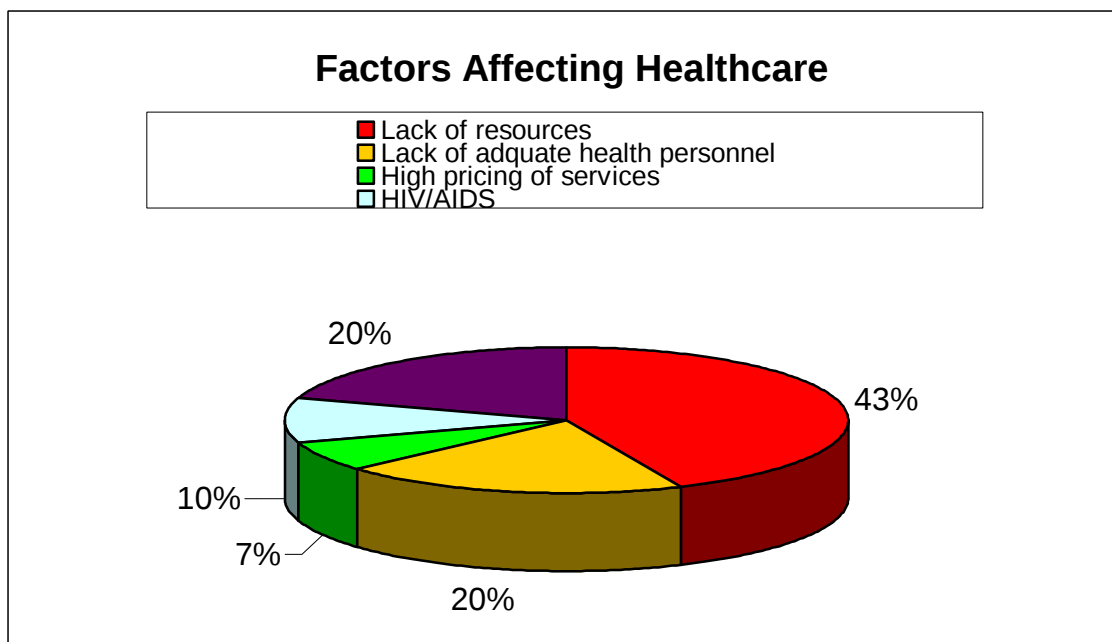


Figure 4-13 Factors Affecting the Healthcare System

4.6.3 Practitioners

4.6.3.1 To Attract more Staff into the Health Work Force

Respondents were asked an open-ended question that aimed at finding out what will attract more staff into the health work force of Malawi. Refer to figure 4-14 that show what would attract health workers in Malawi. Each respondent gave a number of reasons. Better salaries were cited 36 percent of the time that it can attract more staff, while better working conditions was at 28 percent. Capacity building and better career prospects scored 24 percent and 12 percent respectively as factors that can attract more staff into the health workforce of Malawi.

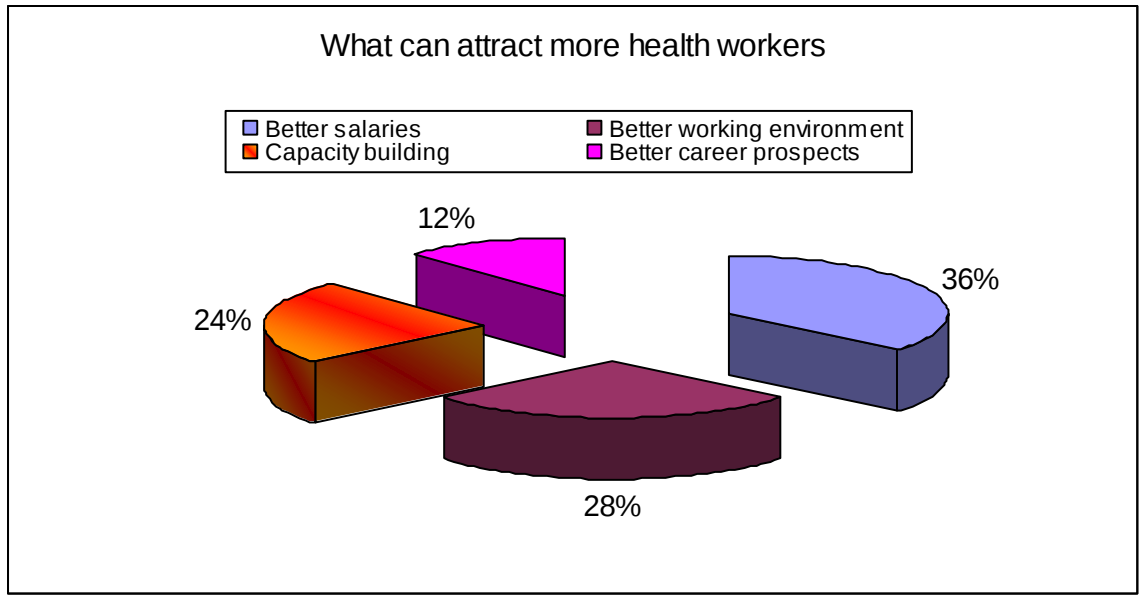


Figure 4-14 Attractions for Health Workers

4.6.3.2. Behaviour of the Health Personnel

Respondents were asked in an open-ended question to describe the behaviour of the health personnel in their institutions. In their response, respondents answered this question with reference to the nurses and not to all the health personnel. About 60 percent of the respondents indicated that the behaviour of their health personnel is good, 20 percent indicated that the old nurses are more responsible and professional in handling patients and another 20 percent say that nurses that have just graduated from various nursing schools have a poor attitude towards their work.

4.6.3.3 Motivation of the Health Personnel

Just above 44 percent of the key respondents cited poor career prospects, delays in addressing concerns of health personnel, poor change management techniques, poor employment strategies by management, (whereby emphasis is on employing support staff as opposed to key staff) as negatively affecting motivation of health personnel. However, there was a 33 percent indication that the motivation of health workers is good. The reasons cited for this were: provision of accommodation that has good security (burglar

bars), removal of restrictions for health workers to use their off duty days for part-time duties in order to cover the shortages and the offering of best employee awards on yearly basis in hospital department.

4.6.3.4 Factors that can Improve the Health Indicators of Malawi

Findings of factors that can improve health indicators in Malawi according to the key respondents are presented in figure 4-15. These show that 44 percent of the respondents point out that increasing the number of health workers of all cadres will improve the health indicators of Malawi, 25 percent say provision of better facilities will do and 19 percent show that the accessibility of material resources will improve the poor health indicators.

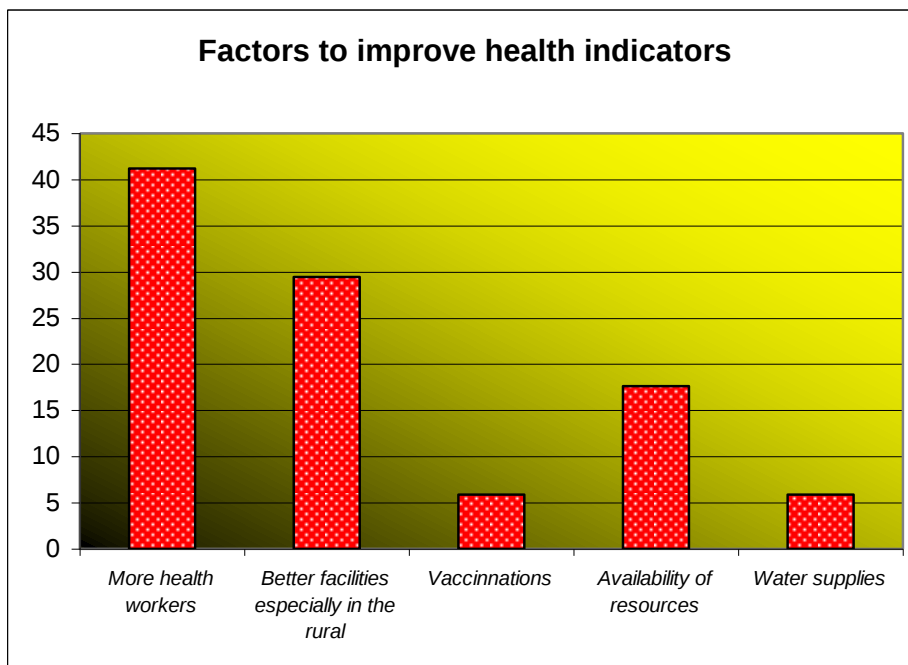


Figure 4-15 Factors that can Improve the Health Indicators

4.7 Brain Drain

Brain drain was also assessed using the same coding of *average*, meaning that not so many health personnel leave the facility, while *above average*, meaning that a great number of personnel leave the hospital and *below average*, meaning minimum number leave. Figure 4-16 illustrate the findings on how key respondents view brain drain in the three categories of health provision.

Respondents (57 percent) show that brain drain in mission hospitals is average, reasons given being that administration is always top down and lack of on the job training. The rest, 43 percent, point out that brain drain is above average because of poor salaries, and lack of career prospects. Brain drain is reported by 86 percent of the respondents as above average in the government hospitals and major contributing factors cited are low salaries and poor loan access for health workers and 14 percent of the respondents say brain drain in government is below average. In the case of private hospitals, 71 percent of the respondents testify that brain drain is average in private hospitals mainly for the reason that they offer their health workers better pay. For the same private hospitals, 14 percent of the respondents feel that brain drain is above average, and another 14 percent are not sure of the status.

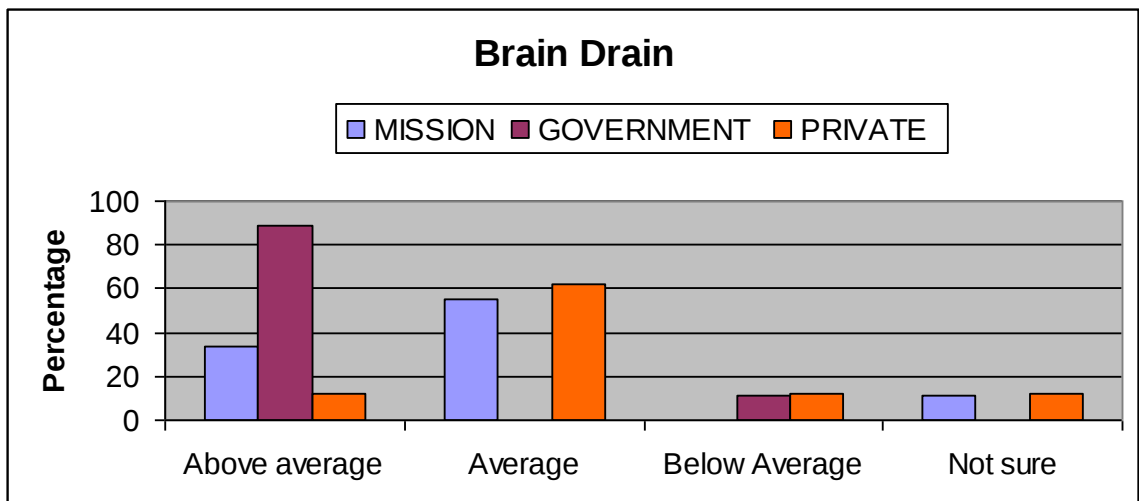


Figure 4-16 Brain Drain per Institution Level

4.8 Facilities and Services Offered

Respondents were asked to provide their opinion of the quality of care of the health care system in Malawi in terms of mission , government and private hospitals, and to categorise their responses to either *average*, meaning the facility is able to meet the consumer's minimal standards of good patient care, *above average*, meaning the health facility is able to provide high quality services beyond the customers expectations and *below average*, meaning the facility is unable to provide minimal acceptable standards of patient care to its consumers. These findings are presented on figure 4-17.

The findings indicate that 71 percent were of the view that the quality of health care services in the mission hospitals is average. The reasons given for the grading were that they have adequate equipment though not modern and adequate drugs. Whereas 14 percent indicate that the mission hospitals are above average because in most cases, they take minimal time to review patients upon reporting to the hospital and that they view capacity building is a priority. Nevertheless, 15 percent are neutral. For the government, 71 percent of the respondents point out that the quality of services in these hospital s it is below average and the reasons cited for this state include, low salaries for health personnel, health workers are reported to concentrating on workshops, number of patients usually greater than the number of health personnel, poor motivation, inadequate uniform kits, lack of protective materials for the health workers, poor patient relationship due to high workload, poor communication between health workers as a result , poor patient care shortage of drugs and equipment, and poor monitoring of patients. Some respondents (28 percent) say that the quality of services is average in the government hospitals because of shortage of staff and inadequate medical resources.

Findings on private hospitals show that the quality of services in these facilities as indicated by 43 percent of the respondents is above average. Respondents perceive the quality of services to be above average because private hospitals are business oriented and they concentrate on productivity in order to beat competition. However, 28 percent say that the quality of services is average because these facilities are reported to over

prescribe drugs to their patients in order to satisfy them, their health workers work under panic and they are average because they have adequate medical resources.

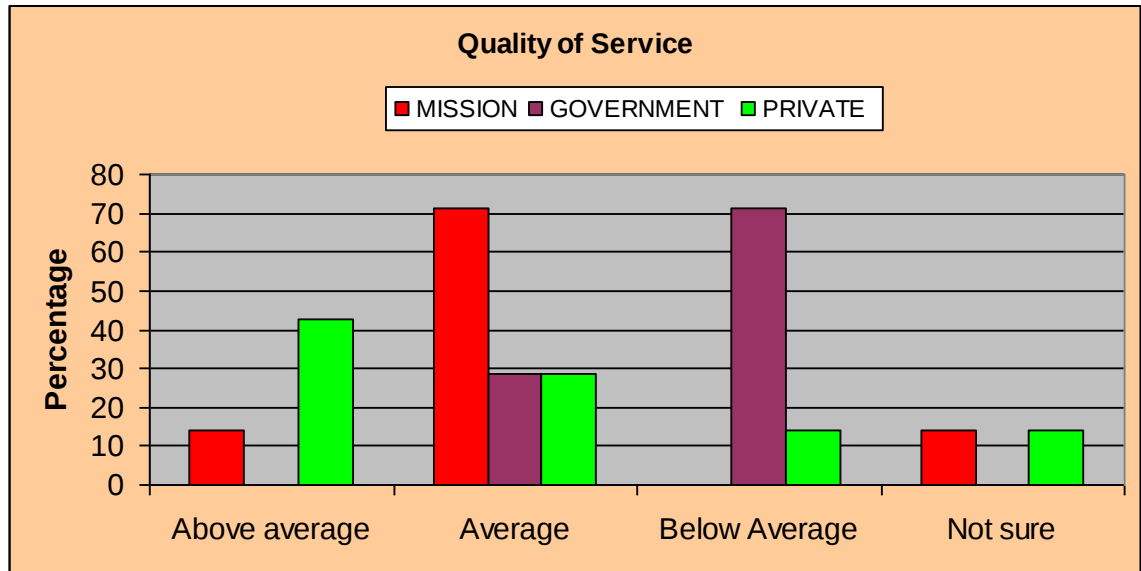


Figure 4-17 Quality of Service per Institution

The key respondents were requested to evaluate on the level of material resources from the three categories of government hospitals, CHAM and private hospitals. The findings of these material resources are presented in figure 4-18.

The results show that 57 percent of the respondents viewed the availability of material resources in mission hospitals as average and 28 percent say thought it was below average. This is they say is because health facilities are located in rural areas and are therefore disadvantaged in that most people are unable to pay for the medical services rendered to them. This forces the facility ending up giving its services free and suffers the consequences. However, 14 percent felt that material resources from mission hospitals are above average.

As for Government hospitals, 86 percent of the respondents reveal that availability of material resources in is below average due to poor usage of funds allocated to this ministry of health. In favour of private institutions, 57 percent of the respondents report

that material resources are above average while 29 percent say that are average and 14 percent are not sure, implying they do not know.

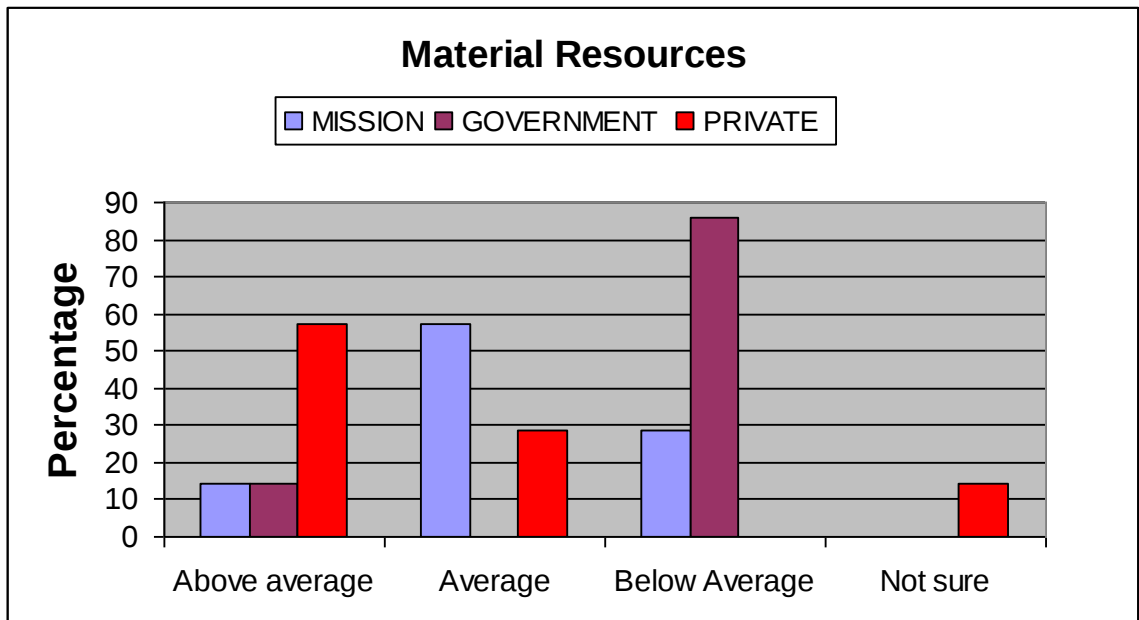


Figure 4-18 Material Resources per Institution

4.9 Statistics from the Institutions

The institutions were requested to provide statistics on the number of health personnel per certain categories, number of beds, and number of patients visiting the institutions. The results are presented in Table: 4-1. These results were used to compute three ratios, namely health staff/bed ratio, patient / doctor ratio and patient per health staff ratio.

Table 4-1 Information from Institutions

INFORMATION FROM INSTITUTIONS				
	Chitawira	Mwaiwathu	Mlambe	Malamulo
<i>Category of personnel and quantity</i>				
<i>Doctors</i>	1	6	3	4
<i>Clinical Officers / Medical Assistants</i>	1	0	4	13
<i>Enrolled Nurses</i>	6	52	39	39
<i>Registered Nurses</i>	1	12	2	3
<i>Radiology Technicians</i>	1	4	2	2
<i>Laboratory technicians</i>	2	8	2	8
<i>Dentists</i>	0	0	0	1
<i>Dental Therapist</i>	1	0	1	0
<i>Specialists</i>	0	3	0	2
Total	13	85	53	72
Number of patients/Month	274	1155	1200	2500
Number of beds per facility	19	64	254	300

4.9.1 Health Staff / Bed Ratio

Findings for Health staff/bed ratio are presented in figure 4-19. This ratio analyses the relationship between health personnel and number of available beds for in patients. It reveals the average number of health personnel that can attend to an in patient. The findings show that on average Mwaiwathu private hospital has a greater number of health personnel to attend to an inpatient at just above 1.2 per inpatient. Chitawira private hospital is the second best with about with about 0.7 health staff per bed. Both Mlambe mission hospital and Malamulo mission hospital trails the group at 0.2 health staff per bed.

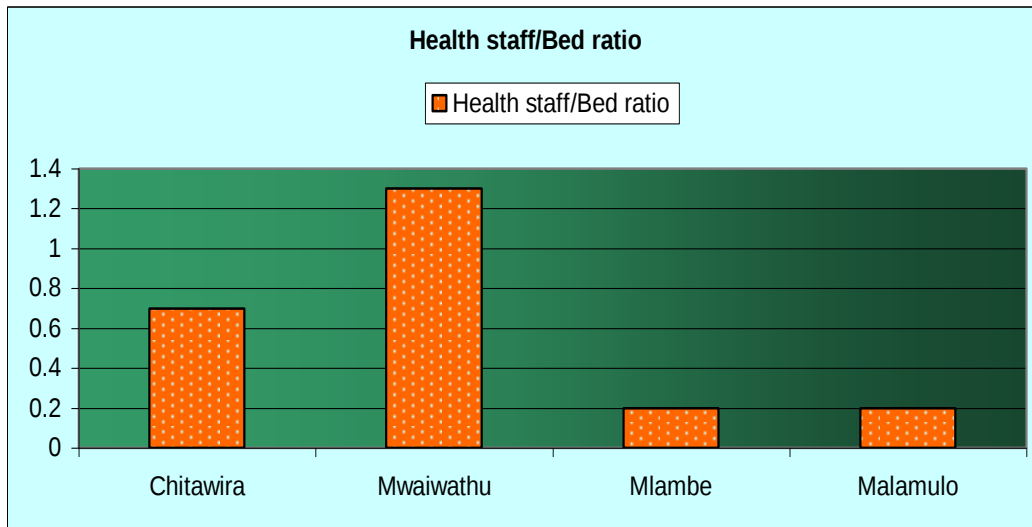


Figure 4-19 The Number of Health Personnel per Bed

4.9.2 Patient Doctor Ratio

Figure 4-20 presents the findings from the institutions on the number of patients per qualified doctor per month. The results show that on average a doctor at Malamulo mission hospital attends to more patients (above 600) per month than rest of the institution. This is seconded by Mlambe mission hospital at just above 400 patients per doctor. The private hospital doctors relatively attend to fewer patients at above 270 for Chitawira private hospital and just below 200 patients per doctor per month for Mwaiwathu private hospital.

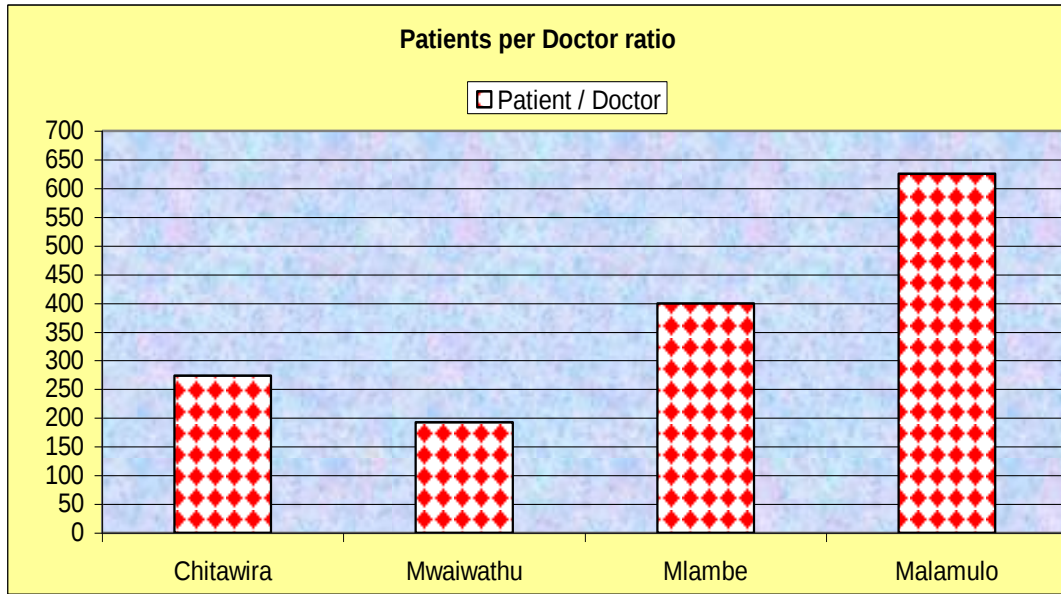


Figure 4-20 Patient Doctor Ratio

4.9.3. Patients per Health / Staff Ratio

Figure 4-21 presents findings from the institutions on the ratio of patients visiting the institution against number of available health staff. It depicts on average how many health personnel are available to attend to patients. These findings show that at Malamulo mission hospital one health personnel attends to 35 patients per month on average while Mlambe mission hospital and Chitawira private hospital just above 20 patients per personnel per month. Mwaiwathu private hospital personnel attend to smallest number of patients per month of about 14 according to these findings.

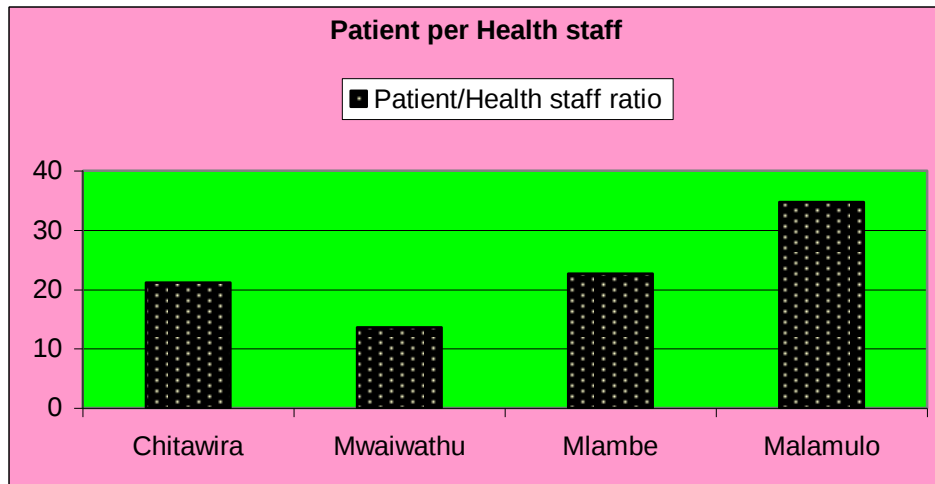


Figure 4-21 Patient per Health Staff Ratio

4.10 Chapter Summary

This chapter was presenting the findings of data that was collected from 115 respondents and 11 key informants. Findings from the following areas are presented in detail: characteristic of sample, tangibles, quality of service, overall impression of the respondents and information from the key respondents.

Chapter Five

5.0 Discussions of Findings

5.1 Introduction

This discusses the data analyzed in chapter four in three broad categories. Firstly it will look at the number of health personnel, secondly, the quantity of health resources and thirdly the quality of health care service delivery in the health facilities.

5.2 Number of Health Personnel

As presented in the findings on Table4-1, Figures 4-19, 20 and 21, the number of health personnel in most institutions is not adequate. As shown on figure 4-21, the graph shows that MPH and CPH have the smallest number of patients to health personnel while Mlambe mission hospital has the larger and Malamulo mission hospital has the largest number of patients to a health worker.

The findings on reliability per institution presented in figure:4-5 show that more patients are reviewed within minutes at private hospitals whereas at mission hospitals they are reviewed within hours, due to lack of adequate personnel. The same graph shows that some patients are even reviewed within days or even weeks at Malamulo mission hospital. This institution however, has the largest number of patients' doctor ratio, patients / health staff ratio and lowest Health staff/bed ratio. This shows that the impact of having a reasonable number of patients per health personnel affects the quality of care offered. These negative experiences that service consumers undergo causes dissatisfaction because their expectations are not met. While for the few health personnel available, the work load per individual is heavy particularly, in mission hospitals and this leaves these personnel exhausted both physically and emotionally.

Emotional exhaustion could come in because of personnel's reflection on poor pay versus workload. Consequently, the direct impact on the institutions could be increased absenteeism and complaints by clients of poor communication by the health personnel, to mention a few.

The results have established that respondents perceive that the behavior of health personnel in mission hospitals is bad. Probably this could be explained by the fact that the few health personnel available in these institutions experience burn out. In other words, this could also demonstrate that there is minimal support, encouragement, motivation and supervision of these few personnel available. This corresponds with (Dieleman 2003) who points out that motivation is influenced by both financial and non financial incentives. However, the private hospitals have the smallest numbers of patients to health personnel and it's observed that there are no major complaints as observed in the mission settings. This explains more about the working environment that it is less stressful and that the personnel have the ability to offer the best quality of services. Figure: 19 demonstrate the health staff / bed ratio, representing a healthy working environment in the private hospitals.

However, the results established that the newly trained nurses have poor attitude towards patients. It is pertinent to examine the reasons for this difference. The older nurses' motivation is likely from some of these factors: responsibility, recognition, salary and training, while the newly qualified nurses' demotivation could be from poor support and feed back from superiors, lack of appreciation by managers, and difficult working conditions. The key informants' observations confirm this observation too. Furthermore, poor communication between Management and the health personnel, delays in addressing concerns raised by health workers and poor change management techniques by management are some of the major de-motivating factors as cited in the findings. These factors, have impact on the health care system, in that, the health institutions where such factors are dominant, experience "indirect wastage" and then later on, they experience "direct wastage" through emigration of health personnel to industrialised countries.

It is observed that removal of off duty restriction on nurses is motivation (maybe strategy of controlling direct wastage) but this leads to fatigue and affirms need for more money by this cadre. While in the same vein, it is not surprising then that health workers are constantly concentrating on workshops, indicating need for cash.

What is coming out clearly is that an environment that is less stressful is able to tap and utilize the potential of its personnel. This is evidenced by findings on responsiveness of both the private and mission hospitals as presented by figure 4-9, that shows responsiveness per institution level. The low patient /doctor ratio of private hospitals shows that health personnel in these institutions have adequate time to listen to the concerns and needs of their patients. This indicates that health personnel assist their consumers with the respect they deserve, while observing high service standards, thus meeting minimum expectations of their clients. However some hospitals where they have training students, the study results show that these have become a source of dissatisfaction to customers mainly because they were allowed to attend to patients without maximum supervision.

The foregoing paragraphs indicate that the greater the number of personnel per patient the better the services offered and the more the personnel are positively affected and the more they release their potential. These findings significantly agree with Anand and Bearnighusen (2003) that quantity of health personnel significantly affects population health.

5.3 Quantity of Health Resources

Medical resources such as drugs, finances (are part of resources available to health services for them to operate) equipment, salaries, and other medical devices are essential infrastructure elements for the delivery of healthcare services. Figure 18 shows material resources as per institution i.e. mission, government and private hospitals the availability

of resources. It indicates that in the private hospitals, availability of resources is above average, mission average and in the government below average.

As per figure 4-18, it is coming out clearly that there is availability of resources in private hospitals. It is also noted in figure 4-17, that private hospitals offer high quality services. It is obvious therefore that resources allow private hospitals to provide health services that are of high quality to their consumers. This means the institutions invest into items like sufficient drugs, equipment and other medical devices that help them to provide services they were trained to provide. An important aspect that is coming out here is that the private institutions plough back into their medical business through investing into resources and salaries of their personnel. While in the same vein, such hospitals are also able to retain its personnel because of the ability of paying their human resources acceptably. In terms of the health personnel themselves, they are motivated to keep working in the private setting not only because of better salaries alone. Another contributing factor is availability of resources that enables them to enjoy providing their expertise as opposed to improvising equipment in order to provide a service.

Medical resources are reported to be average in the mission hospitals as evidenced by figure 4-18 that demonstrate mission, government and private institutions. These findings speak for themselves in terms of the services these institutions are able to provide to their clients in relation to the resources they have. It is noted that resources the mission s have comparing to private institutions do not match. More quality services is afforded in the private institutions while better quality in mission s than in government hospitals. This observation has an impact on the number of personnel these institutions can afford to employ, reliability of services that can be provided, and on growth of the institutions, in terms of investing.

Respondents indicated high pricing of services as one of the factors affecting the healthcare system. Examples of institutions given were Mwaithathu private hospital and Malamulo mission hospitals. These institutions are under private and mission hospitals. This observation shows that the health consumers of these institutions are willing to

utilise the health services being provided, but at the same time the cost is prohibitive. It implies that people going to Mwaiwathu private hospital most of them have better income and steady jobs than those going to Malamulo mission hospital. The direct impact is that it may end up causing some customers to resort to cheaper forms of health provision such as the traditional healers. Hence this can have a direct impact on the health indicators of the country, and can translate into high infant and maternal mortality rates. Another impact could be observed on the poor returns of the institutions because of high pricing of services, hence insufficient funds for hospital operations.

As per figure 4-18, material resources are below average in the government institutions and yet 60 percent of healthcare services of this country are provided by it. It is worth mentioning that the majority that access these institutions are the rural mass firstly because the services are for free and secondly because these institutions are readily available within their locations in the villages. While for most private hospital they have mushroomed in the urban areas and for mission hospitals they are equally available in the rural areas, but their services are chargeable.

The foregoing paragraphs strongly agree with Andaleeb and Simmond (1998) who report that resources are the most important factors constituting quality service. If providers of services have inadequate resources, consumers are the ones who usually suffer the consequences as per experience of Dailard (2003).

5.4 Quality of Health Care Services Offered

This study in line with the Servqual Model, measured quality as follows:

5.4.1 Physical Surrounding

As presented in Figure 4-3, the respondents view physical surroundings of Mlambe hospital as very good. This implies that there is an 18 percent gap between the perception of the hospitals clients' expectation and what is actually available on the ground. For Malamulo mission hospital, it is viewed as good. The gap between the expectation of the clients and what is available is 16 percent. This means that clients who visit Malamulo mission hospital are more satisfied with the physical surroundings than those that visit Mlambe mission hospital. The average of the two institutions is 83 percent satisfaction on physical surroundings. This gap is not alarming though it provides room for improvement.

In the private institution most of the respondents felt Mwaiwathu private hospital and Chitawira private hospitals have good physical environments and surroundings. This gives an average of 80 percent rating for these private institutions. Clients therefore view mission hospitals as having slightly better physical environments than the private hospitals. The results are explained by the fact that these mission hospitals were constructed by the missionaries around the 1960's. Considerable resources were invested in them and particular care was taken on the choice of their sites as opposed to the private that are being constructed in this time of economic hardships by individuals.

This high expectation for private institutions can be explained by the characteristics of the consumers of the services of these hospitals. The majority are individuals who have been through University education and have wide exposure of what good quality is all about.

5.4.2 Equipment

Consumers of services of Mlambe mission hospital and Malamulo mission hospital perceive that the availability of equipment for provision of various services at the hospitals is good at Mlambe mission hospital and low at Malamulo mission hospital.

Consequently, Mlambe mission hospital has a lesser gap and Malamulo mission hospital a bigger gap. Again, this shows that patient's expectations of the quantity of the hospital equipment are not satisfactory considering what the hospital has in supply. This gives the average rating of availability of equipment in the above hospitals as 65 percent. This gap is quite considerable than that of the physical surroundings.

In the private institutions, Mwaiwathu has a bigger gap and Chitawira has a lesser gap on equipment. This implies that respondents evaluate private hospitals as having sufficient equipment to provide adequate services compared to mission institutions. The findings further imply that patients' perceive Chitawira private hospital as having more equipment than Mwaiwathu private hospital. However, observations show that there is a variety of medical equipment at MPH than at CHP. The question as to why the patients have this view will be considered later. However what is apparent is that respondents view private hospitals as having more equipment than the CHAM institutions. The contributing factor in this higher percentage of equipment in the private hospital is the ploughing back of profits from the medical bills into the business by investing in sophisticated equipment in order to give quality service.

Respondents of CHAM institutions were neutral on equipment compared to the respondents of the Private institutions. This implies that either they do not understand the implications of lack of equipment in hospital settings or their background is hindering them from perceiving what constitutes good quality equipment in a hospital setting. What is coming out clear is that the CHAM institutions have high rate of neutral respondents than the private.

5.4.3 Appearance

Appearance of personnel was for the private sector rated good for Mwaiwathu Private Hospital while Chitawira was rated best. This implies that clients of Mwaiwathu perceive a gap in appearance of health personnel while those of Chitawira do not have any. In general, these results reveal that the health personnel who give health services at

the private hospitals are well groomed, smart and presentable than those in the CHAM institution.

5.4.4 Reliability

As presented on Figure 4-5, a small number of patients are attended to within minutes of their arrival at mission hospitals. However, a bigger number is the one that is attended to within an hour of their arrival at the same institutions. It is also worth noting a small number reported getting treatment within days while a very small number reported within weeks at Malamulo mission hospital. At Mlambe mission hospital, only a very small number reported going beyond a day. Mlambe mission hospital is therefore relatively slow in attending to patients than Malamulo mission hospital according to these findings.

The findings on private hospitals reveal that most patients at MPH receive attention within minutes of arrival to the hospital, while few patients receive attention within hours from arrival. At CPH, most of the time patients receive the required medical attention within minutes, while few perceive that they receive it within hours. According to these findings, Mwaiwathu Private Hospital is quite slow in attending to its patients than CPH in the private sector. It is interesting to note that health staff / bed ratio is high at MPH but patients are attended after considerable time. The results obtained on reliability under MPH and CPH show that CPH is more reliable in delivering timely services.

One could attribute this reliability to the size of CPH, and the number of patients that report to the number of health providers available to attend to the patients. On average, most of the patients in the private hospitals are offered services within minutes. These findings support the findings of Dovlo (2005) on “indirect wastage” which is mainly due to loss in output and productivity. It is reported that the loss in output is mainly due to health professionals’ misapplied skills, absenteeism, poor support and lack of supervision. If only few patients are attended to within minutes in these CHAM institutions, one can conclude that one of the reasons as observed by Devolves, (2005) could be responsible for the picture that is observed in the findings.

These findings support the patients' experiences that staff report late for duties in the morning and after lunch. These results indicate that the consumers of the services offered are dissatisfied and at the same time, that something must be wrong with the providers of the service. However, the results support the findings of Dieleman (2003) that show that staff motivation is influenced by both financial and non-financial factors. Figure 4-13 shows that poor pay and lack of adequate resources and many more are contributing factors to poor morale.

According to the Servqual Model, the foregoing paragraphs indicate that in these two CHAM hospitals, there is a bigger service delivery and external communication gap. It shows that the hospitals must have promised their consumers that their services are offered from a certain time in the morning up to lunch hour, then again after lunch to a certain period in the evening.

In the CHAM hospitals the patients perceive that services are offered within minutes. The results point out that the private hospitals are more reliable in delivering timely services than the CHAM hospitals.

5.4.5 Competency / Assurance and Visits

Findings show that respondents view that there are more competent staff at Malamulo mission hospital than at Mlambe mission hospital. Therefore they have a lesser gap between the competency displayed by their personnel and the level required by their clients. The visits to these institutions were viewed as for both these institutions. The findings from the private hospitals indicate that some of the respondents view the personnel at Mwaiwathu private hospital as competent. The findings further indicate that Chitawira private hospital is rated as having competent personnel by most of the respondents. The findings therefore give competency of these private hospitals as very good. Figure 4-7 demonstrates competency of personnel per institution and compare it to figure: 8 that shows number of visits per institution.

From the findings it is demonstrated that private institutions have more competent personnel than the mission hospitals. However the mission hospitals have more patients visiting them than the private hospitals. According to the Servqual Model, the type of gap being discussed in the above paragraphs is the service quality specifications and service delivery gap. This means that the guidelines such as, standing orders of how certain procedures should be carried out, may exist in the CHAM and private hospitals, but employees may not be willing or able to perform to the specified standards. Proper training of human resources for health is crucial for good health delivery as Ritta-Lissa, (2004) Buchan, (2004) Beaglehole and Dal Poz (2003) point out. According to the findings of literature reviewed competency gaps are closed by pre-service education, in service education and work experience. At the same time it is observed that competency of health providers is also affected by unavailability of drugs, equipment and lack of organizational support.

The frequency of visits paid to a particular hospital, says a lot about the people themselves and the facility itself. On average, most hospital visits by consumers are made to the CHAM facilities and some are made to the private hospitals. Looking at the characteristic sample of Mlambe mission hospital and Malamulo mission hospitals, these consumers have attained primary and secondary education, technical and university education. Their annual incomes are in the range of MK36, 000 to MK144, 000; consequently, they can afford to part with some money in order to acquire better health services. However, for patients that patronize the private hospitals, the characteristic sample shows that at MPH and CPH have attained primary, secondary education, technical and university education. These individuals, their annual earnings are in the ranges of MK 144,001 to MK600, 000.

5.4.6 Responsiveness and Empathy

As shown on Figure 4-9 on responsiveness of institutions and figure 10 on empathy per hospital level. Some respondents feel that the behavior of the personnel is good at Mlambe mission hospital and the same is felt by respondents of Malamulo mission

hospital. The types of services themselves are rated well by more of the respondents in the two institutions. This implies the respondents are quite happy with the type of services offered, as the gap is small. Responsiveness of Malamulo mission hospital and Mlambe mission hospital is good as well as on empathy.

As stated in the findings for the private hospitals, behavior of the health personnel at Mwaiwathu private hospital is perceived by most respondents to be good while Chitawira private hospital has the same rating. The types of services offered at this hospital are rated as good by majority of the respondents while Mwaiwathu private hospital the same too. Responsiveness of both these private hospital s is rated as good. On empathy, majority of Mwaiwathu private hospital respondents are satisfied while at CPH almost every one of the respondents is satisfied.

Overall, quality of services offered by the CHAM institutions gives an average quality rating for the mission hospitals of good while for private facilities; it gives a rating of best on quality. These results show that Private Hospitals provide more quality services than CHAM hospitals

The key respondents have indicated that quality of health care in the mission hospitals is average because of availability of equipment and drugs. While in government hospitals, they say it is below average due to poor usage of funds allocated to the Ministry of Health.

5.5 Facilities

Key respondents feel that CHAM hospital s offer health services on an average standard while private hospital s are above average and government hospital s are below average. As per figure 4-17 on quality of service per institution, Brain drain was average in CHAM facilities, below average in private hospitals and above average in government hospitals. In terms of material resources, the key respondents view government facilities

as having below average and CHAM facilities having average and private hospitals having above average resources.

The grading of performance of mission, private and government hospitals by the key respondents, supports findings of literature review (Meijer, 2000, Kumarr and Odzama 2004) on financial resources in health. The key respondents also agree with the respondents from the hospitals who rated average on quality as 68.7 percent in CHAM and 81.4 percent in the private hospitals

5.6 Impression and Experience

Mlambe mission hospital respondents feel the services are generally going down while the impressions of some respondents are that all aspects of the hospital are good. Some of the respondents feel that all aspects of the hospital are good while more feel the service is deteriorating. These findings have a large bearing on how Mlambe mission hospital is managed. It is coming out clearly that there is a consumer expectation and management perception gap. The clients that frequent the hospital indicate from their responses that their minimal expectations of how the institution should be managed is not met, this should be an eye opener to management to consider closing this gap. The gap could be closed by making use of the turn around strategy, whereby all departments that are offering services are reviewed with the objective of improving service standards, hence improving customer satisfaction. The same is true for Malamulo mission hospital they have an expected service and perceived service gap that needs to be closed.

The respondents 67 percent of Mwaiwathu private hospital felt the services were going down with 47 percent of these citing the reason being understaffing resulting in long waiting times for patients to be attended to. These findings represent a huge gap on expected service and perceived service gap (gap 5). It implies that the quality of services that consumers expect to receive in relation to the value of hospital bills does not match. It is important to consider making the closure of this gap a priority in order to promote repeat business by the consumers that visit the facility.

It is observed that most of the respondents at CPH view the services offered as good and only a few expressed dissatisfaction with the services. It is important to consider closing this small gap because a few irate customers are the ones that are faster in spreading negative information than satisfied customers.

On average, the findings above indicate that majority of the respondents that receive services from the private sector are more satisfied in view of the following attributes, tangibles, reliability, competency, responsiveness and empathy. However, the satisfaction degree of those respondents that receive services from the CHAM facilities is lower than that of the private sector. It is worth noting that both the private sector and CHAM have not attained 100 percent, implying, according to the Servqual Model, that there is a service standard gap. This means that both facilities are experiencing gaps between their performance and their consumers' expectations.

5.7 Chapter Summary

This chapter was mainly analyzing and discussing results of findings in chapter four. The discussion centered on three broad categories: firstly it looked at the number of health personnel, secondly, the quantity of health resources and thirdly the quality of health care service delivery in the health facilities.

The study results established that the health care system is under staffed. Consequently, it is strongly coming out that the few health personnel available, are negatively affected because they are unable to cope with the high volume of patients per health personnel in their respective institutions. Therefore, these findings agree with Anand and Bearnighusen (2003) that quantity of health personnel significantly affects population health.

On quantity of health resources, the study reveals that these also are in short supply. However, health consumers of CHAM hospitals indicate that these institutions have adequate resources while in the private hospitals are of the same view. These results highlight that the health resource issue is better in private hospitals than in CHAM institutions. The study explicitly indicates that the low level of resources hinders effective delivery of health care services.

The research unambiguously shows that the quality of health care services offered in private hospitals is of good quality, while in CHAM facilities it is lower. However, it is worth noting that both the private and CHAM institutions have not attained 100 percent on this attribute, implying their quality of services has gaps.

Chapter Six

6.0 Conclusions and Recommendations

6.1 Introduction

This chapter presents the conclusions, recommendations and areas that could still be researched.

6.2 Conclusions

6.2.1 Influence of Health Personnel and the Quantity of Health Resources on Health Care.

This study has established that the number of the health personnel has an impact to the delivery of health care system. It has further established that quantity of health resources has an influence on the quality of healthcare delivery. It can therefore be concluded that in third world countries, the more the number of health personnel and the greater the amount of the health resources available, the better the quality of health service offered.

6.2.2 Quality of Healthcare Services in Health Facilities.

It is established that the quality of health care services offered in Private hospitals is of superior quality than that of CHAM hospitals. Basing on the findings of this study it can be extrapolated that public hospitals fall after the CHAM hospitals. It can therefore be concluded that, quality of healthcare is best in Private hospitals, while mission hospitals offer better services and public institutions offer good service.

6.3 Recommendation

6.3.1 *Attaining Sufficient Human Resource Levels*

The study established that there is low morale and motivation of health personnel. It is recommended that there should be deliberate effort to address this which should have a clear human resource management process. In this regard all health facilities need to consider employing Human Resources for Health so that they are responsible for managing health personnel issues. The human resource management process should ensure proper planning and provision of pleasant working environment for all cadres of health personnel in their institutions. The human resource management process should include support strategies as well as training programs, in order to motivate health personnel. Staff allocations must match with acquired qualifications and skills. Proper reward system which should include performance related bonuses at department level is encouraged.

6.3.2 *Training of Health Personnel*

There is need to consider improving the budget allocated to the Ministry of health, so as to allow the health personnel to provide the services they were trained to provide.

6.3.3 *Establishment of Healthcare Delivery Standards*

Consumers of health services are evaluating the CHAM and Private hospitals in relation to public hospitals. They are content when it is better than public hospitals. Therefore, if public hospitals improve, the general level of services offered will improve too. The study reveals that the quality of health care is going down in all both CHAM and Private hospitals. Since Public Hospitals act as a bench mark, there is need for them to improve on the quality of services they offer as this will have a ripple effect on all healthcare service institution. The health authorities need to develop general hospital standards at

all levels (e.g. attendance of patients within a time frame) which should be enforced and adhered to at all times. Hospital management should continuously monitor these standards with the objective of evaluating service gaps.

6.3.4 *Resource Allocation and Management*

Resource allocation in public and CHAM institutions need to be improved. However the health institution themselves should consider strategies that will bring extra income for their institutions so as to improve their income. Proper mechanisms should be established for prudent financial discipline to be exercised in all health institutions. This will allow extra resources that should translate into improved quality of services offered by their institutions.

6.3.5 *Public Awareness on Health Rights*

The study reveals that there is a gap between service providers (doctors, nurses and key informants) and the patients. It is further evident that the key informants know that the quality of health care services is poor, but most consumers do not recognise this hence accepting the poor quality service. There is therefore need for creating awareness on ones health rights amongst patient particularly the majority poor. Health consumers should know what to expect from service providers and health care system need to develop mechanism for feed back by the recipients.

6.4 *Aspects of Further Research*

6.4.1 *Quality of Healthcare Service Delivery in Public Hospitals*

As stated earlier this study did not cover the public hospitals since permission to do so was not granted by the Government authorities. There is room therefore, to carry out a study on quality of services offered in the public hospital s.

6.4.2 *Baseline Study on Public Awareness on Health Rights*

The study established that health service consumers evaluate quality of health care service based on public hospitals. This exposes the gap of health rights awareness amongst the populous. A study on the level of awareness on health rights amongst the population is another interesting option.

Chapter Seven

7.0 References

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29.03.2006.

Appendix 1. The Servqual Model

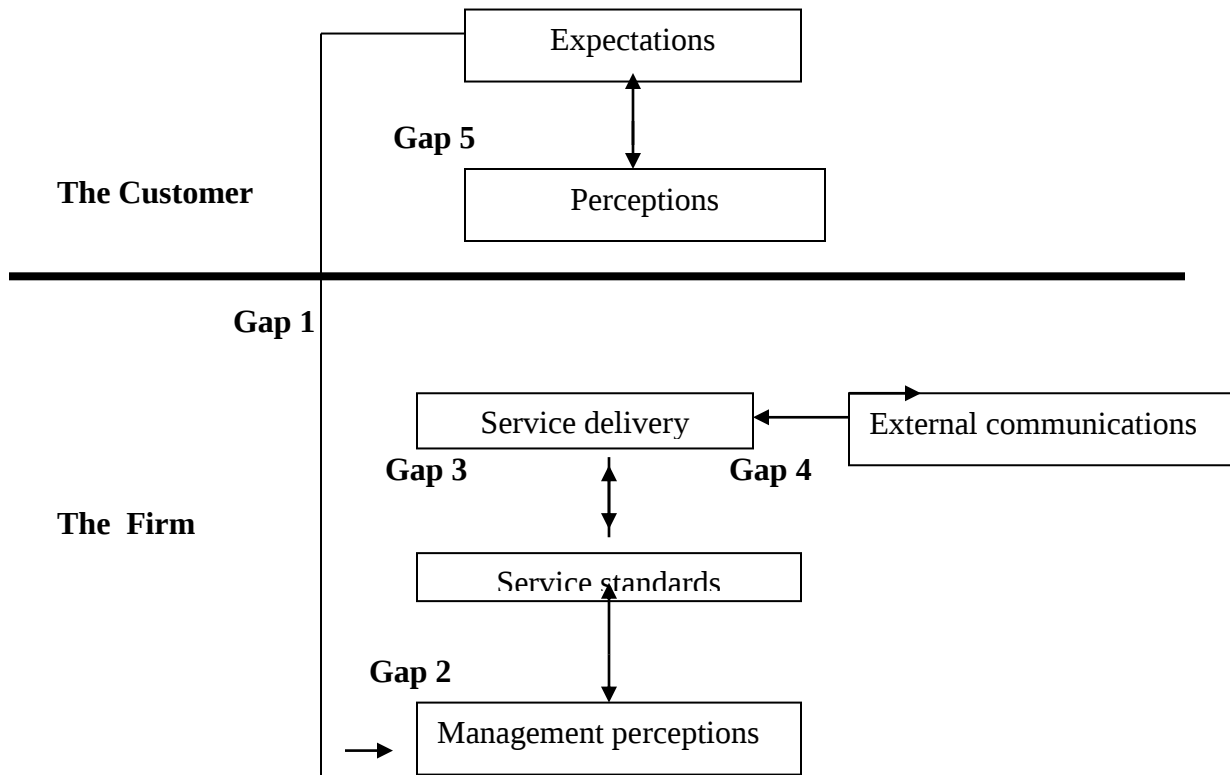


Figure 1. Servqual Model – Gaps. BPP Professional Education (2003)

In establishing if the hospitals are providing quality service to their clients that they serve, the investigator will use the Servqual model to unearth service user's experiences.

The Servqual Model was developed in 1988 with the objective to measure five gaps across all service organizations. These gaps are as follows:

GAP 1: Consumer expectations and management perceptions gap

GAP 2: Management perceptions and service quality specification gap.

GAP 3: Service quality specifications and service delivery gap.

GAP 4: Service delivery and external communications gap.

GAP 5: Expected service and perceived service gap.

This model also measures five generic criteria that consumers use in evaluating service quality. These are:

1. **Tangibles:** Physical facilities, equipment, appearance of personnel
2. **Reliability:** ability to perform the promised service dependably and accurately
3. **Responsiveness:** willingness to help customers and provide prompt service
4. **Assurance:** knowledge and courtesy of employees and their ability to convey trust and confidence
5. **Empathy:** caring, individualized attention.

Appendix 2. Questionnaire for Patients

Thank you for accepting to participate in this study. Below are several questions that I would like to ask you. I urge you to freely share your opinions at any point during the interview. Should any questions sound unclear, please feel free to ask for further explanation. I will be writing down your responses on your behalf.

In Section A, I will ask you some information about your background that will be useful when looking at the results of this study.

In Section B, I will ask you questions about your experiences with this hospital.

Name of interviewer.....

Date of interview.....

Note: The questionnaire will be translated to Chichewa language too.

SECTION A

Instructions to interviewers

Please circle the appropriate number.

Location

Name.....3.....

1= Mwaiwathu Pvt Hospital , 2= Malamulo Mission Hospital 3= Chitawira Private Hospital

Gender	Marital Status	Relationship to Person Paying hospital bill
1= Male	1 = Married (monogamous)	1 = Spouse
2=Female	2 = Married (Polygamous)	2 = Son / daughter
	3 = Widowed	3 = Parent
	4 = Divorced	4 = Other Relative
	5 = Separated	5 = Employer
	6 = Single	6 = Other

Home District.....

Ethnic group.....

Nationality.....

AGE CATEGORY	TICK
16 – 20 Years old	
21 – 30 Years old	
31 – 40 Years old	
41 –50 Years old	
51 – 60Years old	
61 – 70 years old	
71 – 80 Years old	
Above 81 years old	

Education	Religion	Employment and Income
1= No Education 2= Primary 3= Secondary 4= Technical College 5= University	1= Christian 2= Moslem 3= Other 4= Non believer	1= Professional / Managerial 2= Clerical / Secretarial 3= Driver / Messenger / Security guard and related workers 4= Skilled Technical worker / Trade person 5= Semi-skilled worker 6= Unskilled / Casual Labourer 7= Sales person / Services related workers 8= Business (Formal Sector) 9= Small Scale Business (Informal Sector) 10= Agriculture (Own farm) 11= Unemployed

1. What are your annual earnings in Kwacha?

EARNINGS	TICK
0 – 36,000	
36,001 – 144,000	
144,001 – 600,000	
Over 600,000	

2. Does any member of the household receive any income from any other source?

1= Yes

or

2= No

3 If yes, from what source?

1= Rent	SOURCE OF INCOME
2= Main Occupation	
3= Sale of goods / produce	
4= Pension	
5= Remittances from relatives (not currently living in Malawi)	
6= Any other sources not mentioned above.	

4. How much per month from these sources, tick in the given box below?

.....

EARNINGS	TICK
0 – 36,000	
36,001 – 144,000	
144,001 – 600,000	
Over 600,000	

SECTION B

TANGIBLES

6. (Circle the number under the initials that applies. **WF**= Well cared for and attractive; **MA**= Modern and abundant in supply; **VG**= Very good; **N**= Neutral; **B**= Bad).

Indicate your view of the following aspects of this hospital

	WF	MA	VG	N	B
Physical facilities	1	2	3	4	5
Equipment	1	2	3	4	5
Appearance of personnel	1	2	3	4	5

7. In brief, give me your impression of all aspects of this hospital. Please explain.

8. RELIABILITY

WAITING PERIOD TO SEE A MEDICAL PRACTITIONER 1= Within minutes 2= Within hours 3= Within days 4= Within weeks 5= Within a month 6= Within a year 7= Other (specify).....

9. (Circle the number under the initials that applies. **G**= good; **VG**= very good; **N**= Neutral; **B**= Bad; **VB**= very bad.)

Indicate your view of the ability of the hospital to perform the promised services dependably and accurately

	G	VG	N	B	VB
Competency of personnel	1	2	3	4	5
Number of people visiting the hospital	1	2	3	4	5
Behaviour of personnel	1	2	3	4	5
Type of services offered	1	2	3	4	5
Responsiveness	1	2	3	4	5
Empathy	1	2	3	4	5

10. What has been your experience of this hospital you are visiting, in terms of services offered?

THANK YOU FOR YOUR RESPONSES.

Appendix 3. Questionnaire for Key Informants

The objective of this in-depth interview is to elicit information about the real nature of the problem of the area under study.

1) What is your opinion of the health care system in Malawi in terms of

- a) Quality of services offered to patients, in Mission , government and private hospital s,
- b) Brain drain
- c) Material resources in the health sector.

.....
.....

2) In your opinion what can be done to attract more staff into the health work force of Malawi and keep them?

.....
.....

3) Health indicators of Malawi are poor, in your opinion, what do you think can be done to improve them?

.....
.....

4) What do you think are the major factors that are negatively affecting the health care system in Malawi?

.....
.....

5) How many health personnel are there for each category?

.....
.....

DOCTORS:.....

ENROLLED.NURSES:.....

REGISTERED.NURSES:.....

RADIOLOGY

TECHNICIANS:.....

LABORATORY.TECHNICIANS.....

DENITSTS:.....

SPECIALISTS:.....

CLINICIANS.....

6) How many patients visit the hospital in a month?

.....

7) How many beds does this facility have?

.....

8) Who funds the running of this hospital?

.....

9) How would you describe the behaviour of the health personnel in your facility?

.....
.....

10) How would you describe the motivation of health personnel here?

.....
.....

11) Do the material resources that you have in this hospital allow you and all the personnel to perform all the services that you were trained to deliver? Please briefly explain.

.....
.....

Appendix 4. Informed Consent for Participants

Dear Participant,

A RESEARCH STUDY ON FACTORS THAT AFFECT HEALTH CARE SYSTEMS
IN THE THIRD WORLD COUNTRIES – A CASE FOR MALAWI.

My name is Annie Chipwanya and I am currently studying in the Executive Master of Business Administration degree programme at Polytechnic a constituent college of the University of Malawi. This study is part of requirement for completion of the programme. This study is an investigation on factors that affect the health care systems in the third world countries, in this case, Malawi. You are therefore selected to participate in this study. The interview is expected to take approximately twenty minutes and you will be expected to answer questions from an instrument that will be given to you / read to you and responses will either be written by you or by me or by my assistants on your behalf.

In signing this document, I am giving my consent to participate in this study. I understand that I was selected to participate in this study because I have come to this hospital (Mwaiwathu private hospital, Malamulo mission hospital, Chitawira private hospital and Mlambe mission hospital).

I understand that in participating in this study, I will be expected to answer questions from an instrument.

I understand that there are no any risks associated with this study and that participation is voluntary. I am allowed to withdraw my consent and discontinue participation at any time. I may also refuse to answer any specific questions.

I understand that confidentiality will be maintained throughout the study.

I understand that if I have any questions relating to the study, I can contact Annie Chipchwanya at Medical Aid Society of Malawi, P.O. BOX 1254, Blantyre or on 08 354 893 or 01 820 298.

PRINCIPAL INVESTIGATOR

Mrs.A. Chipchwanya
University of Malawi
Polytechnic
Department of Management studies
P/Bag 303
Chichiri Blantyre

I, the undersigned, have read the above information, understand it fully and wish to participate in the study.

.....

Appendix 5. Mlambe Mission Hospital



Appendix 6. Chitawira Private Hospital



Appendix 7. Mwaiwathu Private Hospital

