

**Evaluating the referral system between CECELIA MAKHIWANE HOSPITAL ART unit
and its feeder sites, (Zone 2, 8 and 13 clinics)**

LUNDI NCANA

Assignment submitted in partial fulfillment of the requirement for the degree of Master of
Philosophy (HIV/AIDS Management) at Stellenbosch University.



Study leader: Dr. Thozamile Qubuda
Faculty of Economic & Management Sciences
Africa Centre for HIV/AIDS Management
December 2010

Declaration

By submitting this assignment electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the owner of the copyright thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

Date: 24/07/2010

Acknowledgement

I am grateful to God for giving me the opportunity to complete this study, and give Him thanks and praise.

The report would have never been possible without the invaluable support and unending encouragement of numerous people:

- Dr Thozamile Qubuda, my supervisor at University of Stellenbosch, for all the guidance throughout.
- East London Hospital Complex “Cecelia Makiwane Hospital” and Buffalo City LSA management for allowing me to do the research at their facilities.
- My wife Nomfundo Ncana for her support and consistently reminding me not to give up throughout.
- Colleagues, especially Dumo Jebese and Sindisa Gede

To you all, my sincere thanks and love and I wish you all the best in your endeavors, may people be as caring and helpful to you as you’ve been to me.

Abstract

Purpose of the study

The primary purpose of the study was to evaluate the referral system between CMH ART unit and its feeder sites, and assess the staff perception and patient's satisfaction about the latter with the intention of improving and shaping it.

Research design

A non-experimental descriptive type of quantitative research was used in conducting a cross sectional survey to evaluate the referral system between CMH ART unit and its feeder sites. Data was collected through open and closed ended questionnaires handed to the respondents to fill and return back to the researcher.

Findings

The results revealed lack of management support and supervision of the system; absence of standard operative procedure to follow when down referring patients; insufficient staffing; congested waiting rooms and long waiting hours.

Conclusion

The down referral process began without the completion of planning with all involved stakeholders because of the pressure to implement the decision to down refer, staff at the feeder clinics although trained on ART care, but not experienced enough to manage the large influx of patients on ART were left alone to manage patients on HAART. Simple measures like communication between facility staff and patient education should be adopted to improve the system.

Opsomming

Doel van die studie

Die primêre doel van die studie was om die verwysing stelsel tussen die CMH ART eenheid en sy voeder werwe te evalueer, asook om die personeel se persepsie en pasiënte se tevredenheid oor die laasgenoemde te evalueer met die voorneme om dit te verbeter en verwerk.

Navorsingsontwerp

'n Nie-eksperimentele beskrywende aard van kwantitatiewe navorsing is gebruik in die uitvoering van 'n kruis deursnee-opname om die verwysing stelsel tussen CMH ART eenheid en sy voeder werwe te evalueer. Data is ingesamel deur middel van oop en geslote geëindig vraelyste uitgedeel aan die respondente om in te vul en terug te keer na die navorser.

Bevindings

Die resultate blyk 'n gebrek aan ondersteuning van die bestuur en beheer van die stelsel; die afwesigheid van standaard operatiewe prosedure om te volg wanneer pasiënte af verwys word; 'n tekort aan personeel; oorgelaaide wagkamers en lang wag ure.

Gevolgtrekking

Die af verwysing proses het sonder die voltooiing van die beplanning met alle betrokke belanghebbendes begin as gevolg van die druk om die uitvoering van die besluit om af te verwys te implementeer. Personeel by die voeder klinieke, alhoewel opgelei in ART sorg, maar sonder die nodige ondervinding om die groot instroming van ART pasiënte te behandel, was alleen gelos om die pasiënte op HAART te behandel. Eenvoudige maatreëls soos die kommunikasie tussen die fasiliteit personeel en die opvoeding van pasiente sal moet goedgekeur word om die stelsel te verbeter.

List of Acronyms

Acquired Immune Deficiency Syndrome

Antenatal Clinic

Antiretroviral Drugs

Antiretroviral Therapy

T-Lymphocytes Immunity Cells

Community Health Centre

Cecilia Makiwane Hospital

Down Referral System

Frere Hospital

Highly Active Antiretroviral Therapy

Human Immune Virus

Maternity Out-patient Unit

Non Governmental Organization

Out Patient Department

Primary Health Centre

Prevention of Mother to Child Transmission

Provider Initiated Counseling and Testing

People Living With HIV and AIDS

Voluntary Counseling and Testing

Table of Contents

Study leader: Dr. Thozamile Qubuda	1
Acknowledgement	3
Abstract	4
Chapter 1	8
1.1 Introduction.....	8
1.3 Problem statement.....	11
1.4 Purpose of the study.....	12
1.5 Research question	12
1.6 Research objectives.....	12
1.7 Research design	13
1.8 Population	13
1.9 Sampling	14
1.11 Pilot study	16
1.12 Ethical considerations	16
1.13 Data analysis	17
1.14 Conclusion	17
Chapter 2: Literature review	18
2.2 The referral process.....	19
2.3 Down referral.....	21
2.4 Referral form.....	22
2.5 Conclusion	24
Chapter 3: Research Methods	24
3.1 Research design	24
3.2 Research method.....	25
3.4 Population	26
3.5 Sampling	26
3.6 Data collection	27
3.7 Pilot study	27
3.8 Ethical consideration.....	27
3.9 Data analysis	28
3.10 Conclusion	29

Chapter 4: Analysis and findings of the study	29
4.1 Introduction.....	29
4.2 Patients satisfaction findings.....	29
4.2.1 Patients accessing treatment at zone 13 clinic	30
4.2.2 Patient accessing treatment at CMH although they have been down referred to zone 13 clinic	33
4.2.3 Patients accessing treatment at zone 2 clinic	36
4.2.4 Patient accessing treatment at CMH although they have been down referred to zone 2 clinic .	39
4.2.5 Patient accessing treatment at CMH but reside in areas nearer to zone 8 clinic	42
4.3 Findings of clinicians, pharmacist and data captures’ perception on DRS.....	45
4.3.1 Clinical Unit.....	45
4.3.2 Pharmacy Unit	46
4.3.3 Monitoring and evaluation unit.....	47
4.3.5 Counseling Unit	49
4.4 Conclusion	50
Chapter 5: Limitations, recommendations and conclusion	51
5.1 Introduction.....	51
5.2 Limitations	51
5.3 Recommendations.....	51
5.4 Conclusion	52
References.....	54

Chapter 1

1.1 Introduction

The development of effective patient referral system is one of the important public health issues in developing countries. Primary health care will not work unless there is effective hospital support to deal with referred patients, and to refer patients who do not require hospital attention back to one of other primary health care services (World Health Organization, 1987).

A fundamental principle of primary health care (PHC) is the close relationship between all levels of the health care system, starting at the community extending upwards to clinic, health center

and district health hospital and beyond. Each patient is connected through a seamless continuum of services and should arrive at the appropriate level capable of giving optimal health care for any given problem. This assures that the most common and often important measures are available nearest to home and convenient to each citizen. Through a smooth functioning referral system, the patient can arrive at higher level where most specialized medical professionals as well as diagnostic and therapeutic tools are available. Thus the referral system is an integral part of PHC (Referral System Guidelines, 2003).

In South Africa we aim to deliver a national health care system that provides equality. *Equality* means that every person's health is seen as important and that every person can get the health care that he or she needs. The focus of the health service is on the primary health care, development and involvement of communities, and the provision of health services to everybody (even in the most rural areas of South Africa). The health services are divided into four levels namely *community*, *district*, *provincial* and *national* levels. It is important that health care professionals at all levels of health care delivery, as well as the planners of health care, work together to coordinate their efforts (Naude et al., 2000).

Community level: At the community level, the basic services are given. We find different clinics at this level, for example the immunization clinics. These clinics will provide the services that the community needs (Naude et al., 2000).

District level: At the district level the focus is on primary health care, but also financial support services to the clinics at the community levels. District health services aim to monitor and evaluate health services at the community level, and help with the development and management of personnel. At this level we find the district hospitals that only serve as general hospitals and cannot give any specialized care, for example big operations (Naude et al., 2000).

Provincial level: Provincial level health authorities must monitor and evaluate the health services at the district level. At this level specific provincial health services such as specialist hospitals are provided. Provincial health authorities are also responsible for planning and providing the training of health professionals for the whole province (Naude et al., 2000).

National level: At national level services for the country are planned and evaluated. The National Department of health is responsible for: Training of health care personnel; Developing guidelines and strategies for all health care in the country; Monitoring and evaluating academic hospitals; Planning and allocating of funds for health care; Distributing funds in fair and equal manner; and Working with the departments of health of other countries (Naude et al., 2000).

Referral system is one of the strategies putted in place to ensure adequate use of hospital resources and health care services. Referral has been defined as the process in which the treating physician at a lower level of health service, who has inadequate skills by virtue of his qualification and/or fewer facilities to manage a clinical condition, seeks the assistance of a better equipped and or specialists trained person, with better resources, to guide him in managing a particular episode of a clinical condition in a beneficiary (Al-Mazrou et al., 1990).

1.2 Background of the problem

Cecilia Makiwane Hospital (CMH) is situated in the suburb of Mdantsane, near the city of East London, in the Amathole District of the Eastern Cape Province of South Africa, together with Frere Hospital; they make up East London Hospital Complex (ELHC). CMH is government owned facility, first opened in 1974, with the catchment population of well over 1 million. The site is well served by public transport and geographically accessible for the majority of the population within the catchment area. The HIV care and treatment clinic has been operational since 2004, providing services from Monday to Friday between 07h30 and 16h00 hours. CMH received accreditation from the National Department of Health in 2005. The site provides adult ART care and treatment only, pediatric services are provided at the outpatient pediatric clinic. Voluntary counseling and testing (VCT) is available in all the inpatient wards, and prevention of mother to child treatment (PMTCT) program is available in the antenatal clinic (ANC) and the maternity outpatient unit (MOU).

Zone 2, 8 and 13 clinics are also situated in the suburb of Mdantsane; they act as feeder sites to CMH ART unit. Their initial role is to identify adult patients in need of ART, begin the process

of adherence preparation, and refer them to the nearest ART accredited site which is CMH for initiation of treatment.

The International Center for HIV/AIDS Care and Treatment Program (ICAP), in partnership with Fort Hare University, employed (in 2006) a medical officer and a professional nurse to be permanently located in each clinic, and to manage patients in HIV care exclusively. However patients still needed referral to CMH for the commencement of ARVs as these clinics does not have a pharmacy service. Subsequently, once patients are stabilized on ART at CMH, they are down referred back to their respective clinics for collection of their monthly treatment, and for follow up visits. Patients are only referred to CMH for renewal of their ARV prescriptions or management of complications.

1.3 Problem statement

Program like HIV and AIDS awareness campaign are gradually destigmatizing HIV and AIDS in our societies, and the number of people seeking for HIV counseling and testing is also slowly increasing. Strategies like provider initiated counseling and testing (PIHCT) and contact tracing enhances the process (HIV counseling and testing). The rollout of antiretroviral (ARVs) also added value to HIV counseling and testing (VCT) with the hope that if tested positive they will be on ARVs, unlike before 1994 in South Africa where people were tested without a substantial treatment after the results came positive, either than treating opportunistic infections.

CMH ART unit is the only accredited ART site in the area of Mdantsane, due to escalating numbers of people who access ART in this unit, a down referral system (DRS) to feeder sites is one of the strategies putted in place to ensure best use of hospital resources and health services, to reduce the number of patients accessing ART services at this unit, strengthen the healthcare professionals' partnership in caring for the patients, and to improve accessibility of healthcare/treatment to the communities.

The task of the feeder sites is to identify patient need of ART, begin the process of adherence preparation, and refer patients to CMH ART unit for initiation of treatment. At CMH ART unit patient are initiated on highly active antiretroviral treatment (HAART) and assessed there, then

down referred to feeder sites closest to each patient, where they will be further managed. At feeder sites they also conduct essential services like medical intervention for people living with HIV and AIDS (PLWA), diagnostic confirmation and disease monitoring, management of opportunistic infections, ARVs and PMTCT.

Although the DRS have been implemented at this unit, the staff is still overwhelmed by the huge number of patient seeking health services because; patients whom live nearer to, and those that had been down referred to feeder sites, continue accessing ARVs at the unit resulting in adequate attention per patient difficult to achieve. The same patients in the feeder sites are registered as defaulters, and that generates insufficient and unreliable data collection.

1.4 Purpose of the study

The primary purpose of the study is to evaluate the referral system between CMH ART unit and its feeder sites, and assess the staff perception and patients satisfaction about the latter with the intention of improving and shaping it, so that it could have the greatest beneficiary impact upon the target group (patients and staff) through working with lay and professional staff, and the management of the sites.

1.5 Research question

When conducting the study, the researcher will work towards answering the following question:

- What are the staff perceptions towards the down referral of patients?
- Does the down referral of patients satisfy patient's needs?

1.6 Research objectives

The study objectives are;

- To encourage CMH and its Feeder sites staff to evaluate their referral system
- To measure aspects of the referral system thought to be inadequate
- To provide pointers for action to improve the referral system

1.7 Research design

Research design relates directly to the testing of hypothesis. It is the specification of the most adequate operations to be performed in order to test a specific hypothesis under given condition (Claire Bless et al., 2000).

The researcher will employ a non-experimental quantitative research. The primary characteristic of a non-experimental research according to Christensen (2007) is that it is a descriptive type of research in which the goal is to attempt to provide an accurate description or picture of a particular situation or phenomenon.

The researcher is interested in describing a phenomenon (or a topic), which is a referral system, so an evaluation research (descriptive evaluation) design will be adopted to conduct the study. Descriptive evaluations are very useful and can be done with relatively few resources, but at the same time require disciplined thinking and a clear structure. Their main features according to St Lager et al., (1997) are some means of portraying a service, what it does and who does it, they also involve descriptions of why the service exists, and finally, they involve the evaluators' understanding of the context within which the service operates.

Mouton (2008) states that all forms of evaluation research usually use all available data collection methods. This could be structured (questionnaires; tests; scales) or semi-structured (focus group interviews; individual interviews; participation observation) as well as analyzing existing documentary sources (annual reports; field records; participation records; etc (Mouton, 2008).

1.8 Population

The population of a study is that group (usually of people) whom we want to draw conclusion (Mouton et al., 2005).

The target population comprises of patients from around the referral clinics whom accessing treatment at CMH, down referred patients (patients accessing treatment at feeder sites);

HIV/AIDS or adherence counselors; nurses; doctors and managers from Cecelia Makiwane ART unit and its feeder sites (Zone 2, 8 and 13 clinics).

1.9 Sampling

We are almost never able to study all the members of the population that interest us, and we can never make every possible observation of them. In every case then we will select a sample from among the data that might be collected and studied (Mouton et al., 2005).

Sampling according to Polit et al., (1995) refers to a process of selecting a portion of the population to represent the entire population.

Once an author has chosen a population, it is important to find out who within the group becomes a study subject. There are a variety of ways authors can select samples. They may attempt to enroll every eligible subject in the study. That is fine for small populations, but with larger groups, it is not feasible (Gelhbach, 1993).

Sometimes it is appropriate for the researcher to select a sample on the basis of his/her own knowledge of the population, by implement that approach, he/she uses purposive method. Purposive method is defined by Brink (2000) as a method that is based on the judgment of a researcher regarding subjects or objects that are typical or representative of the phenomenon (or topic) being studied, or who are especially knowledgeable about the question at issue.

In this study the researcher will employ non-probabilistic purposive sampling method. As the researcher using the latter does not know in advance how many subjects are needed, he/she samples continuously until data saturation occurs. In purposive sampling, often consecutive persons are included in a sample until a certain number has been studied, or objects seen over a certain period constitute the sample. The sample will comprise of patients from areas around the referral clinics whom access treatment at CMH, and patients accessing treatment at feeder sites (zone 2; 8 and 13); and all adherence/peer counselors; nurses; pharmacist assistants; pharmacists and doctors from CMH ART unit and its feeder sites (Zone 2, 8 and 13 clinics) present during the same period.

1.10 Data collection and measurement

Data collection tools

The researcher gathered data directly from each patient through administering structured questionnaires to respondents by means of a scheduled structured interview. The latter according to Bless et al., (2000) is based on a established set of questions with fixed wording and sequence of presentation, as well as more or less precise indication of how to answer each question. The questionnaire will be presented to each participant in exactly the same way to minimize the role and influence of the interviewer and to enable a more objective comparison of the results.

Questionnaires for collecting data from the staff (Doctors; Nurses; Data Captures and Lay counselors) will be used without direct personal contact with the respondents. In other words the staff will self-administer questionnaires without the assistant of an interviewer, so questionnaires will be distributed and collected once it has been filled out.

Throughout the process of data collection the problem of persuading participants to co-operate with the researcher is ever present. Lack of co-operation lead to no-response and to incompletely filled-out questionnaires, and unreliable results. While lack of co-operation can be disastrous to research project, participants have the right to refuse to participate. This is the right that the researcher must respect (Bless et al., 2000).

Reliability and validity measurements

Reliability refers to the degree of similarity of the information obtained when the measurement is repeated on the same subject or the same group (Katzenellebogen et al., 1997). The researcher will utilize item analysis to ascertain reliability, thus that the items within the questionnaire that are not providing useful information about the subjects or which are actually confusing the data will be removed. In this case the researcher is interested in finding out how well the responses in each item correspond to the responses to the other items and to the test as a whole.

Validity refers to the extent to which a measure actually measures what it is meant to measure (Katzenellebogen et al., 1997). This could be achieved by designing data collection tools that will actually measure the things that they are supposed to be measuring.

1.11 Pilot study

The pilot study is a “trial run” undertaken before embarking a full scale project. The purposes of the pilot include: confirming that the study management hierarchy is aware of its responsibilities; checking that the selected method/study design is appropriate for the data to be collected; confirming the political/technical feasibility of the study; and checking that the time-scale is reasonable (St Lenger et al., 1997).

The researcher has conducted a pilot study few days before the actual study with the similar clients to those of the researcher’s interest, to test the validity of the questionnaire and to test if the interview process should be adjusted to answer the research question. The researcher during this period has made use of a non-scheduled structured interview, which is meant to aid the formulation of accurate and precise questions that can be used during the study.

1.12 Ethical considerations

When conducting a study, the following principle of fundamental ethical principles underlying protection of human subjects has been considered:

- *Informed consent* – Just as all patients entering health services have the right to know what will happen to them and to sign a consent form for all procedures, so do the participants in a research project (Brink, 2000). During the study, study participants has been be informed about the study and given consent form to sign.
- *Principle of anonymity* – According to Brink (2000) anonymity refers to the act of keeping individuals nameless in relation to their participation in the research. To abide to this principle, information related to participants or to the fact that certain individuals have participated in this study will not be available to anyone beyond the immediate research team and the names of study participants will not be used neither to questionnaires of excel spreadsheet.
- *Principle of confidentiality* – Brinks (2000) describes confidentiality as refers to the researcher responsibility to protect all data gathered within the scope of the project from being divulged or

made available to any other person. Study participants has been informed that the researcher intends to publish the results of the study and personal characteristics will not be made known. The research team will sign a confidentiality agreement from as a way of enforcing confidentiality and if the former has been breached, necessary procedures will be followed.

1.13 Data analysis

Mouton (2008) states that, all fieldwork culminates in the analysis and interpretation of some set of data, be it quantitative survey data, experimental recordings, historical and literary texts, qualitative transcripts or discursive data. Analysis involves “breaking up” the data into manageable themes, patterns, trends and relationships. The aim of analysis is to understand the various constitutive elements of one’s data through an inspection of the relationships between concepts, constructs or variables, and to see whether there are any patterns or trends that can be identified or isolated, or to establish themes in the data.

The researcher will utilize descriptive statistics, the latter provide simple summaries about the sample and the measures, and together with simple graphics analysis they form the basis of virtually every quantitative analysis of data.

Descriptive statistics are used to describe and summaries data. They convert and condense a collection of data into an organized, visual representation of data (a picture) in a variety of ways, so that the data have some meaning for the readers of research reports. A descriptive approach employs measures such as frequency distributions, measures of central tendency and dispersion or variability and measure of relationships (Brink, 2000).

1.14 Conclusion

This chapter has been focusing mainly on the study background, problem and purpose. The next chapter will explore more on the previous literature about the referral systems.

Chapter 2: Literature review

2.1 Introduction

A referral system is regarded as a network of facilities and service providers functioning within a certain geographical area to achieve: the equitable access to appropriate and timeous care based on the need of the users; the efficient and effective use of available health care resources; and the best health care outcome for care delivered to the users within the current available resources. It is important to ensure a continuum of care for patients as they access additional and/or different services. A quality referral system ensures efficient use of health care services on offer, and also

minimizes the costs to patients. The basis of successful referral is good relations and effective communication between the different levels.

According to Roland et al., (1992) referrals are both important and informative. They are important because decision to refer is rarely straightforward; the referral can be problematic at the individual clinical level, but it also has economic, social, and political implications because the referral system is a gateway to hospital care. The decisions made in general practice are crucial determinants of the use of health service resources. He further says they are informative because of what they reveal about the way in which the health service works. By examining the history and development of the referral system we can learn about relationships between the various professional groups involved in health care delivery and how these relationships have changed over time.

2.2 The referral process

Referral is a weak link in the organization of many district health systems in Africa. In theory health centers and district health hospitals should complement each other: whoever can be treated adequately at health centre level will be treated there, and the referral system will ensure that all others are referred to the district hospital in timely fashion. The criteria for referral are supposed to be purely medical, and objective, in the interest of a patient. This appears straightforward but everything indicates that referral system is usually dysfunctional (BMC Health Services Research, 2006).

In South Africa primary care providers (clinic and community health center) refer to the designated district hospital for higher level of care. A patient may visit a PHC, but if the clinic doesn't have the capacity to adequately care for him or her, the patient would then be transferred either urgently or non-urgently (depending on the condition) to a higher level of care facility. When non-urgent the clinic staff would encourage him or her to visit the outpatient department (OPD) of a hospital, often with letter as to their condition. When urgent, health care worker make arrangement for transportation of patients and discuss the patient with the doctor at the receiving facility, and there are guidelines to be followed when doing this kind of referral.

Similar to South African system, in Zimbabwe's hospital referral plan, district (secondary level) hospitals provide general inpatients services, accepting referrals from urban and rural health centers and clinics (primary level). Provincial (tertiary level) hospitals receive patients referred from districts hospitals and provide general specialist services. Quaternary level hospitals in the major urban centers serve as national facilities and provide specialist and subspecialist services (Health Policy and Planning, 1998).

In the Republic of Honduras, the public institutions are categorized in five levels of service: 1) CESAR (Centro de Salud Rural: rural health centre, equivalent to health posts) where only auxiliary nurses provide services; 2) CESAMO (Centro de Salud con Medico: health centre with physician), providing outpatient care and laboratory services; 3) Area Hospital (approximately 50 beds with internal medicine, surgery, obstetrics and gynaecology, and pediatrics; 4) Regional hospital (approximately 100 to 150 beds with the above mentioned four basic services and some specialized wards); 5) National hospital (highly specialized referral). Patients are expected to follow this hierarchy of health services (Health Policy and Planning, 1998).

The United Kingdom referral system involves patients referred by their General Practitioners (GPs) to the outpatient clinics of hospitals consultants. In urgent cases GPs can refer patients for inpatient admission to hospitals, although this occurs much less frequently than outpatient referral. GPs can also refer to variety of other practitioners, including physiotherapists, speech and occupational therapists, clinical psychologists, dieticians, community psychiatric nurses, social workers and so on. Usually the GP making referral will write a letter to the consultants or department concerned giving details of the patient and their current problem, and the patient will then be asked to attend the relevant clinic at an appointment time. Following the initial consultation the patient may be discharged back to the care of their GP, they may be given further appointments in the outpatient clinic, or they may be placed in the waiting list for admission to hospital (Roland et al., 1992).

When a health care facility is unable to assist a patient or when he/she needs additional or continuation of care then he/she is referred to a different but associate facility. This is known as referring up or down the district health system, which has a number of levels. It is essential that

all health care providers, academic institutions and users has a common understanding and acceptance of the referral pattern outlining who will be treated at which facility under what circumstances. The services offered by health care facility whether clinic, hospital or health care are generally based on the levels of skill of the staff who work there, so as to avoid patients being referred up unnecessary, support is given to the staff of one facility by those from another “higher up” the system. On a PHC level, this support is often in the form of visit by a doctor and/or other specialist. In other words instead of the patient being moved to hospital, the health professional comes to where the patient is, both to see the patient, and to up-skill the clinic staff attending the patient. Tejal et al., (2000) conducted description study by mailing surveys to providers to determine their satisfaction with the referral process. The results showed that the providers were dissatisfied with the current referral system.

Sanders; et al used retrospective examination of patient records to ascertain the patterns and appropriateness of hospital utilization at different levels of care. Data were collected on demographics and patient care variables. The appropriateness of admissions and referrals was determined by an assessment of the severity of illness and intensiveness of care required. They concluded that the network did not meet design expectations as the central level referral cared for a similar case-mix of patients as the district level, but at six times the cost (Health Policy and Planning, 1998).

In a similar study conducted by Omaha et al (2001) which was about patient referral system in the Republic of Honduras, the study covered all public hospitals in the country as well as three centers each of eight sanitary regions. They demonstrated low referral rate at secondary and tertiary hospitals, and also at health care centers; common referral flow from health centers directly to National Hospitals, by passing Area and Regional Hospitals; a lack of registered lists of referred letters; and insufficient supply.

2.3 Down referral

Once the patient is seen and receives the attention at the higher level facility, back referral to the original facility is of vital importance. This communication contains answers to the question posed with specific findings, special investigation, diagnosis, treatment offered and follow up

expected from the lower facility. The back referral may be written in the patient held record, but is most usually on the separate piece of paper (referral form), which should be delivered by a patient to the clinic but may also be sent by mail or fax to the clinic (Referral System Guidelines, 2003). The weakest part of this communication is generally back referral from the higher level facility. This communication not only assures proper patient care and follow up, but importantly provides continuity education to lower level facility and their staff.

Omaha; et al in their study of patient referral system in the Republic of Honduras noted the same problem as several young doctors complained of not receiving any reply, or not even hearing any results concerning the patient they had referred in some complicated cases to higher level institutions (Health Policy Planning, 1998).

Difficulties with referral are commonplace because of physician time constraints, lack of clarity about reasons for referrals, patient self referral, limitations imposed by managed care, and unclear follow-up plans.

The WHO Expert Committee on the Role of Hospitals at the First Referral Level identified the following key problems within the referral system: 1) overloading of the hospital with inappropriate self referrals, or poor judged referrals, 2) barriers of distance, transport, or payment, 3) lack of confidence in health care at the health posts/centre levels, leading to by-passing of those levels, and 4) inadequate flow of information to and from the hospital (World Health Organization, 1987).

2.4 Referral form

Effective referral requires clear communication to assure that the patient receives optimal care at each level of the system. Because the patient is moving between facilities it is the role of the supervisor to assure that this movement is facilitated and that proper communication accompanies it in both directions: upward, describing the problem has seen at the lower level facility and requesting specific help and, importantly, information back to the lower facility describing the findings, the action to be taken and the follow up needed (Referral System Guidelines, 2003).

The referral form is designed to facilitate communication in both directions although effective referrals can occur with written communication on the patient held record or any other convenient paper. Every patient referred upward should be accompanied by a written record of findings, the question asked, any treatment given and specific reasons for referral and expectations from the lower level facility. Such communication should accompany the patient (usually carried by patient) and a clear designation of which, facility the patient is being sent.

In Honduras, the importance of a patient referral system has been emphasized in recent years. In the past, even at the Teaching Hospitals (Escuela Hospital), which is the only training institution for medical graduates, doctors used to throw away referral letters at a glance (personal communication). There is a routine referral form of the Ministry of Public Health, but no duplication form for when referrals are sent and no standard reply from four received referrals cases (Health Policy and Planning, 1998).

Shin-ichi Toyabe & Akazawa Koubei (2006) studied the pattern of referral of in patients from secondary care hospitals to a tertiary care university hospital and the reverse referral under the situations using a geographic information system, taking pediatric inpatients as an example. The results indicated that more than 60% of inpatients visited tertiary care in Japan without referral from other medical facilities; patients living near the hospital tended to use the hospital as secondary care hospital or were admitted without referral from other medical facilities.

The referral process is a critical component of quality of clinical care, and it has become increasingly scrutinized in the managed care era. Physician-to-physician communication is vital to the success of an outpatient referral. Optimal communication involves transfer of relevant clinical information in both directions (from transferring physician to the specialists and vice versa). Breakdown in communication can lead to poor continuity of care, delayed diagnosis, poly-pharmacy, increased litigation risk and unnecessary testing, and can therefore decrease the quality of care (Gandhi, Sittig Franklin, Sussman, Fairchild & Bates, 2000).

Tejal et al (2000) in their study further state that a critical component of effective referral system is the referral letter, both PCPs and specialists were dissatisfied with the content of the letters

they provided each other and with the information they received. There were many items that specialist wanted to know that PCPs said they have often did not include.

2.5 Conclusion

Previous studies have revealed that communication breakdown between referring institution or doctors, and together with patients who by-pass primary health care institution; are the reasons for non-optimal functioning of the referral system. However few studies of patient referral system have been undertaken in developing countries, some studies in these areas have focused on the quality of referral letters and the appropriateness of a referral.

Chapter 3: Research Methods

The chapter will identify the research design, and the instruments used to collect the data and how the data was analyzed and interpreted to draw up a conclusion of the study.

3.1 Research design

The researcher employed a non-experimental descriptive type of quantitative research. A cross-sectional study was conducted to evaluate the effectiveness of the referral system between CMH

ART unit and its feeder sites (Zone2; 8 and 13). A cross sectional study according to Christenson (2007) identifies representative samples of individuals that differ on some characteristics, such as age, gender, ethnic group or religion, and measures these different samples of individuals on the same variables or variable often at one point in time.

An evaluation research (descriptive evaluation) design was adopted to conduct the study. Descriptive evaluations are very useful and can be done with relatively few resources, but at the same time require disciplined thinking and a clear structure. Their main features according to St Lager et al (1997) are some means of portraying a service, what it does and who does it, they also involve descriptions of why the service exists, and finally, they involve the evaluators' understanding of the context within which the service operates.

A survey design (simple survey) was also employed which according to Bless et al., (2000) is the collection of information on a wide range of cases, each case being investigated only on the particular aspect under consideration.

3.2 Research method

Quantitative research methodology which Bless et al (2000) defines as one that relies upon measurements and uses various scales, was employed throughout the study. In qualitative research numbers form a coding system, by which different cases and different variables may be compared. Systematic changes in “scores” are interpreted or given meaning in terms of the actual world that they represent, and numbers have the advantage of being exact.

3.3 Research setting

The study took place at Cecilia Makiwane Hospital ART unit and at zone 2; 8 and 13 clinics, situated in the suburb of Mdantsane near the city of East London, in the Amatole District of the Eastern Province of South Africa. Cecilia Makiwane hospital together with Frere hospital makes up East London Hospital Complex. CMH is the governed owned facility, first opened in 1974, with the catchment population of well over 1 million. The site is well served by public transport and geographical accessible for the majority of the population within the catchment area. The care and treatment clinic has been operational since 2004, providing services from Monday to

Friday between 07h30 and 16h00 hours. CMH received accreditation from the National Department of Health in 2005. The site provides adult ART care and treatment only; pediatric services are provided at the outpatient pediatric clinic. Voluntary counseling and testing (VCT) is available in all the inpatient wards, and prevention of mother to child treatment (PMTCT) program is available in the antenatal clinic (ANC) and the maternity outpatient unit (MOU).

Zone 2; 8 and 13 clinics are also situated in the suburb of Mdantsane, they are the only 3 clinics that provide HIV/AIDS care and treatment services, and they also act as feeder sites to CMH ART unit. Their initial role was to identify adult patients in need of ART, begin the process of adherence preparation, and refer them to the nearest ART accredited site which is CMH for initiation of treatment, but presently they also provide treatment services.

3.4 Population

The population of a study is that group (usually of people) whom we want to draw conclusion (Mouton et al., 2005). The target population included all patients from areas around the referral clinics whom access treatment at CMH, and patients accessing treatment at feeder sites (zone 2; 8 and 13) from the period of 14th December 2009 to 14th January 2010, and all adherence counselors; nurses; pharmacist assistants; pharmacists and doctors from CMH ART unit and its feeder sites (Zone 2, 8 and 13 clinics) present during the same period.

3.5 Sampling

Sampling according to Polit et al., (1995) refers to a process of selecting a portion of the population to represent the entire population.

Purposive sampling that is defined by Brink (2000) as a method that is based on the judgment of a researcher regarding subjects or objects that are typical or representative of the phenomenon (or topic) being studied, or who are especially knowledgeable about the question at issue, was used.

The researcher employed non-probabilistic purposive sampling method, as he did not know in advance how many subjects are needed, he sampled continuously until data saturation occurred.

In purposive sampling, often consecutive persons are included in a sample until a certain number has been studied, or objects seen over a certain period constitute the sample.

The sample composed of patients from areas around the referral clinics whom access treatment at CMH, and patients accessing treatment at feeder sites (zone 2; 8 and 13) from the period of 14th December 2009 to 14th January 2010, and all adherence counselors; nurses; pharmacist assistants; pharmacists and doctors from CMH ART unit and its feeder sites (Zone 2, 8 and 13 clinics) present during the same period.

3.6 Data collection

The researcher gathered data through administering structured questionnaires, which were composed of closed and open ended questions to the patients. Questionnaires were also dispatched to the facility staff (Nurses, Doctors, Data Captures and Adherence/Peer Educators) to fill without the assistant of a researcher, and were collected once they have been filled.

3.7 Pilot study

The pilot study is a “trial run” undertaken before embarking a full scale project. The purposes of the pilot include: confirming that the study management hierarchy is aware of its responsibilities; checking that the selected method/study design is appropriate for the data to be collected; confirming the political/technical feasibility of the study; and checking that the time-scale is reasonable (St Lenger et al., 1997).

The pilot study was conducted a week before the actual study with the similar clients to those of the researcher’s interest (1 doctor; 1 Nurse; 1 Data Capturer; 1 Pharmacist; 2 Adherence/Peer educators and 10 Patients), to test the validity of the questionnaire and to test if the interview process shall be adjusted to answer the research question. The researcher during this period will made use of a non-scheduled structured interview, which is meant to aid the formulation of accurate and precise questions that can be used during the study. Participants used during this period were not used as part of the study.

3.8 Ethical consideration

When conducting a study, the following principle of fundamental ethical principles underlying protection of human subjects will be considered:

- *Informed consent* – Just as all patients entering health services have the right to know what will happen to them and to sign a consent form for all procedures, so do the participants in a research project (Brink, 2000). Study participants were informed about the study and given consent form to sign.
- *Principle of anonymity* – According to Brink (2000) anonymity refers to the act of keeping individuals nameless in relation to their participation in the research. To abide to this principle, information related to participants or to the fact that certain individuals have participated in this study was not made available to anyone beyond the immediate research team and the names of study participants was not used neither to questionnaires of excel spreadsheet.
- *Principle of confidentiality* – Brinks (2000) describes confidentiality as refers to the researcher responsibility to protect all data gathered within the scope of the project from being divulged or made available to any other person. Study participants were informed that the researcher intends to publish the results of the study and personal characteristics will not be made known. The research team signed a confidentiality agreement from as a way of enforcing confidentiality.

3.9 Data analysis

Mouton (2008) states that, all fieldwork culminates in the analysis and interpretation of some set of data, be it quantitative survey data, experimental recordings, historical and literary texts, qualitative transcripts or discursive data.

Descriptive statistics together with simple graphic was used to analyze the study; the former provides simple summaries about the sample and the measures.

Descriptive statistics are used to describe and summaries data. They convert and condense a collection of data into an organized, visual representation of data (a picture) in a variety of ways, so that the data have some meaning for the readers of research reports. A descriptive approach employs measures such as frequency distributions, measures of central tendency and dispersion or variability and measure of relationships (Brink, 2000).

3.10 Conclusion

This has been focusing on the research methodology of the study, thus including the population, research settings, data collection and analysis and ethical considerations that revolve around, when conducting a research study. The following chapter will be discussing the findings obtained from the data analysis.

Chapter 4: Analysis and findings of the study

4.1 Introduction

The chapter will be about revealing the results of the data collected during the research period, the results are presented using tables and graphs that has been extracted from an excel spreadsheet.

4.2 Patients satisfaction findings

The questionnaire was divided into 2 sections, Section A was composed of closed ended questions whilst Section B was composed of open ended questions. Section A was further divided into ease of getting care; patients' perception of the treatment they receive from the health care workers and their views on down referral system. Patient were divided according to the clinic where they receive care to assess the experience they come across in each clinics. The number or the percentage on the graphs represent the number or percent of patients replied by stating **True** or **False** on a particular question.

4.2.1 Patients accessing treatment at zone 13 clinic

Section A - Closed ended questions

There was 20 participants participated in the study, 15% was between the age of 18-25 years; 35% was from an age group between 26-34 years and 50% of them were 35 years and above. (See fig 4.1)

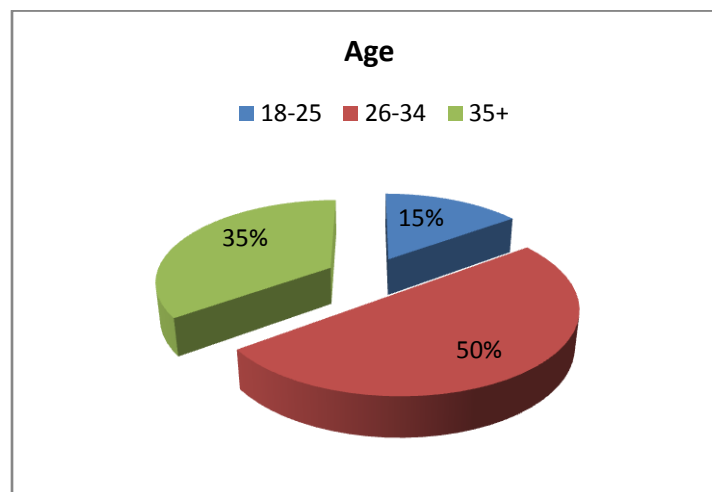


Fig 4.1 Illustrates zone 13 patients participated in the study, categorized according to age Patients were posed five questions to assess the ease of getting care into this facility. The response to these questions was as follows; 100% of them agreed that they have easy access to the clinic; 83% agreed that they do not wait long to get into the clinic, only 17% disagreed on that; 83% again agreed that they do not leave the site without getting care when its busy, 17% disagreed on that; all agreed that they are given time to ask question during the consultation by the health care workers; and lastly they all agree that their waiting room is comfortable and safe. (See figure 4.2)

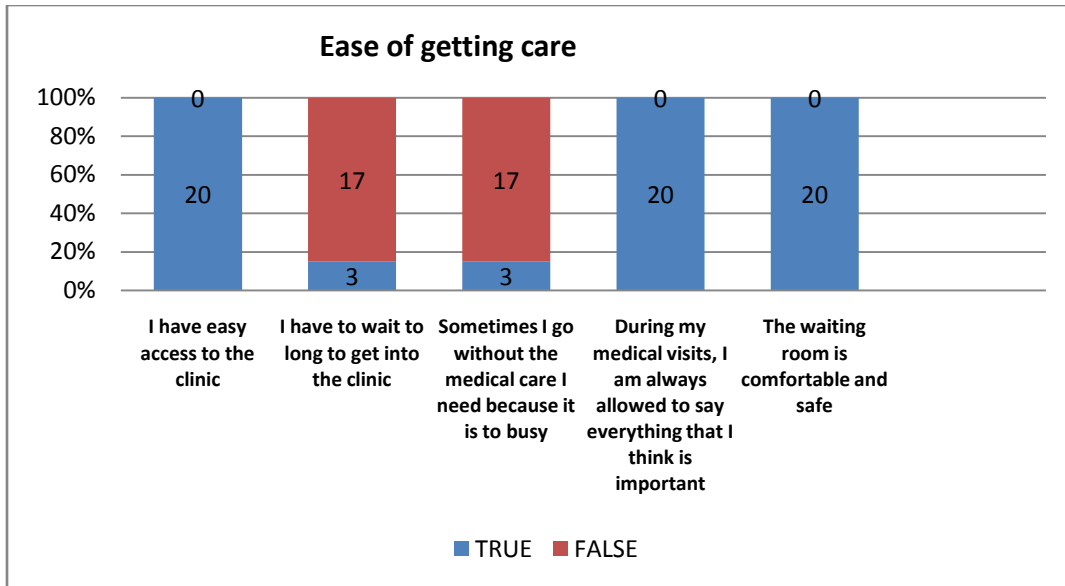


Fig 4.2 Illustrate ease of getting care in zone 13 clinic

Three questions were posed to assess the satisfaction of patient towards the treatment they receive from the health care workers (HCW). They were all satisfied with the medical care they receive from this facility and they also agreed that HCW are careful to check everything when treating and examining them, only 17% who believe that HCW sometimes hurry too much when they treat them and 83% disagreed on that. (See fig 4.3)

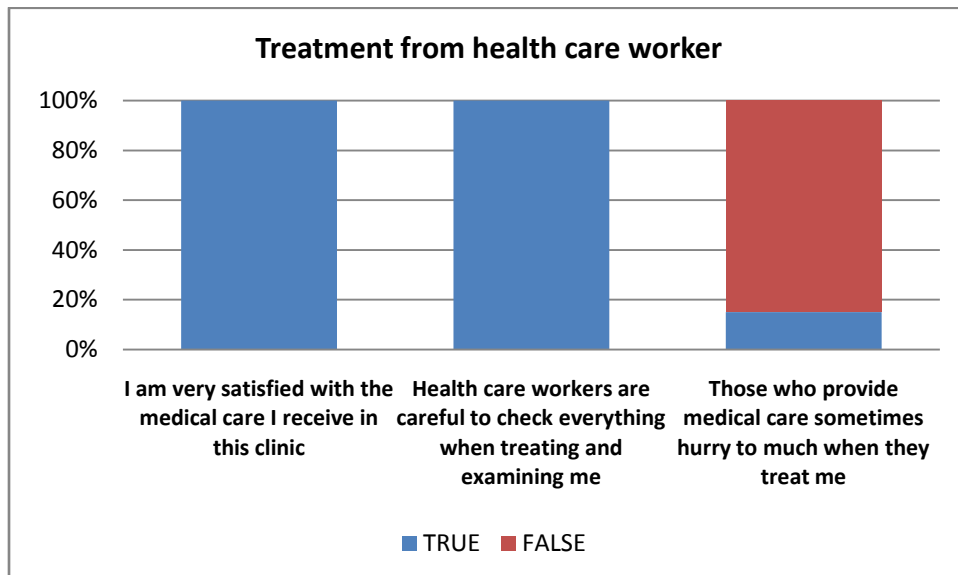


Fig 4.3 Illustrate the patients satisfaction about the treatment they receive from HCW at zone 13 clinic

Five questions were posed to assess their satisfaction about the down referral system. They all (100%) agreed that they were informed about being down referred to this site; they always get their medication on their scheduled dates; the down referral has been helpful to them; and they all prefer to access treatment at this facility than at CMH. The fifth question was asking whether they voluntarily asked to be down referred, 70% agreed on that, only 30% disagreed. (See fig 4.4)

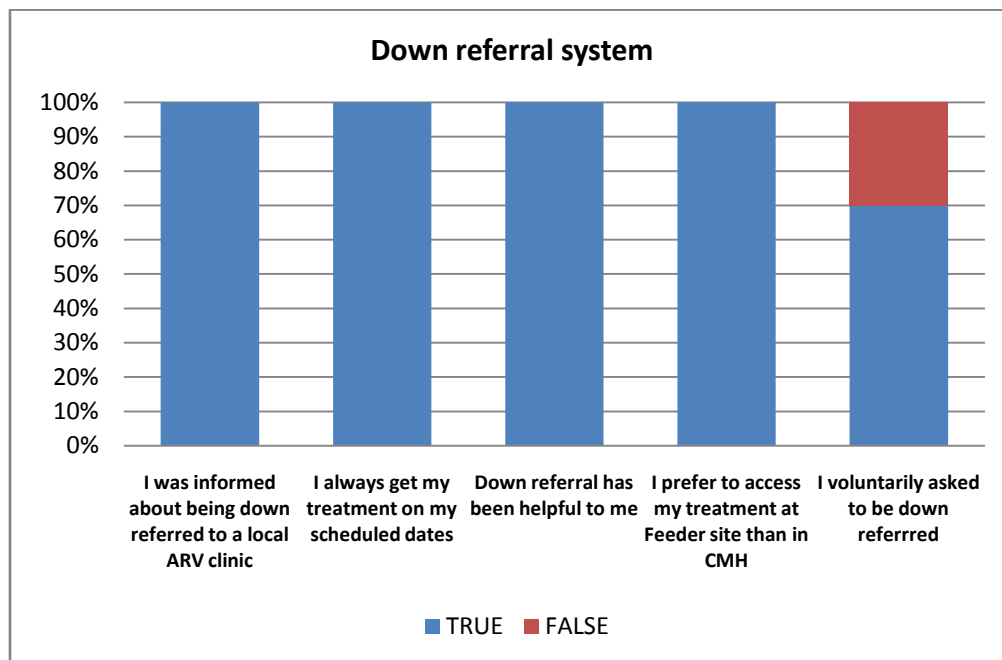


Fig 4.4 Illustrate the patients satisfaction about down referral system

Section B - Open ended questions

What do you like most about our clinic? All (100%) responded by saying it is closer to their homes, saves them taxi fare, they do not have to wake up early in the morning on their appointment dates compared to when they were accessing treatment at CMH, and also they do not wait long before they can receive medical attention.

What do you like list about our clinic? 70% on the participant responded by saying there is nothing that they like list about the clinic, and the rest raised different opinion like; taking too

long when they have to take observations, and treatment for minor ailments is not always available.

4.2.2 Patient accessing treatment at CMH although they have been down referred to zone 13 clinic

Section A - Closed ended questions

The research managed to get 9 participants from this category of patients, 11% was from the age of 18-25; 33% from the age of 26-34; and 56% from 35 and above. (See fig 4.5)

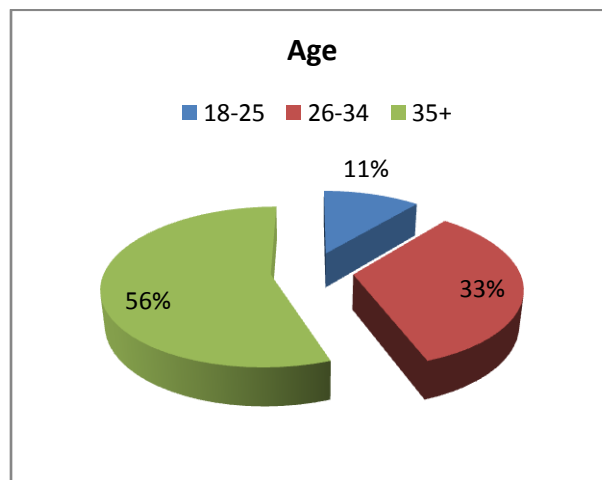


Fig 4.5 Illustrate patients accessing treatment at CMH although they have been down referred to zone 13 clinic, categorized according to age

Patients were posed five questions to assess the ease of getting care. The response to these questions was as follows; 45% agreed that they have easy access to the facility, but 55% disagreed on that; 33% agreed that they have to wait too, but 67% disagreed on that, 22% agreed that sometimes they have to leave the facility without getting care when it is busy, but 78% disagreed on that; all of them (100%) agreed that they are given time to ask question during the consultation by the HCW; and lastly 90% agree that their waiting room is comfortable and safe, but only 10% disagreed on that. (See figure 4.6)

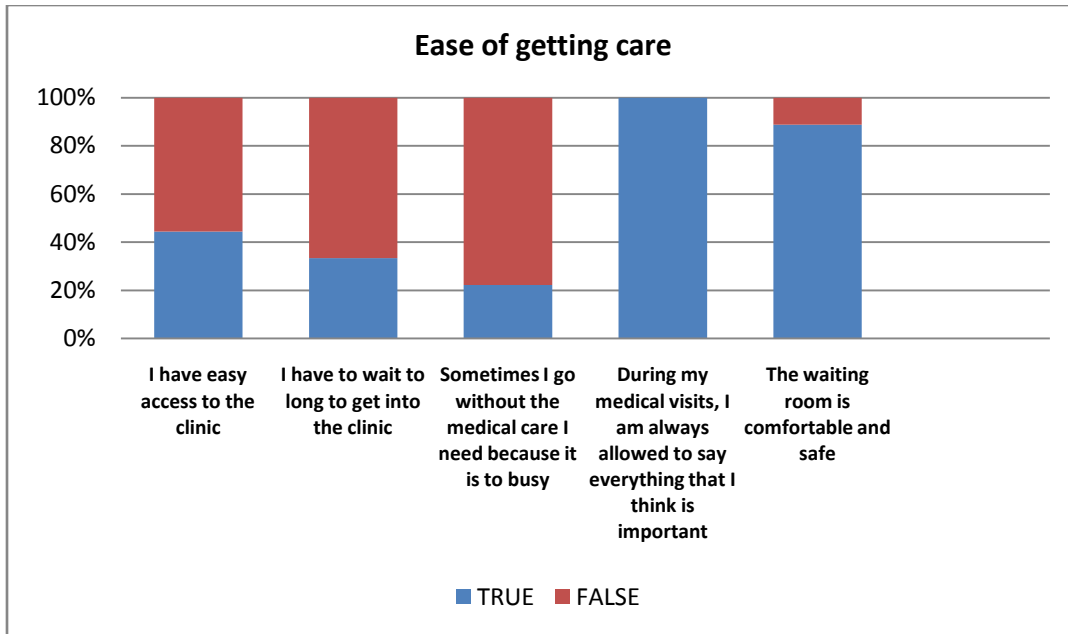


Fig 4.6 Illustrate the ease of getting care at CMH

Three questions were posed to assess the satisfaction of patient towards the treatment they receive from the health care workers (HCW). They were all (100%) satisfied with the medical care they receive from this facility, they agreed that HCW are careful to check everything when treating and examining them, and they all (100%) disagreed on the notion that HCW sometimes hurry too much when they treat them. (See fig 4.7)

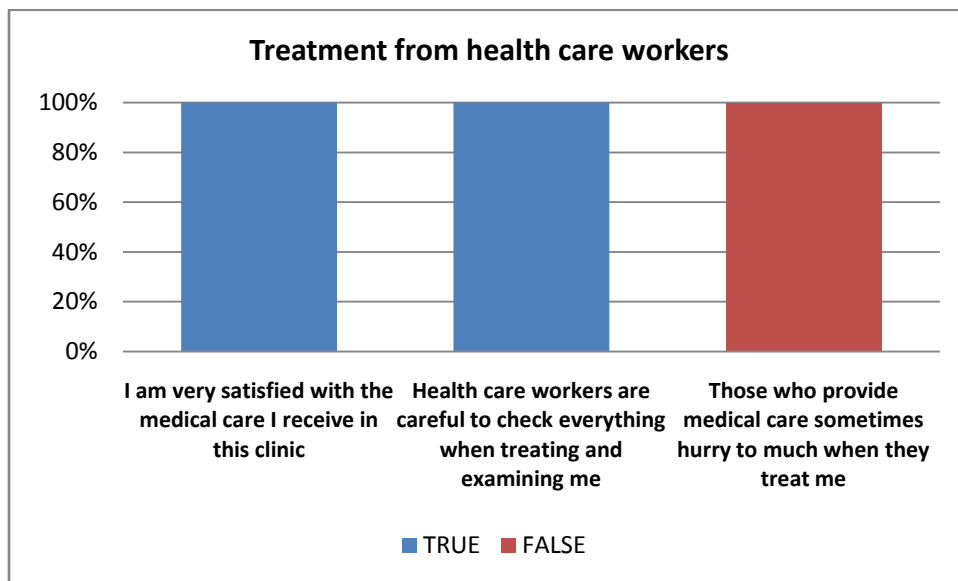


Fig 4.7 Illustrate patients' satisfaction about the treatment they receive from HCW at CMH

Five questions were posed to assess their satisfaction about the down referral system. Only 10% agreed that they were informed about being down referred to this site, but 90% disagreed; they all agreed that they always get their medication on their scheduled dates; 55% agreed that the down referral would be helpful to them, but 44% disagreed; 33% prefer to access treatment at this facility than at nearest feeder site, but 67% prefers to access treatment at feeder site. The fifth question was asking whether they voluntarily asked to be down referred, 22% agreed on that, but 78% disagreed. The graph reflects that the patients were not informed that they have been down referred although they voluntarily ask for this initiative, and it also reveals that they prefer to access treatment at the nearest feeder site than at CMH. (See fig 4.8)

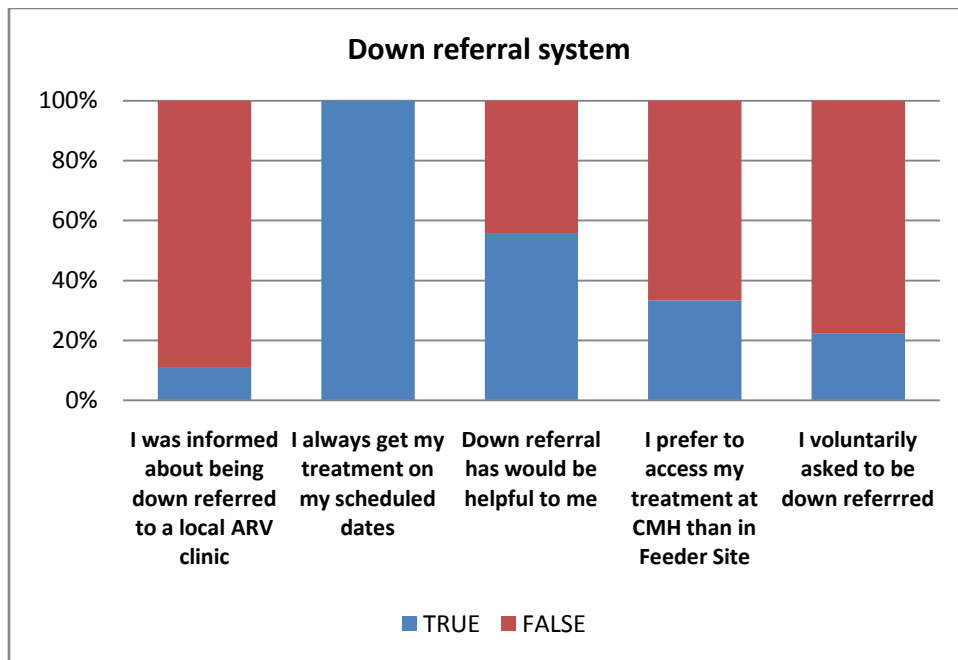


Fig 4.8 Illustrate the patients' satisfaction about the down referral system

Section B - Open ended questions

What do you like best about our clinic? 44% of participants responded by saying they do not have to wait long before getting medical attention, and there is privacy; 33% said the facility staff treat them with courtesy, and they receive educational session whilst waiting for medical attention; and 23% said there is nothing that they like about the facility.

What do you like list about our clinic? 46% said that the facility is far from their residential areas, and they have to pay transport to be able to access medical services; 22% said they have to wake up early on their appointment dates; and the other 22% had nothing that they like list about the facility.

4.2.3 Patients accessing treatment at zone 2 clinic

Section A - Closed ended questions

Zone 2 clinic had about 20 participants that participated in the study, 15% was from the age of 18-25; 30% from 26-34; and 55% from 35 years and above. (See fig 4.9)

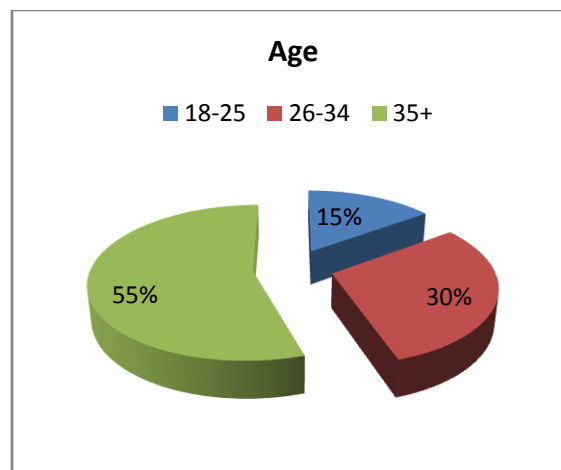
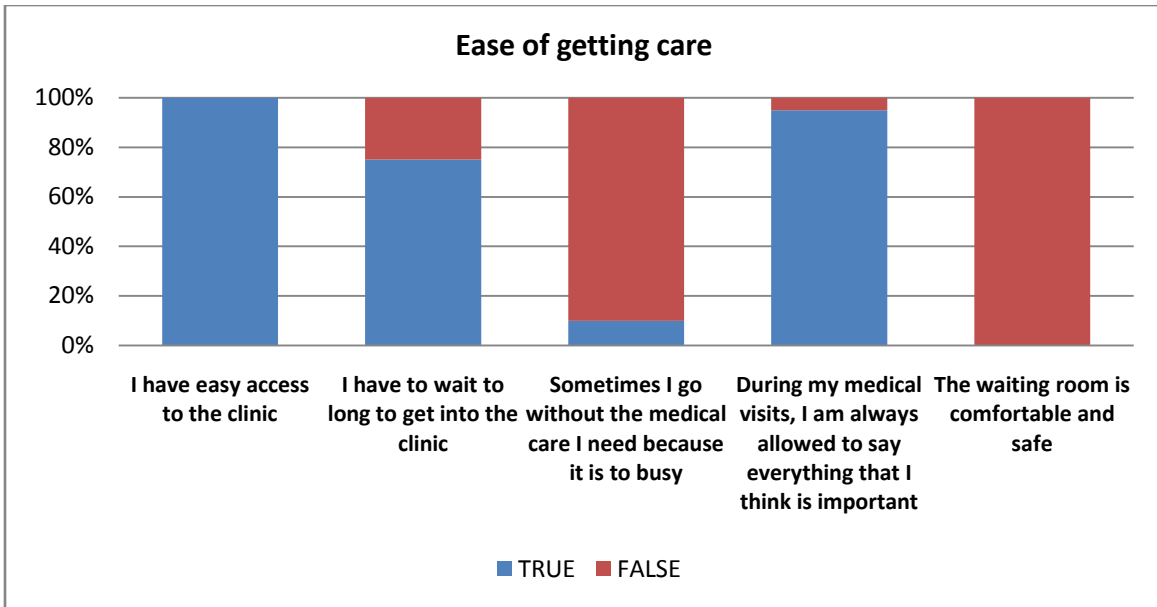


Fig 4.9 Illustrate zone 2 patients participated in the study, categorized according to age

Patients were posed five questions to assess the ease of getting care. The response to these questions was as follows; they all agreed that they have easy access to the facility; 60% agreed that they have to wait too long to get into the clinic, 40% disagreed on that; 10% agreed that sometimes they have to leave the facility without getting care when it is busy, but 90% disagreed on that; 95% agreed that they are given time to ask question during the consultation by the HCW, only 5% disagreed; and lastly all (100%) disagreed on the statement that says their waiting room is comfortable and safe. (See figure 4.10)



4.10 Illustrate the ease of getting care at zone 2 clinic

Three questions were posed to assess the satisfaction of patient towards the treatment they receive from the health care workers (HCW). 85% is satisfied with the medical care they receive from this facility, but 15% is not satisfied; 90% agree that HCW are careful to check everything when treating and examining them, 10% did not agree on that; and 75% disagreed on the notion that HCW sometimes hurry too much when they treat them, 25% agreed on that. (See fig 4.11)

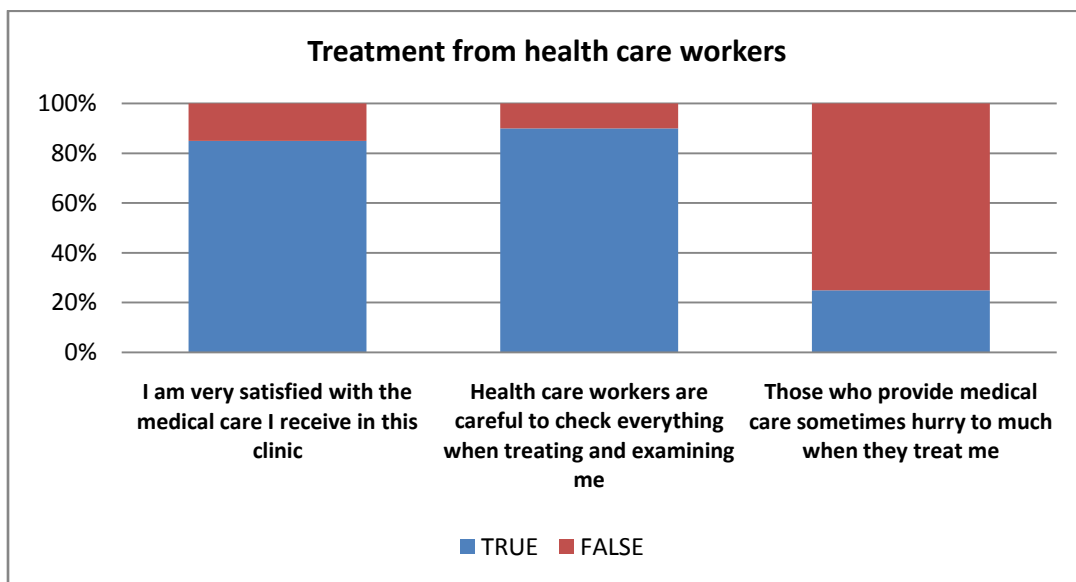


Fig 4.11 Illustrate the patients satisfaction about the treatment they receive from HCW at zone 2 clinic

Five questions were posed to assess their satisfaction about the down referral system. 95% agreed that they were informed about being down referred to this site, but 5% disagreed; they all (100%) agreed that they always get their medication on their scheduled dates; 95% agreed that the down referral has been helpful to them, but 5% disagreed; 95% prefer to access treatment at this facility than at nearest feeder site, but 5% prefers to access treatment at CMH. The fifth question was asking whether they voluntarily asked to be down referred, 85% agreed on that, but 15% disagreed. (See figure 4.12)

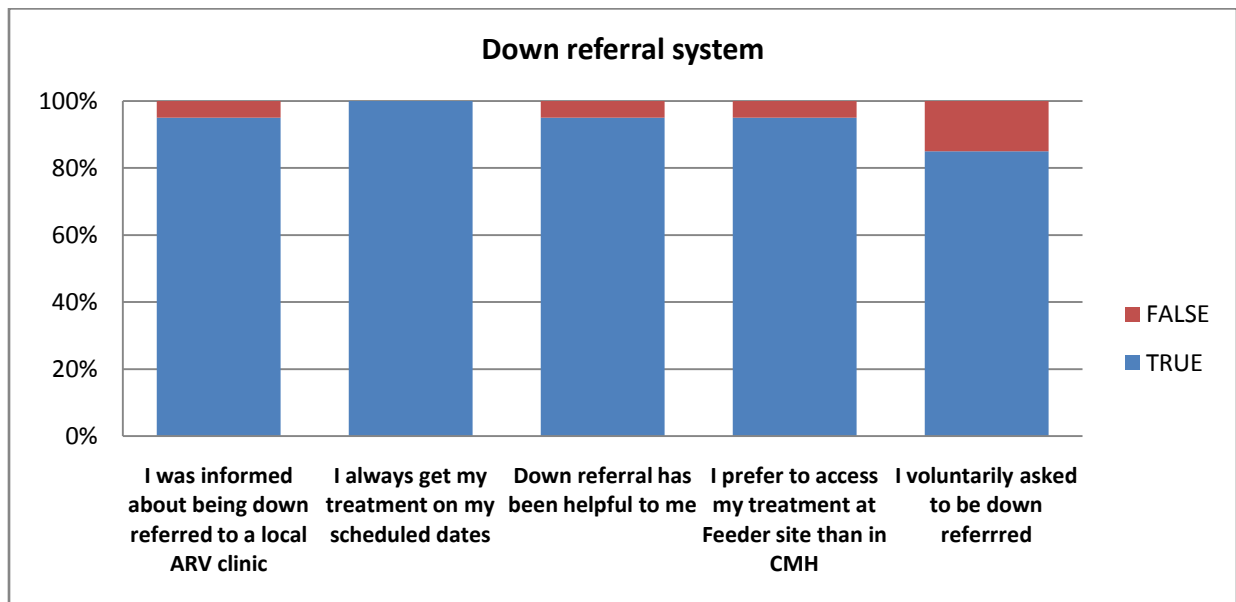


Fig 4.12 Illustrate the patients' satisfaction about the down referral system

Section B - Open ended questions

What do you like best about our clinic? 83% responded by saying the facility is closer to where they stay, and they are treated with courtesy; and 17% said there is nothing that they like about the facility.

What do you like list about our clinic? 92% said they wait too long before receiving medical attention, and the waiting room is always congested as it is too small to cater for the number of patients accessing care in this facility; 8% said there is nothing that they do not like about the facility.

4.2.4 Patient accessing treatment at CMH although they have been down referred to zone 2 clinic

Section A - Closed ended questions

There was about 20 participants participated in the study from this group of patients, 20% was from age 18-25; 20% from 26-34; and 60% from 35 years and above. (See fig 4.13)

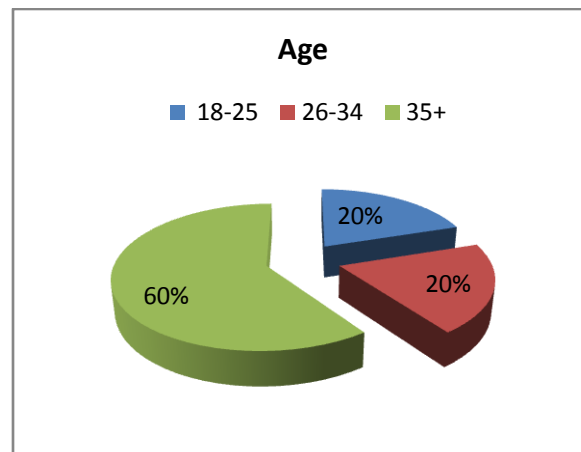


Fig 4.13 Illustrate patients accessing treatment at CMH although they have been down referred to zone 2 clinic, categorized according to age

Patients were posed five questions to assess the ease of getting care. The response to these questions was as follows; 50% agreed that they have easy access to the facility, and 50% disagreed; 70% agreed that they have to wait too long to get into the clinic, but 30% disagreed on that; 5% agreed that sometimes they have to leave the facility without getting care when it is busy, but 95% disagreed on that; 95% agreed that they are given time to ask question during the consultation by the HCW, only 5% disagreed; and 15% disagreed on the statement that says their waiting room is comfortable and safe, but 85% agreed. (See figure 4.14)

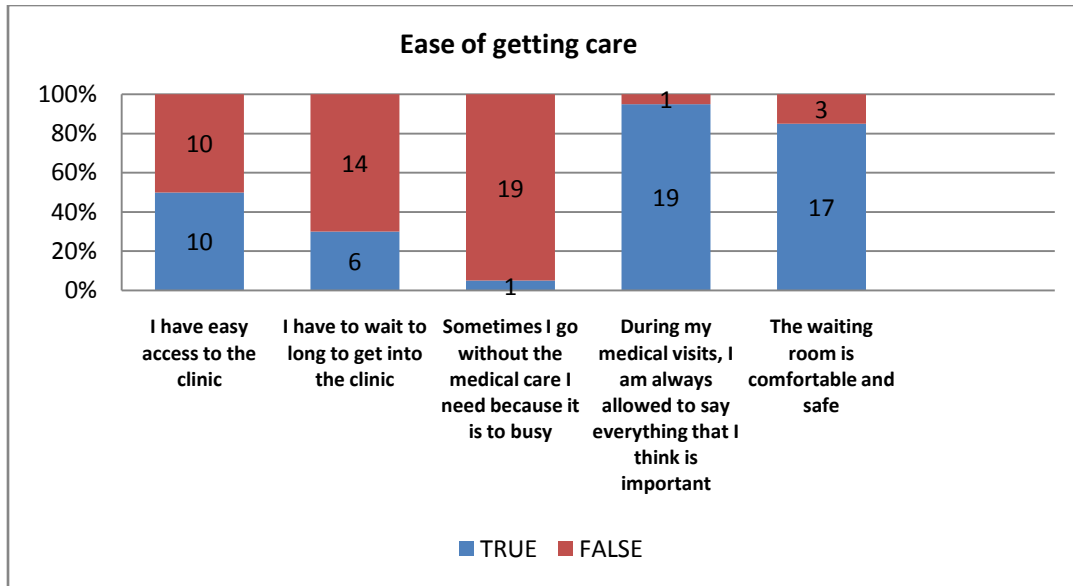


Fig 4.14 Illustrate the ease of getting care at CMH

Three questions were posed to assess the satisfaction of patient towards the treatment they receive from the health care workers (HCW). All participants (100%) were satisfied with the medical care they receive from this facility; 100% agree that HCW are careful to check everything when treating and examining them; and they all (100%) disagreed on the notion that HCW sometimes hurry too much when they treat them. (See fig 4.15)

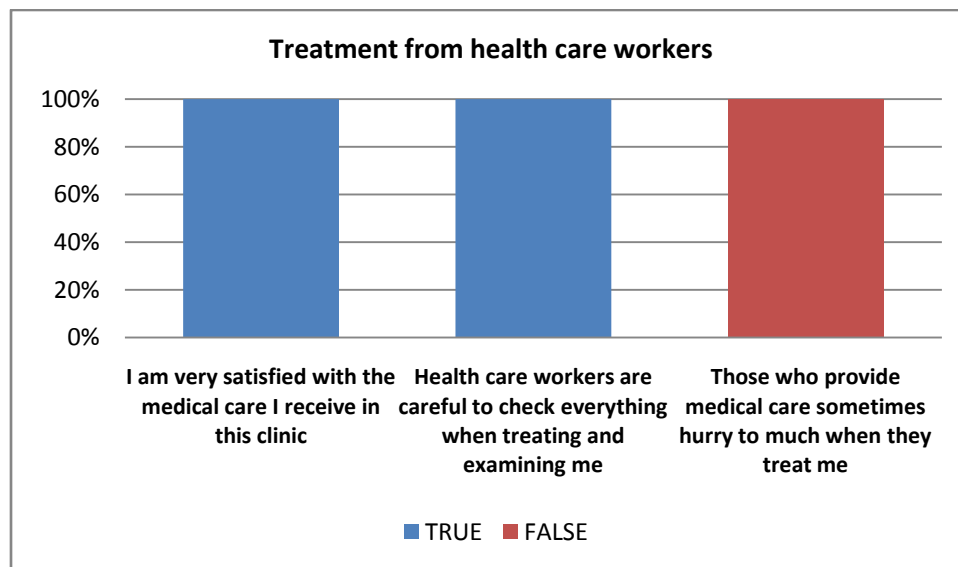


Fig 4.15 Illustrate patients' satisfaction about the treatment they receive from HCW at CMH

Five questions were posed to assess their satisfaction about the down referral system. 50% agreed that they were informed about being down referred to this site, and another 50% disagreed; 95% agreed that they always get their medication on their scheduled dates, 5% disagreed; 55% agreed that the down referral would be helpful to them, but 45% disagreed; 50% prefer to access treatment at nearest feeder site, and another 50% prefers to access treatment at CMH. The fifth question was asking whether they voluntarily asked to be down referred, 55% agreed on that, but 45% disagreed. (See figure 4.16)

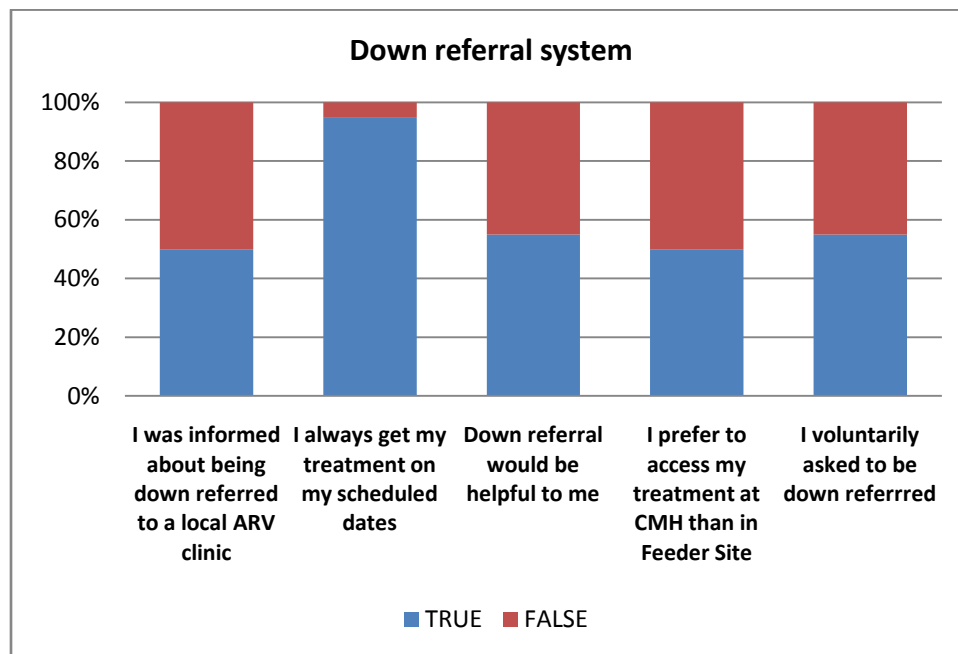


Fig 4.16 Illustrate the patients' satisfaction about the down referral system

Section B - Open ended questions

What do you like best about our clinic? 50% responded by saying they are treated with courtesy and they also receive educational sessions; 36% said they there is nothing that they like about the facility; and 14% said they always get their treatment on their appointment dates compared to zone 2 clinic.

What do you like list about our clinic? 69% said the facility is far from where they stay and have to wake up early on their appointment dates; and 31% said there is nothing that they like list about the facility.

4.2.5 Patient accessing treatment at CMH but reside in areas nearer to zone 8 clinic

Section A - Closed ended questions

There was about 20 participants participated in the study from this group of patients, 10% of participants were from the age of 18-25; 25% from 26-34; and 65% from 35 years and above. (See figure 4.17)

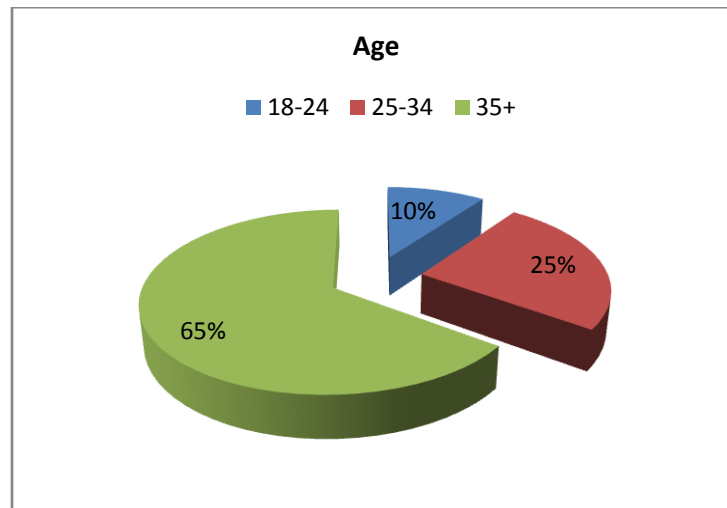


Fig 4.17 Illustrate patients accessing treatment at CMH although they have been down referred to zone 2 clinic, categorized according to age

Patients were posed five questions to assess the ease of getting care. The response to these questions was as follows; 45% agreed that they have easy access to the facility, and 55% disagreed; 50% agreed that they have to wait too long to get into the clinic, and other 50% disagreed on that; 10% agreed that sometimes they have to leave the facility without getting care when it is busy, but 90% disagreed on that; 95% agreed that they are given time to ask question during the consultation by the HCW, only 5% disagreed; and 20% disagreed on the statement that says their waiting room is comfortable and safe, but 80% agreed. (See figure 4.14)

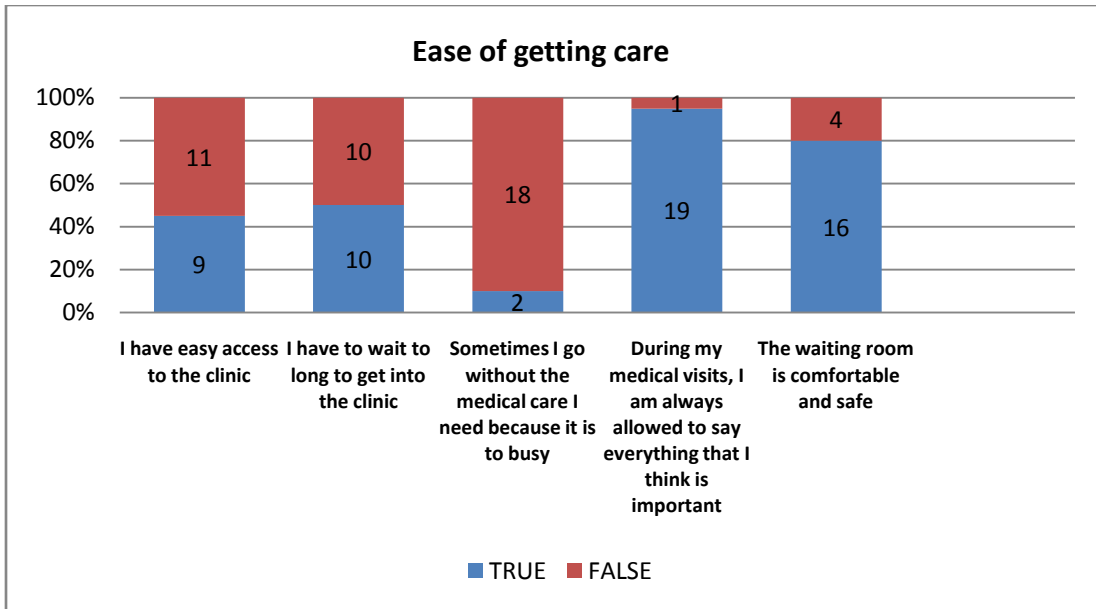


Fig 4.18 Illustrate the ease of getting care at CMH

Three questions were posed to assess the satisfaction of patient towards the treatment they receive from the health care workers (HCW). 95% is satisfied with the medical care they receive from this facility, only 5% that disagree on that; 100% agree that HCW are careful to check everything when treating and examining them; and they all (100%) disagreed on the notion that HCW sometimes hurry too much when they treat them. (See fig 4.19)

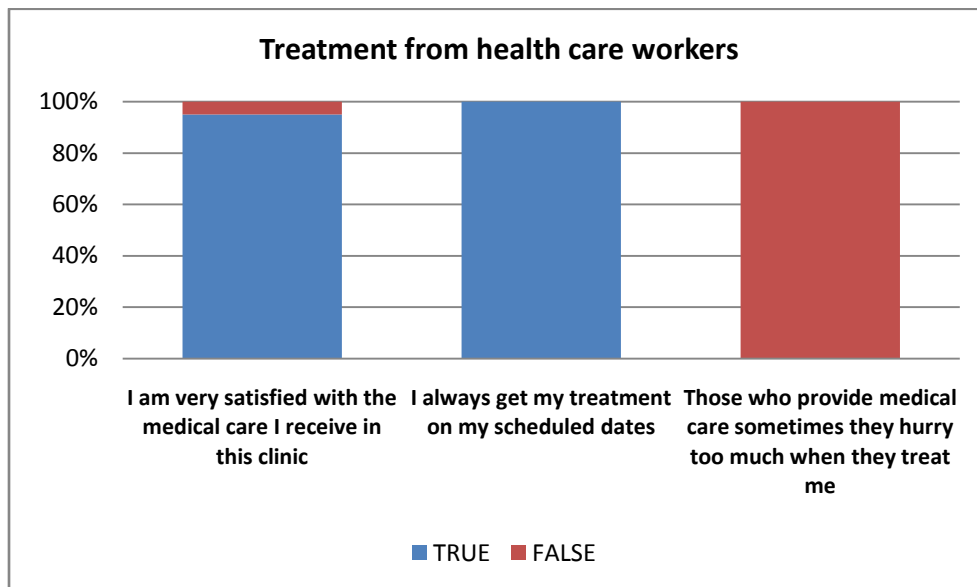


Fig 4.19 Illustrate patients' satisfaction about the treatment they receive from HCW at CMH

Five questions were posed to assess patient satisfaction about the down referral system. 10% agree that they were informed about being down referred to this site, 90% disagree on that; 100% agree that they always get their medication on their scheduled dates; 75% agreed that the down referral would be helpful to them, but 25% disagreed on that; 55% prefer to access treatment at nearest feeder site, and another 45% prefers to access treatment at CMH. The fifth question was asking whether they voluntarily asked to be down referred, they all (100%) agree on that. (See figure 4.16)

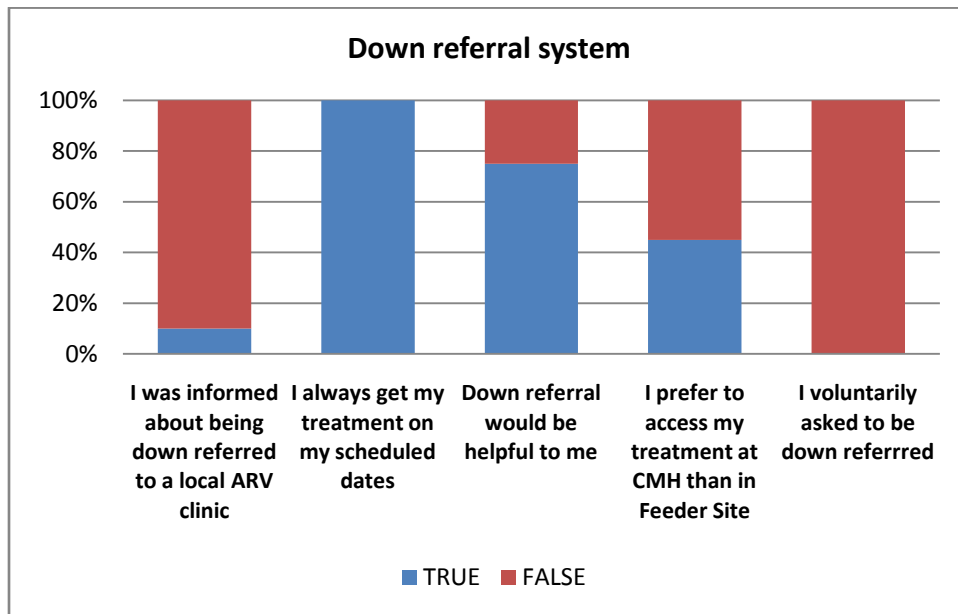


Fig 4.20 Illustrate the patients' satisfaction about the down referral system

Section B - Open ended questions

What do you like best about our clinic? 29% said they are treated with courtesy and receive educational sessions; another 29% said the facility is closer to where they stay; 21% said there is nothing that they like best about the facility; 14% said they always receive their treatment including treatment for minor ailments; and 7% said there is privacy and confidentiality is maintained.

What do you like list about our clinic? 50% said there is nothing that they like about the facility; 28% said it is far from where they stay and have to spend money to come to the clinic; 14% said

they have to wake up early on their appointment dates; and 7% said the pharmacy unit does not treat them with courtesy.

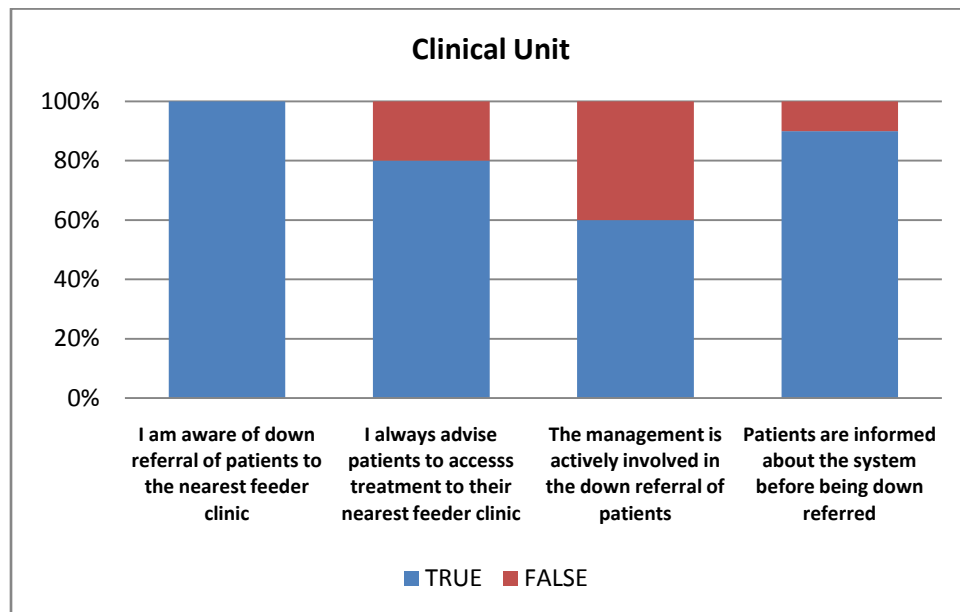
4.3 Findings of clinicians, pharmacist and data captures’ perception on DRS

Their questionnaire was also divided into Section A and B, section A was composed of open ended questions which categorized according to clinical unit, pharmacy unit, monitoring and evaluation unit, and general questions that involved all units. There was also a questionnaire for lay staff which also had Section A and B.

4.3.1 Clinical Unit

Section A - Closed ended questions

Four questions were posed to the clinicians to understand their perception about the down referral system. All (100%) participants agree that they are aware of the down referral system; 80% agree that they always advise their patients to access treatment at their nearest feeder sites, but 20% do not exercise that; 60% agree to the statement that says management is actively involved in the down referral of patients, 40% disagree on that statement; 90% agree that patients are informed about the system before being down referred, 10% did not agree on that. (See fig 4.21)



4.21 Illustrates clinical unit response on the questionnaire

Section B - Open ended questions

What are the strengths you can mention about the down referral of patients? The most prominent answers were that it is cost effective to patients and reduces defaulter rate; due to reduced number of patients, clinicians get a chance to render quality patient care.

What are the challenges you can mention about the down referral of patients? The most prominent answers were shortage of staff; lack of space and privacy; inadequate communication with feeder sites; patients continue to come to CMH for treatment although they were down referred.

4.3.2 Pharmacy Unit

Section A - Closed ended questions

Six questions were posed to the participants, 100% of the participants agreed that they are aware of the down referral of patients; 20% agreed that there is a tracking system in place to detect down referred patients, whom continue accessing treatment at CMH, but 80% did not agree on this statement; 80% agreed when asked whether the transport is always available to transport down referred treatment, 20% did not agree; 20% agree on the statement that say there is enough space for storage of down referred patients, but 80% did not agree on that; when asked whether the pharmacy kept updated of down referred patients, 20% agreed and 80% did not; and the notion that says the management is actively involved in the down referral of patients, 20% agreed and 80% did not. (See fig 4.22)

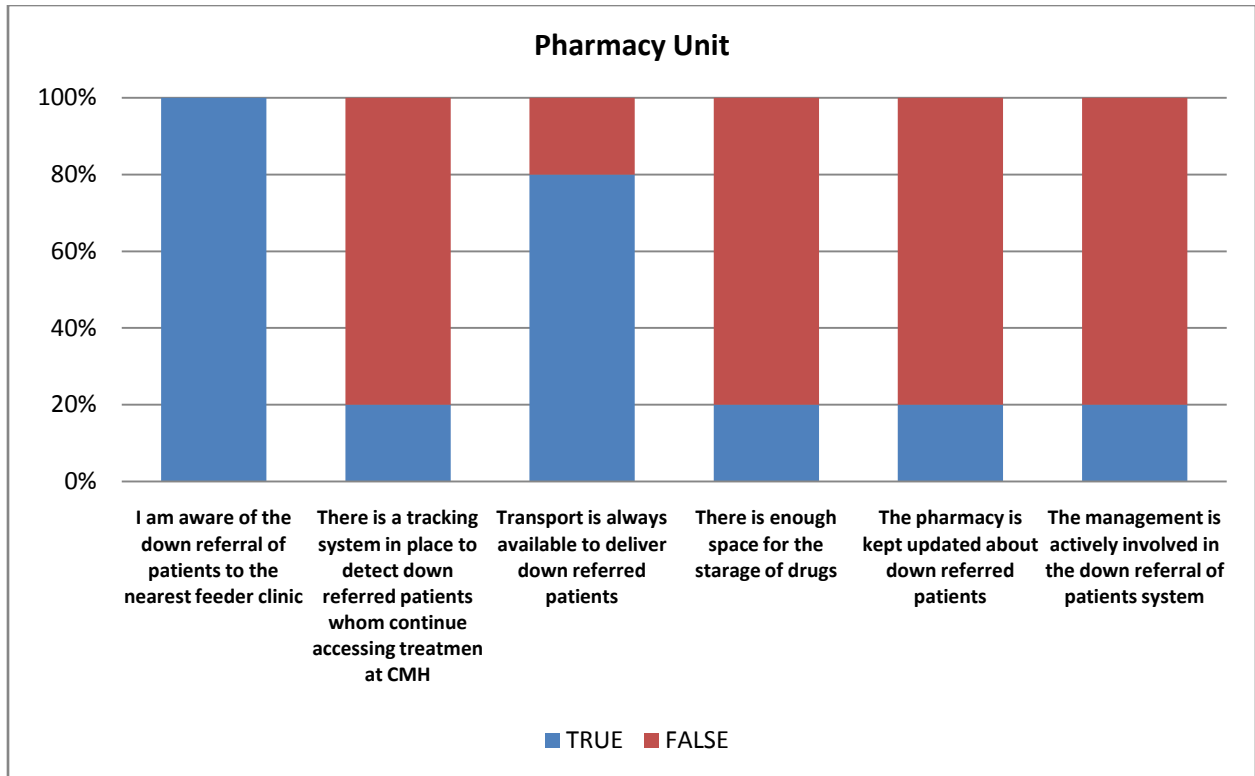


Fig 4.22 Illustrate pharmacy unit response on the questionnaire

Section B - Open ended questions

What are the strengths you could mention about the down referral of patients? 20% of participants felt that it is time consuming and it save the patients unnecessary travelling costs as they access treatment at sites closer to their homes. 80% feel like there is none because patients still continue to come to CMH for treatment although they have been down referred; they feel like the system is failing its needs and suggest that there should be more involvement from the management, and there should be someone spearheading the process.

What challenges you can mention about the down referral of patients? The most prominent answers on this question were not enough space for storage of medication; lack of management support; shortage of staff (data capturers); and also to create a system that will be able to detect defaulters.

4.3.3 Monitoring and evaluation unit

Section A - Closed ended questions

Five questions were posed to the participants to assess their perception about down referral system, 100% agreed when the following statements were posed to them, I am aware of the down referral of patients to their nearest feeder site; and whether there is a tracking system in place to detect down referred patient, whom continue accessing treatment at CMH; 100% disagreed on the notion that says the down referral system has been evaluated before; 33% agree that the management is actively involved in the down referral of patients system, but 67% disagreed on that. (See fig 4.23)

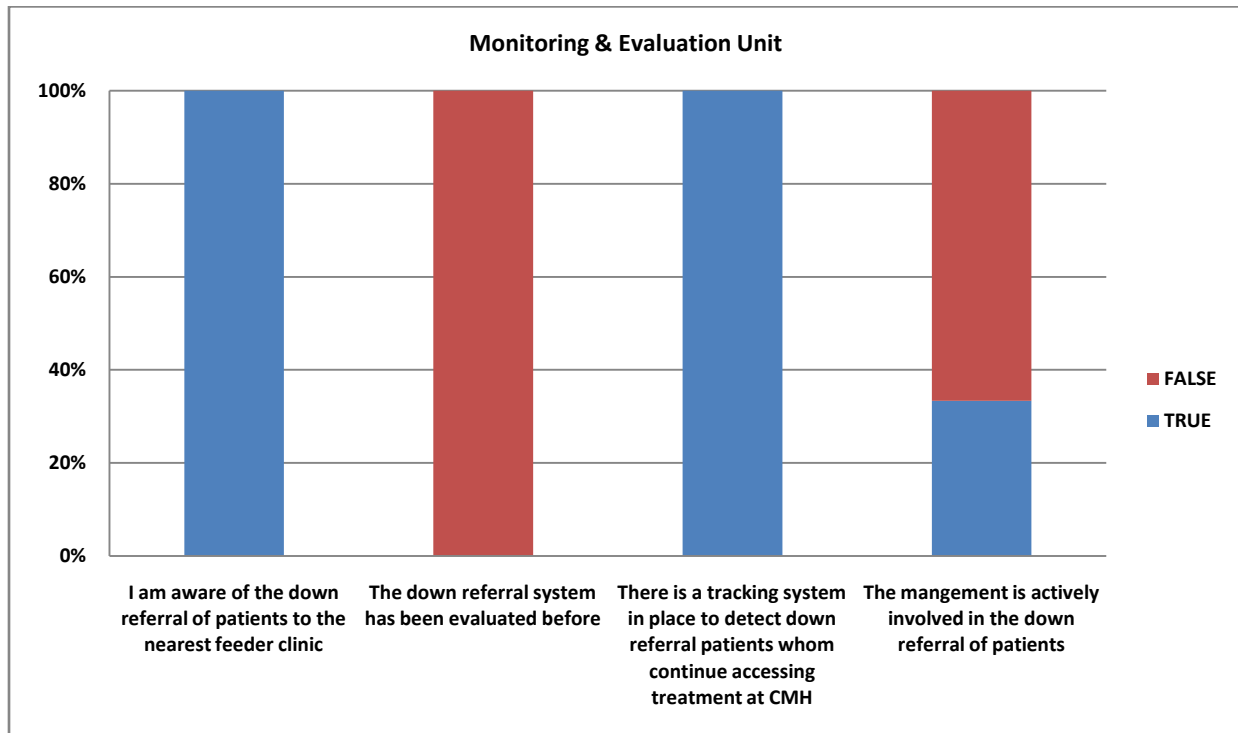


Fig 4.23 Illustrates the Monitoring and Evaluation Unit response to the questionnaire

Section B - Open ended questionnaire

What are the strengths you can mention about the down referral of patients? All (100%) feel like it is cost effective to the patients, and it reduces defaulting rate as patient usually complain for taxi when they did not honor their appointments.

What are the challenges you can mention about the down referral of patients? The most prominent answers were; lack of space which lead to lack of privacy and inactive involvement of the facility managers.

4.3.4 General questions

About 5 general questions were posed to assess clinical, pharmacy and monitoring an evaluation units staff perception about the down referral system, 38 % of participants agreed that the down referral was properly implemented, 62% disagree on that; all (100%) participants feel like the down referral of patients needs to be evaluated; on the statement that say there is a team from CMH and feeder sites that is leading the process 27% agreed and 73% disagreed on that; 22% agreed that there is a complete buy-in from staff and management of the feeder site 78% disagreed. (See fig 4.24)

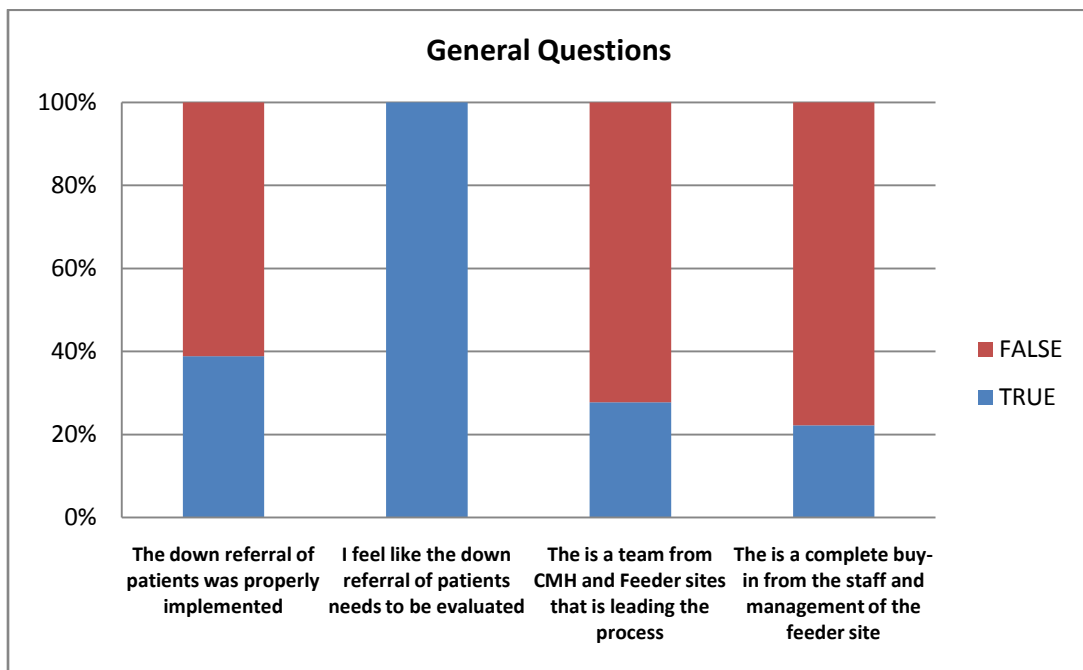


Fig 4.24 Illustrate the staff response to general questions

4.3.5 Counseling Unit

Section A - Closed ended questions

Five questions were posed to adherence/peer educators to assess their perception of the down referral system. All (100%) participants agreed that they are aware of the down referral system, they all (100%) feel like the system needs to be evaluated, and there is a functional tracking system in place to track the defaulters. 100% of participants do not agree on the statement that says there is team from CMH and Feeder sites that is leading the process.

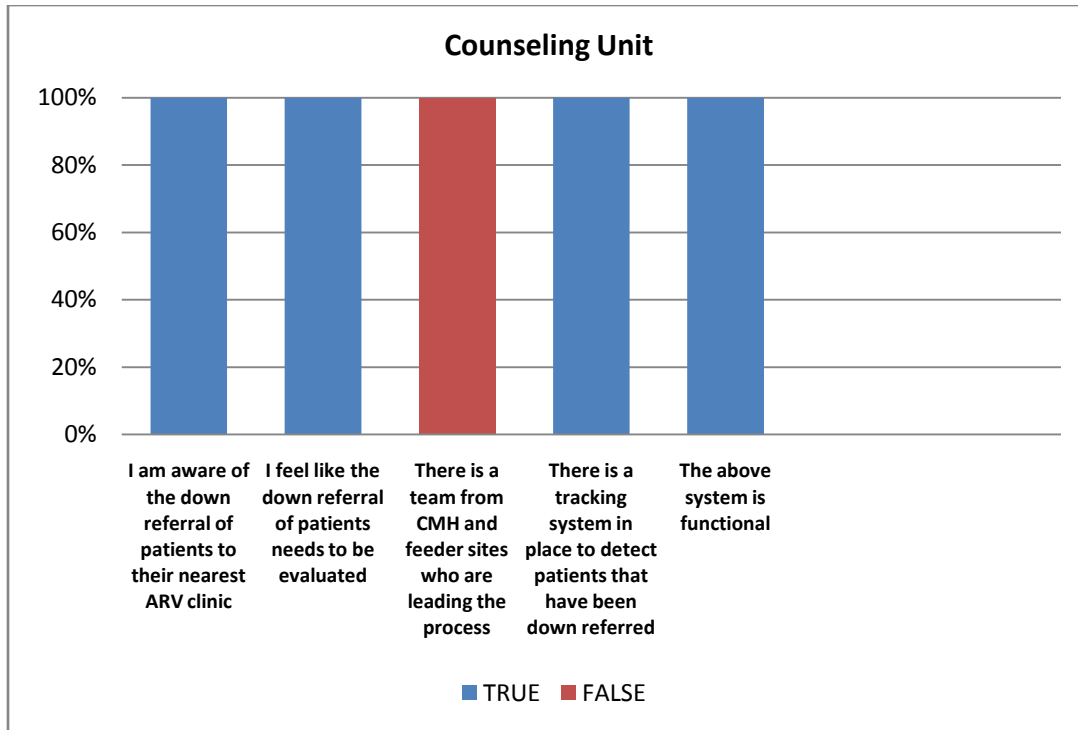


Fig 4.25 Illustrate the counseling unit response to the questionnaire

Section B - Open ended questions

What are the strengths you mention about down referral of patients? 67% of participants said it helps clients to access treatment closer from home and is cost effective; and 33% said nothing.

What are the challenges you can mention about the down referral of patients? 58% said patient continue to access treatment at CMH although they have been down referred to the nearest feeder clinic; and 48% said treatment is not always available in feeder sites especially at Zone 2 clinic and that leads to patients coming back to CMH to access treatment.

4.4 Conclusion

This chapter was focusing on the findings obtained after the collection of the data, Microsoft excel was used to collect and analyze that data. The following chapter will present limitations encountered during the study, recommendations made from the findings and the conclusion of the study.

Chapter 5: Limitations, recommendations and conclusion

5.1 Introduction

This chapter reflects back to the purpose and objectives of the study, the primary purpose was to evaluate the referral system between CMH and its feeder sites (zone 2; 8 and 13). It will make conclusion about the study and provide recommendations on how to improve the down referral system.

5.2 Limitations

The researcher was interested in answering the question “does the down referral system function effectively between CMH and its feeder sites (zone 2, 8 and 13)”. Limitations such as absence of the standard operating procedure to follow when down referring patients, and for the researcher to measure the system on; absence of a person spearheading the process; and the inactive involvement of the facility managers on the system inhibited the researcher from answering fully this question. The researcher slightly derailed from answering the question by focusing more on understanding the staff perception and patient satisfaction about the down referral system.

The researcher become aware during the study that the down referral system between CMH and zone 8 has collapsed, this surfaced due to lack of pharmacist assistant to assist with the management and storage of medication at zone 8 clinic. All patients that have been down referred to the latter were left with no choice but access their treatment at CMH. They only come for minor ailments treatment to zone 8 clinic.

5.3 Recommendations

Management

- Management of the institutions should be actively involved and help in supervising the process
- Enact a standard operating procedure to follow during the process of down referral
- Bimonthly or quarterly meeting should sit between CMH and feeder sites staff to improve communication and discuss obstacles encountered during the process

- Filling of vacant positions that inhibit the effectiveness of the system e.g. data capturers and pharmacist assistants
- Workshop for the staff on down referral system to bridge the gaps

Feeder sites

- Training of staff on HIV/AIDS
- Incorporation or integration of HIV/AIDS services with general clinic services
- Addition of consultation rooms and renovation of waiting to cater for the influx of patients

Pharmacy

- Pharmacy should be updated on down referred patients or a system to detect down referred patients should be created
- Improve drug storage condition of drugs in feeder sites
- Sufficient supply drugs in feeder sites

Patients Education

- On the importance or advantages of down referral
- On acceptance of HIV status as others are reluctant to access treatment at feeder sites due to confidentiality issues

Monitoring and evaluations

- The system should be evaluated biannually
- Create a system to detect down referred patients, whom continue accessing treatment at CMH

5.4 Conclusion

The down referral process began without the completion of planning with all involved stakeholders because of the pressure to implement the decision to down refer, staff at the feeder clinics although trained on ART care, but not experienced enough to manage the large influx of patients on ART. Due to the influx waiting prolonged and waiting rooms became overcrowded.

The down referral of patients is not well monitored, and with the gradual increase in the down referral, there is no master list of patients down referred. The electronic database maintained at CMH is not maintained when patients are down referred. Patients down referred but continue accessing treatment at CMH are registered as defaulters in feeder sites resulting insufficient data. No active system for tracing of down referred patients in place.

There is inadequate drug supply management as down referred patients sometimes could not get treatment on their appointment dates in feeder site ending up being referred to CMH. Some patients end up consistently accessing their treatment at CMH due to frustration with the chaotic process.

Down referral requires careful planning, implementation over a realistic time frame, and attention monitoring at all levels. The most obvious and significant lesson is the need to take time to explain to the patients the reason behind the decisions taken for the down referral, and explain that they would from one proximal service without any compromise in care.

References

1. Al-Mazrou, Y.Y., Al-Shari, S. & Rao, M. (1990). *Principles and Practice of Primary Health Care*. Riyadh Directorate of Health Centers, Ministry of Health, Al-Helal Press
2. Bless, C. & Higson-Smith, C. (2000). *Fundamentals of Social Research Methods. An African Perspective*. Third Edition. Juta Education (Pty) Ltd
3. Bossyns, P., Abache, R., Abdoulaye, M.S., Miye, H., Depoorter, A. & van Lerbeghe, W. (2006). Monitoring the referral system through benchmarking in rural Niger: an evaluation of the functional relationship between health centres and the district health centres. *BMC Health Services Research*, **6**(51)
4. Brink, H.I. (2000). *Fundamentals of Research Methodology for Healthcare Professionals*. Juta and Company. Cape Town. RSA
5. Christenson, L.B. (2007). *Experimental Methodology*. Pearson International Edition. Tenth Edition. Pearson Education, Inc
6. Gandhi, T.K., Sittig, D.F., Franklin, M., Sussman, A.J., Fairchild, D.G., Bates, D.W. (200). Communication Breakdown in the Outpatient Referral Process. *J Gen Intern Med*, **15**, 626-631
7. Gehlbach, S.H. (1993). *Interpreting the Medical Literature*. Third Edition
8. Katzenellenbogen, J.M., Joubert, G., Abdool Karim, S.S. (2001). *Epidemiology. A Manual for South Africa*. Oxford University Press.
9. Kravitz, R.L., Franks, P., Feldman, M., Meredith, L.S., Hinton, L., Franz, C., Duberstein, P, & Epstein, R.M. (2006). What Drives Referral from Primary Care Physicians to Mental Health Specialists? A Randomized Trial Using Actors Portraying Depressive Symptoms. *J Gen Intern Med*, **21**, 584-589
10. Mouton, J. & Babbie, E. (2005). *The practice of Social Research*. South African edition. Oxford University Press.
11. Mouton, J. (2008). *How to succeed in your Masters' & Doctoral Studies. A South African Guide and Resource Book*. Van Schaik Publishers
12. Naude, M. & Setswe, G. (2000). *Basic Community Health Nursing*. Heineman Publishers (Pty) Ltd
13. Omaha, K., Melendez, V., Uehara, N. & Ohi, G. (1998). Study of a patient referral system in the Republic of Honduras. *Health Policy and Planning*, **13**(4), 433-435

14. Toyabe, S. & Kouhei, A. (2006). Referral from secondary care and to aftercare in a tertiary care university hospital in Japan. *BMC Health Service Research*, **6**(11)
15. Rosemann, T., Wensing, M., and Rueter, G. & Szecsenyi, J. (2006). Referral from general practice to consultants in Germany: If the GP is the initiator, patients' experiences are more positive. *BMC Health Services Research*, **6**(5)
16. Roland, M. & Coulter, A. (1992). *Hospital Referrals. Oxford General Practice Series*. Oxford University Press
17. Sanders, D., Kravitz, J., Lewin, S., & Mackee, M. (1998). Zimbabwe's hospital referral system: does it work? *Health Policy and Planning*, **13**(4), 359-370
18. Siddiqi, S., Kielmann, A.A., Khan, M.S., Ali, N., Ghaffar, A., Sheikh, U. & Mumtaz, Z. (2001). The effectiveness of patient referral in Pakistan. *Health Policy and Planning*, **16**(2), 193-198
19. St Leger, A.S., Schnieder, H. & Walsworth-Bell, J.P. (1987). Evaluating health services' effectiveness. *A guide for health professionals, service managers and policy makers*. Open University Press. World Health Organization. *Hospitals and Health for all*. Technical Report Series No. 744. Geneva: WHO

Annexure A

1229 Zone 14

Mdantsane

5219

23 June 2009

At: Dr Z. Jafta
East London Hospital Complex
Frere Hospital
P O Box 9047
East London
5200

Application for a permission to conduct a thesis

Dear Madam

I hereby apply for a permission to conduct a thesis in your institution, currently I'm working for MSPH-ICAP (South Africa) and I am also a student at Stellenbosch University, studying towards attaining a Masters of Philosophy Degree in the Management of HIV and AIDS. As part of the course, each student has to conduct a thesis. I've identified Cecelia Makiwane Hospital as a suitable institution to conduct the study. My topic of interest is to "**Evaluate the referral system between Cecilia Makiwane Hospital ART unit and its feeder sites (Zone 2, 8 & 13)**". The results of the study will be also submitted to East London Hospital Complex.

Yours Faithfully

Lundi Ncana (Mr.)

1229 Zone 14
Mdantsane
5219
18 November 2009

At: Mr. M Lusasa
Sub-district Manager
Buffalo City
East London

Application for a permission to conduct a thesis

Dear Madam

I hereby apply for a permission to conduct a thesis in your institution, currently I'm working for MSPH-ICAP (South Africa) and I am also a student at Stellenbosch University, studying towards attaining a Masters of Philosophy Degree in the Management of HIV and AIDS. As part of the course, each student has to conduct a thesis. I've identified Cecilia Makiwane Hospital, and Zone 2, 8 and 13 clinics as suitable institutions to conduct the study. My topic of interest is to **“Evaluate the referral system between Cecilia Makiwane Hospital ART unit and its feeder sites (Zone 2, 8 & 13)”**.

Yours Faithfully

Lundi Ncana (Mr.)
043 7211305 / 072 2796629

Annexure B

“Evaluating the referral system between Cecelia Makiwane Hospital ART Unit and its feeder sites (Zone 2; 8 and 13 clinics)

Patient Service Satisfaction Questionnaire

Facility Name.....

Age.....

Sex.....

Home

Address.....

.....

These next questions are about how you feel about the medical care you receive from this facility

Please indicate with a tick whether the following statements are True or False	True	False
False		
Ease of getting care		
I have easy access to the clinic		
I have to wait too long to get medical care		
Sometimes I go without the medical care I need because it is too busy		
During my medical visits, I am always allowed to say everything that I think is important		
The waiting room is comfortable and safe		
Treatment from Health Care Workers		
I am very satisfied with the medical care I receive in this clinic		
Health care workers are careful to check everything when treating and examining me		
Those who provide my medical care sometimes hurry to much when they treat me		

Down referral system		
I was informed about being down referred to local ARV clinic		
I always get my treatment on my scheduled dates		
Down referral has been helpful to me		
I prefer to access treatment in CMH/Feeder site than in CMH/feeder site		
I voluntary asked to be down referred		

What do you like best about our
clinic.....

.....

.....

.....

.....

What do you like list about our
clinic.....

.....

.....

.....

Evaluating the referral system between Cecelia Makiwane Hospital ART Unit and its feeder sites (Zone 2; 8 and 13 clinics)

Health Workers perception towards down referral of patients Questionnaire

Facility Name..... Category of staff.....

The next questions are about how you perceive the down referral of patients from CMH to feeder sites; please answer question under general and your unit, and also the last 3 questions.

Please indicate with a tick whether the following statements are true or false:	True	False
General		
The down referral of patients system was properly implemented		
The patients voluntary ask for down referral to the nearest feeder site		
There is a team from CMH and feeder sites who are leading the process		
There is a complete buy-in from the staff and management of the feeder sites		
Clinical Unit		
I am aware of down referral of patients to the nearest feeder clinic		
I always advise patient to access treatment to their nearest feeder clinic		
I believe down referral of patients is helpful to the patients		
The management is actively involved in the down referral of patients		
Patients are informed about the system before being down referred		
Pharmacy Unit		
I am aware of down referral of patients to the nearest feeder clinic		
There is a tracking system in place to detect down referred patients whom continue accessing treatment at CMH		
Transport is always available to deliver down referred treatment		
There is enough space for storage of drugs		

The pharmacist is kept updated about down referred patients		
The management is actively involved in the down referral of patients system		
Monitoring and Evaluation		
I am aware of down referral of patients to the nearest feeder clinic		
The down referral system has been evaluated before		
There is a tracking system in place to detect down referred patients whom continue accessing treatment at CMH		
The management is actively involved in the down referral of patients system		

What are the strengths you can mention about the down referral of patients?.....
.....
.....
.....
.....

What are the challenges you can mention about the down referral of patients?.....
.....
.....
.....
.....

Evaluating the referral system between Cecelia Makiwane Hospital ART Unit and its feeder sites (Zone 2; 8 and 13 clinics)

Counselors perception towards down referral of patients Questionnaire

Facility Name..... Category of staff.....

The next questions are about how you perceive the down referral of patients from CMH to feeder sites; please answer all questions

Please indicate with a tick whether the following statements are true or false:	True	False
Counseling Unit		
I am aware of the down referral of patients to their nearest ARV clinic		
I feel like the down referral of patients system needs to be evaluated		
There is a system in place to track patients that did not come to fetch their treatment		
The above mentioned system is functional		

What are the strengths you can mention about the down referral of patients?.....

What are the challenges you can mention about the down referral of patients?.....

