FACTORS INFLUENCING HIV/AIDS CLIENT SATISFACTION AT COMPREHENSIVE CARE CENTRES IN WAJIR COUNTY, KENYA

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DECLARATION

Student

I declare that this research thesis is my original work and has not be presented for an award of a degree in any university or institution

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DEDICATION

To my immediate family and my parents for their unwavering support in ensuring smooth transition and completion of the course work and the research project.

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ABSTRACT

Service delivery is a key pillar of the health systems building blocks and client satisfaction is one of the parameters that is used to assess the status of services offered in an institution. Client satisfaction is a customer related tool that is applied to identify the gaps and improve the quality of services while focusing on the retention of clients. Most institutions do not understand the importance of client satisfaction and assume that clients are satisfied with the service while at the end the quality of care is compromised especially in the areas of HIV/AIDS service provision. This study arose to investigate the factors that influence HIV/AIDS Client satisfaction at the Comprehensive Care Centre's in Wajir County. Specifically, the study assessed availability of HIV/AIDS testing services, availability of HIV drugs, availability of care and support system and the availability of the institutional support towards HIV/AIDS at the Comprehensive Care Centres. In order to accomplish these research objectives, a descriptive cross-sectional study was employed where both quantitative and qualitative data were gathered through survey questionnaires for the HIV/AIDS Clients. In addition, key informant interviews and facility-based observation guide was used to collect qualitative data. The study targeted clients in the Clinic who were on antiretroviral therapy for more than six months at the sub-County referral hospitals and the County referral hospital Comprehensive Care Centre of Wajir County. The researcher targeted a sample of 157 clients out of a population of 265 clients. The study managed to gather information from 147 clients using semi-structured questionnaires; representing a 93.6 per cent response rate. Pretest was done to improve reliability and validity of the research instruments. Statistical Package for Social Sciences (SPSS) version 24 was used to code and analyze the collected data. Chi-square, Fisher's exact test, Pearson correlation coefficient and Logistic regression analysis was done to determine the relationship between and among the variables. The data was analyzed using descriptive statistics (percentages, frequencies, means, and standard deviations) and inferential statistics (regression coefficients, F-statistics, *t*-statistics and Chi-square statistics). Results from bivariate analysis revealed a significant relationship between client satisfaction (1= Satisfied, 0=Not satisfied) and predictor variables. The researcher therefore did a multivariate analysis using logistic regression, where availability of HIV testing services (sig. 0.010) and availability of HIV care and social support (sig. 0.005) were significant predictors of client satisfaction. Availability of institutional support (sig. 0.263) and availability of drugs (sig. 0.480) were not found to be significant predictors of client satisfaction. The results indicated the likelihood of being satisfied with services in the Comprehensive Care Centre's was 51.3 per cent (sig. 0.010) higher for people who reported availability of HIV testing services and 56.9 per cent (sig. 0.005) higher for people who reported accessibility of HIV care and social support. The study concluded that availability of HIV testing services and availability of HIV care and social support were significant factors influencing client satisfaction. Based on the findings from the study the researcher recommended that focus and priority should be given to HIV/AIDS services, the hospitals management need to ensure sufficient HIV testing services and drugs are available and accessible to patients. In addition, stakeholders in the fight against HIV/AIDs in collaboration with hospitals management need to provide social and welfare support as well as institutional support through budgetary allocation to the HIV/AIDS programs in the County. The study also suggested further that, studies can be conducted to identify quality of services and client retention.

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ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ART	Antiretroviral Therapy
ARVs	Antiretroviral
CBO	Community Based Organization
CCC	Comprehensive Care Centre
CDC	Centre for Disease Control
DHIS2	District Health Information Software
EPPS	Estimation and Projection Package Spectrum
GoK	Government of Kenya
HIV	Human Immuno Deficiency Virus/
HRH	Human Resource for Health
HTS	HIV Testing Service
IRC	Information, Education and Communication
KAIS	Kenya AIDS Indicator Survey
KASF	Kenya AIDS Strategic Framework
KDHS	Kenya Demographic Health Survey
KEMU	Kenya Methodist University
KHQIF	Kenya HIV Quality Improvement Framework
KNAACC	Kenya National Aids Control Council
KNBS	Kenya National Bureau of Statistics
KQMH	Kenya Quality Model for Health
MDGs	Millennium Development Goals
MoH	Ministry Of Health
MOT	Mode of Transmission
NACOSTI	National Commission of Science and Technology and Innovations
NASCOP	National Aids Control Program
SEQUAL	Service Quality
SPSS	Statistical packages for Social Sciences
TB	Tuberculosis
UN	United Nation
UNAIDS	United Nations Programme on HIV/AIDS
WHO	World Health Organization

CHAPTER ONE:

INTRODUCTION

1.1 Background to the study

Client satisfaction is a critical element in health service delivery from client testing of HIV to retention in the antiretroviral therapy and has a direct effect to the success of HIV treatment outcomes. HIV and AIDS Service access, client retention and adherence remain a challenge in achieving the universal target of offering services in treatment in the emerging economies with Human immunodeficiency Virus epidemics. The importance of client satisfaction in strengthening service quality for the HIV/AIDS care and treatment cannot be overemphasized. The satisfaction of patients has recently come out as a critical parameter used to assess the quality of health services across the service delivery points. This is largely based on the knowledge that satisfied clients and consumers of services make important life time behavioral change like close relation to the service provider and adherences to treatment hence strengthening satisfaction with ultimate retention and improved quality of life in continuum of care. According to Hopkins et al. (2020), client satisfaction is a critical significant outcome in the healthcare systems. The term client satisfaction refers to the gap which exists between the expectations to be received by the client in regard to the services and what they actually receive from the service delivery points. This is a very subjective concept that can be very hard to assess and measure, but it is an important concept in the healthcare system. The rationale behind the concept of client satisfaction is to give a direct feedback to individuals and institutions who provide an array of services. Client satisfaction is a good indicator to measure the quality of services and it shows the associations in the treatment

outcomes and the services provided (Rai et al., 2016). According to Mohiuddin (2020), client satisfaction is a very significant tool which enables to strengthen the quality life of the patients and also enables the individuals and institutions who provide services to assess specific problems and challenges of customers which require to be addressed.

The satisfaction of clients in HIV treatment and care is very significant in monitoring the service provision. Firstly, it is an important outcome in its own right as a goal of health system and secondly, the respectful patients who are satisfied with the kind of health care services received are less likely to face obstacles and challenges in adhering to treatment. The concept of quality is multifaceted and it entails the extent in which the health care service provided generates the desired outcome (Runciman et al., 2017). Thus, quality healthcare entail that act of engaging the thing for right patient with a sole purpose to achieve the best results.

The HIV/AIDS Client satisfaction study is anchored under the service delivery component which is a significant pillar in health systems management building blocks. The (World Health Organization [WHO] 2013) has described the key purpose of the health systems building blocks framework, is bring common understanding in the health care system and its components. For strengthening of the healthcare system, it is important to understand the problems, where those problems are and why such investment is required and what will happen as a result and by what means can change be monitored.

The building blocks helps to understand the three critical areas where they enable an explanation of a desirables features that is, what the system in healthcare should address and the ability to initiate in terms of healthcare financing. On the same note,

they enable to define the World Health Organizations priorities. Finally, it enables to set out the sum total of agenda in the healthcare systems hence they provide means to identify flaws in World Health Organization support. While these building blocks provide useful ways in the clarification of critical functions, the problems facing nations rarely manifest themselves in this way. Reasonably, they need a new integrated approach to respond and identify the inter-dependence of each component in the healthcare system (WHO, 2013).

The healthcare systems which function well is paramount in addressing the major challenges encountered by citizens of all countries globally. The healthcare systems are strengthened by six building blocks in many different ways. The cross-cutting components for example health information and leadership or governance gives a basis for the universal policy and regulation of healthcare system blocks. Specifically, the major pillars in the healthcare system such as the health financing and the health workforce, health products, technologies and the health service delivery comprise of a third group which reflect the immediate outputs of the healthcare system which is the availability and the distribution of the care (WHO, 2016). The ultimate aim of these pillars is to increase the access coverage leading to clients' behavioral change in terms of service utilizations and continuity of service hence improved quality of life of the patients with ultimate satisfaction services.

Services delivery is a key pillar in the health systems management and strengthening it, is important in achieving the health-related Millennium Development Goals (MDGs), including the delivery of appropriate interventions to moderate the burden associated with HIV/AIDS. Therefore, providing services comprise of immediate output of the input invested in the healthcare system which include the workforce

employed, the supplies & procurements and the financing of the healthcare. The improvement of the services delivered and access of the same should be increased by the inputs hence contributing to retention and satisfaction of clients. Therefore, the major role of the healthcare system is to ensure that available health services meet the minimum quality standards and is accessible as required (WHO, 2016).

The procedure of building a basis for advancing the delivery of healthcare must go on together with efforts in restructuring the delivery of service according with the values which are reflected in those pillars contained in the management of healthcare system. The leaders from the health sector, the policy makers tasked in assessing the health systems should participate in the procedures to deliberate on the possible ways of assessing the major features in their respectful nations. The scholars and academicians should continue experimenting measures and procedures that would enable progress to be assessed over time along the significant dimensions (WHO, 2016).

Some measurements that have been regularly used to assess healthcare services continue to be relevant and form part of the critical features. For instance, the availability of services, the utilization, access and coverage have been used interchangeably to indicate whether people actually are receiving the healthcare services they require. Access to healthcare services is a term which is broad with economic and socio-psychological dimensional aspects of people's ability to make use of health services. The comprehensive measurement of access requires a systematic assessment of the physical presence or delivery of services that meet a minimum standard to the patient (Pasquet et al., 2010). Utilization is a parameter used to measure the magnitude in the use of health service in a particular service delivery points. Health service Coverage, refers to that proportion of people receiving a

particular intervention among those who require it. It is therefore prudent to address and avail this dimension since it has a direct bearing and effect to the client satisfaction in any given service delivery points.

HIV/AIDS keeps on being a noteworthy global general medical problem. In the year 2015, 36.7 million people lived with HIV (counting 1.8 million of children) the global HIV prevalence of 0.8 per cent (United Nations Program on HIV/AIDS [UNAIDS], 2016). The dominant parts of the number of these people live in low and middle-income economies. Around the same time, 1.1 million people died of AIDS-related ailments (UNAIDS, 2016). In spite of these difficulties, new global endeavors have implied that the quantity of people accepting HIV treatment has expanded drastically as of late, especially in poor nations. By December 2015,17 million people living with HIV accepting to use antiretroviral treatment (ART) rose from 15.8 million in June 2015 and 7.5 million in 2010 (Maduka, 2019). This implies 46 per cent of all grown-ups and 49 per cent of all children living with HIV were accessing ART (UNAIDS, 2016). By the year 2016, sixty-five per cent of people with HIV/AIDS globally lived in just 10 nations which include Nigeria, Uganda, Mozambique, India, Kenya, South Africa, Uganda, Tanzania, Zambia and United States of America (UNAIDS, 2016). Most of these nations are low-income thus adding to more challenges.

In the sub-Saharan Africa, HIV service delivery points are congested with clients. A lot of efforts and focus has been on improving the availability of health workforce, drugs and other HIV/AIDS related supplies, patient flow, waiting time and contact time. This has an effect on the Client satisfaction and retention that ultimately impacts on the quality of HIV/AIDS care and treatment. To reduce the Client waiting time and

improving the client-clinician contact time, a strategy of task shifting, longer appointment period for the expert and stable Clients ultimately strengthen the quality of HIV care and treatment. Using peer health care workers with support from technical service providers helps in improving quality of care (Tsui et al., 2017).

The concept of quality of healthcare services refer to the proper performance which are according to the stipulated standards of interventions that are appropriate and safe, affordable to the respectful society and those with ability to generate impact with regard to malnutrition, disability, mortality and morbidity (WHO, 2012). The six key dimensions are improved when quality healthcare system is embraced (WHO, 2016). The dimensions require that the healthcare deliver health that adhere to evidence based approach, be effective, the results improve the outcome in health of the individuals in the community. The healthcare should be offered in a need basis, it should be efficient, should be delivered in a manner which optimize the use of resources and avoid unnecessary waste, deliver health service in a timely, reasonable geographical area and be provided in a setting where the skills and resources are suitable to the needs of medical sector which are client-centered, providing health services which consider the preferences and aspirations of specific service users and their culture in the community setting. The health care services should be equitably provided for and should not differ in terms of quality due to personal information which include ethnicity, socioeconomic status, safety, gender, race and delivering health care which reduces the risks of harm to the service users (WHO, 2016).

HIV/AIDS clients have minimum standard service packages that are offered in all facilities that provide these services. The World Health Organization gave recommendations on early HIV/AIDS diagnosis for a certain population, initiation of

earlier antiretroviral therapy for adolescents, children and the adults including breast feeding women who are infected with HIV/AIDS, the Spouses infected with HIV/AIDS and sexual partners in sero-discordant relationship (WHIO, 2020). However, the health systems related barriers exacerbate the gaps in the cascade of care from HIV/AIDS Client linkage, the retention, identification and viral suppression. These includes limited infrastructure for information management systems, poor referral and tracking mechanisms, human resources for health inadequacies, limited access to and unequal distribution of services, commodity and supply challenges. Diagnosis and linkage to care including treatment coverage has been a challenge in the recent times. Likewise, based on Kenya AIDS Strategic Framework 2020/2021, there are gaps in HIV/AIDS client's quality of care, poor or inconsistent viral monitoring, limited use of electronic medical records and limited coordination of services and support from the institutions and stakeholders (National AIDS Control Council [NACC], 2020).

Similarly, in a significant number of Counties in Kenya, the HIV quality of care and treatment at the service delivery points is not at optimal level. HIV/AIDS stigma and discrimination is high in the northern Kenya region, hence affecting client satisfaction. This is attributed to a gap in HIV/AIDS support and care for the clients. The HIV program at national level has ensured the supply of Antiretroviral Therapy is able to cover beyond the number of people who need the drugs (National AIDS Control Council [NACC], 2016a). Some counties like Kiambu, Kisumu, Uasin-Gishu and Busia have Antiretroviral Therapy coverage of more than 100 per cent.

The infrastructure of the health care systems in Kenya is inadequate and they lack enough resources to improve those systems. This gap in the infrastructure has affected

the satisfaction levels of clients and the quality care. Therefore, alignment and coordination with the partners in the national response are required. Moreover, development of human resources plans to support scaling up and antiretroviral therapy adherence is also required.

By 2017, huge milestones have been achieved in the HIV/AIDS interventions in Kenya with 62% of people living with HIV/AIDS knew their status, 75% on Antiretroviral Therapy while 77% of people living with HIV/AIDS had viral load suppression and 52% reduction in AIDS related deaths (NACC, 2018a). This is progressive and an achievement towards the 90-90-90 strategy with 90% of HIV/AIDS knowing their status, 90% of those with HIV be on Antiretroviral Therapy and among them 90% manage viral suppression.

According to latest assessment report in the Country, the HIV/AIDS prevalence in Kenya was 4.9% translating to 1.3 Million adult persons living with the virus. The assessment identified the HIV prevalence was twice as high among the women population at 6.6% compared to Men at 3.1 % (Kenya population based HIV impact assessment [Kenphia], 2018).

The high HIV/AIDS burden Counties in Kenya are Busia, Migori, Kisumu, Homabay and Siaya (NACC, 2018b). Wajir County falls in the category of Counties with low HIV prevalence rate and contributes to 0.1% of the total number of people living with HIV in Kenya.

HIV Prevalence in Wajir is less than the National prevalence at 0.4 % (NACC,2018). The HIV prevalence among women in the County is higher at 0.8% than that of Men at 0.2% hence women are more vulnerable to HIV than men in the County. However,

the County recorded substantive increase of new HIV infection in the year 2015 at 56% among adults aged 15 years and above (NACC, 2016b).

1.2 Statement of the Problem

Clients desire to get services when visiting health service delivery points; inadequate or substandard discovery of their needs at the health facilities, leads to client dissatisfaction. Client satisfaction influences retention and adherence to treatment. It is therefore critically important to understand Client satisfaction in the health Care service delivery points. It is an avenue of monitoring Client retention and evaluation of the service standards offered in a facility and provides the platform of addressing the existing gaps and improve the quality of care of the HIV/AIDS Clients. Client satisfaction is a personal assessment that is generally influenced by individual expectation (Centre for the Study of Social Policy, 2007).

Many researchers have found an association between client satisfaction and quality of services offered in the health facilities. In Wajir County, Cumulatively, 545 HIV/AIDS clients have ever been on HIV Care and treatment at the Comprehensive Care Centre's (District Health Information System [DHIS2], 2018). Currently, 50 per cent of these Clients cannot be traced and they are assumed to have defaulted treatment and or opted for self-transfer out to other Comprehensive Care Centre's outside Wajir County. It is therefore important to investigate the rationale behind the loss of this significant number of Clients at the Comprehensive Care Centre's.

Although, a lot of studies have been done in various thematic areas in the Kenyan health sector, no single study has established factors that influence HIV/AIDS client satisfaction at the comprehensive care centres in Wajir County. The study has

endeavored to identify in all the above gaps and further relates how availability of HIV testing services, availability of HIV/AIDS drugs, availability of HIV/AIDS Care and support System services and the HIV/AIDS institutional support affects the HIV/AIDS Client satisfaction.

1.3 Purpose of the Study

This study was to determine the factors that influence client satisfaction in Wajir County Comprehensive Care Centre's.

1.4 Study Objectives

1.4.1 Overall Objective

The general objective of the study was to investigate factors that influence Client satisfaction at the Comprehensive Care Centre's in Wajir County.

1.4.2 The specific objectives

a) To establish how the availability of HIV testing services affects the HIV/AIDS Client satisfaction.
b) To establish how the availability of HIV/AIDS Drugs affects the HIV/AIDS Client satisfaction.
c) To determine how the availability of HIV/AIDS Care and support System services affects the HIV/AIDS Client satisfaction.
d) To determine how the existing HIV/AIDS institutional support system affects the HIV/AIDS Client satisfaction.

1.5 Research Questions

a) How does the availability of HIV testing services affect the HIV/AIDS Client satisfaction?
b) How does the availability of HIV/AIDS Drugs affect the HIV/IDS Client satisfaction?
c) How does the availability of HIV/AIDS Care and Support System affect the HIV/AIDS Client satisfaction?
d) How does the existing HIV/AIDS institutional Support system affect the HIV/AIDS Client Satisfaction?

1.6 Justification of the Study

The health Care systems in Kenya has myriads of gaps and challenges that include declining trends of health indicators, failure of the health systems dissatisfied patients and service providers leading to high rates of attrition. There are also existed wide disparities in terms of achieving the Kenya quality model for health (KQMH) and services provision not only between public and private institutions of similar category but also across regions and towns (Murugami, 2014). HIV Client adherence and retention in the comprehensive Care Centre's is critical in monitoring the Antiretroviral Therapy performance contrary to Wajir County where 225 actual clients are on care and treatment out of the 265 Clients who were ever on Care. The selection of Wajir County was also based on the Kenya National AIDS Control Council report on the HIV/AIDS County profile, which revealed the number of adults receiving Antiretroviral Therapy in the County decreased by 68 per cent, despite being among the lowest HIV prevalence in Kenya (NACC,2016). Studies on the HIV/AIDS Client satisfaction helps in identifying the gap in the quality of care and

treatment service provision offered to the HIV/AIDS Clients at the Comprehensive Care Centre's. Client satisfaction is one of the strategies used to accredit health institutions and improve service provision to the Clients in the contemporary. However, half of the HIV Clients who have ever been on Care at the Comprehensive Care centers in Wajir County cannot be traced and therefore need to investigate on the gaps at the HIV/AIDS Clinics. This study will help in assessing the status of the Client satisfaction and the findings will be shared with the management and the stakeholders to improve the quality of services at the service delivery points.

1.7 Limitation of the Study

There were two significant limitations in this study. There was mismatch in regard to the data on the number of HIV Clients on Antiretroviral drugs in the National AIDS and Sexually Transmitted Control Program (NASCOP) site and the actual number of Clients in the Comprehensive Care Centre's in Wajir County. However, the researcher decided to use the actual data in the Comprehensive Care Centre's. Likewise, self-stigma was a key issue in this study and the clients could have opted not to respond to the questionnaires for fear of identification. To address this the researcher tried and used all the avenues to conduct the study without bias while upholding honesty, confidentiality and integrity of the clients.

Due to resource constraint and the uniqueness of the study, the researcher limited himself to the targeted cohort, the service providers at the Comprehensive Care Centre's, the key managers of the institutions and the stakeholders in HIV/AIDS Programs in the County.

1.8 Delimitation of the Study

The study focused on the HIV/AIDS clients in Wajir County in the Northern Eastern region of Kenya. The county borders Mandera County to the North East, Somalia to the east, Ethiopia to the North, Marsabit to the West, Isiolo to the South West and Garissa to the south. The County is very vast with 56,000 square kilometers and high level of HIV/AIDS stigma and discrimination with stringent cultural practices in the communities. The variable studies included demographic aspects like gender, education, service delivery points and the period the clients had been seeking care at the Comprehensive Care Centre's. The other variables were, availability of HIV testing services, availability of HIV Drugs, availability of HIV Care and Social support, availability of institutional support and client satisfaction. The study only focused on the client satisfaction component among the targeted group of respondents, who were distributed in three health facilities, Bute, Habaswein and Wajir County Referral Hospital. The method of data collection was mixed, with both questionnaires and interviews subjected to selected respondents. The method of data collection and analysis involved chi-square and logistic regression.

1.9 Significance of the Study

The researcher was not aware of any study done in Wajir County regarding HIV/AIDS client satisfaction at the Comprehensive Care Centre's. However, HIV/AIDS has not been a priority in Wajir County and the focus has been minimal overtime. It was therefore very important to do a study and ascertain the status of the HIV/AIDS client satisfaction that has a direct link with the Client retention and the quality of Care for this cohort group. The findings of the study will be significant to researchers, local government leaders, the Government, service providers,

Development Partners, Civil Society, the community, and the county government of Wajir County. The findings and recommendations of this study may help to guide in planning future HIV interventions and policy in the fight against HIV/AIDS in Wajir County. The results might help the County government in formulating policies and strengthening implementation of current policies in care for the HIV/AIDS clients. The community shall also benefit from enhanced service delivery from the CCCs and the county department of health in providing quality HIV/AIDS treatment, care and support.

1.10 Assumption of the study

Despite the uniqueness of the study involving HIV/AIDS clients, the study assumed that the respondents cooperated and gave sincere response in completing the questionnaires. To try the participants to answer the questionnaires honestly, anonymity and confidentiality were preserved, and they were assured that the study would find the underlying cause of the research problem. To enable the researcher to answer the research questions, a pre-study was conducted. If you are undertaking a study, you need to assume that people will answer truthfully. Another assumption is that the sample was representative of the population to be able to make inferences. The study adopted a representative sample size, which was determined by use of Fisher et al method to avoid bias.

1.11 Operational Definition of Terms

Care and Treatment: Treatment here in this study is defined as the process of giving medication or care for illnesses and disease. This could include giving the patients Anti-Retroviral Therapy or drugs for opportunistic infections or preventing them from

getting opportunistic diseases. Care includes the aspect of supporting the patient through counseling and provision of other necessary resources to help manage HIV and other related diseases.

Client: These are the patients on Anti-Retroviral Therapy seeking services at the Clinic.

Client-Clinician Contact time: The average period when the service provider is attending to the patient.

Client flow: Movement of clients/patients from one unit to another in a service delivery point and in an organized manner.

Client retention: Is a system where clients stay in the registers of the clinic and adhere to appointments.

Client satisfaction: Subjective evaluation of the health service received against client's expectations.

Client waiting time: Period when the client visits the service delivery point attended to him/her and leaves the facility.

Defaulter: Clients who missed appoints for three months and more.

Expert patient: Clients who understand well on HIV Care and treatment and are link to the facility to support the clients' adherence to the medication.

Quality: The degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.

Quality improvement: Is a systematic approach using specific methods to improve quality; achieving successful and sustained improvement.

CHAPTER TWO:

LITERATURE REVIEW

2.1 Introduction

This section gives a review on the factors that influence client satisfaction at the Comprehensive Care Centre's. It also presents the experiences of HIV/AIDs at the Comprehensive Care Centre (CCC) in local, regional and global experiences. The outline follows the study objectives presented in chapter one.

2.2 Empirical Literature Review

2.2.1 Prevalence of HIV/AIDs in Kenya

There are 38 million people living with HIV/AIDs globally of whom 26 million (68.5 per cent) are in Africa. In 2019, more than 1.7 million people became newly infected with HIV of whom One million (57 per cent) were from Africa and 690,000 people died from AIDS-related illnesses of whom 440,000 (64 per cent) were from Africa (UNAIDS, 2020). To boost body's immunity, infected people use antiretroviral therapy to prolong their life span despite being infected with HIV. Despite huge population infected with the virus, only 68 per cent access antiretroviral therapy. In Africa, only seven out of ten people infected with HIV access treatment which is lower than Western and central Europe and North America where out of ten people access treatment. In 2019, 67 per cent of people living with HIV were found to access the treatment with children (0-14 years) having lower access to these treatments compared to adults. Available studies also show that fewer males than female access these treatments.

A study by UNAIDS (2018) found that among people living with HIV, tuberculosis (TB) remains leading cause of death for 33 per cent of all HIV/AIDs patients. Globally, 9 per cent of people living with TB disease were HIV positive.

There have been global studies that have shown the levels of HIV client satisfaction, spanning across different regions and showing differing results. For instance Tran and Nguyen (2012) on a study of patient satisfaction with HIV/AIDS treatment and care in Vietnam established that family and institutional support systems as well as capacity building for healthcare workers influenced clients (patients) satisfaction. This study in Vietnam engaged 1,016 patients spread across seven hospitals in Ho Chi Minh City, where significant factors related to higher client satisfaction included being older age, having partner or spouse and female sex.

In Eastern Europe in Ukraine, Hailemeskal et al. (2020) did a study covering 649 HIV clients to establish quality of care and client satisfaction. The findings were that user-friendliness confidentiality and comprehensiveness of services were considered key in influencing customer satisfaction. Another study by Ahmed et, al. (2017) focused on the patient experiences in relation to adherence to therapy and treatment outcomes from a global sample size, where data was collected via online platforms in an online database. Through the use of questionnaires, the authors established that patient autonomy contributed the highest component of patient satisfaction, contributing 35% to the observed variance in client satisfaction. Further, the study established that employment status and education levels significantly influenced client satisfaction while clinical factors were not. This study shows that support given to patient and autonomy were considered key in patient satisfaction.

Here in Africa, Wung et al. (2016) focused on HIV-positive clients and their satisfaction, where multivariate analysis showed that being female, high number of staff (adequate), and employed were considered significant predictors of client satisfaction. In Lusaka, Zambia, Mukamba et al. (2020) did a study covering 150 lost-to follow up HIV clients across thirteen Lusaka-based public health facilities where the results indicated that the facility type, whether urban or rural or hospital was significant predictor of client satisfaction.

According to (Global Network for People Living with HIV [GNP], 2020) Kenya is ranked 13th by HIV/AIDs prevalence globally with adult HIV prevalence being 4.5 per cent. In 2019, there were 42,000 new HIV infections and 21,000 deaths. Inaccessibility to HIV drugs have been linked to Stigma and discrimination despite the 70 percent of the population living with the Virus being on treatment. Despite interventions to promote access HIV services at the health facilities and in the Comprehensive Care Centre's, studies show that 3 out of 10 sex workers in Kenya are living with HIV and are often neglected in health facilities (GNP, 2020). Challenges that negatively affect utilization of HIV Treatment among sex workers in Kenya include bad attitude by healthcare workers and frequent arrest and detention by police officer (Avert 2020). The prevalence for men having sex with other men is 18.2 per cent; and for the intravenous drug users is 18.3 per cent. According to International Refugee Rights Initiative report in 2016, the utilization of HIV services among these groups is lower than the general population contributed by negative perceptions from health workers and harassment by police officials due to illegality of homosexuality in Kenya. The available studies on the adherence to HIV treatment has been done among the prostitutes and men engaging sexually with fellow men or has focused on social-cultural factors with unclear focus on comprehensive care centers.

2.2.2 Availability of HIV/AIDS Testing Services

The availability of HIV/AIDS testing and counseling services in Africa has affected early detection of HIV/AIDs and the initiation of antiretroviral Therapy. In Kenya, data from Ministry of Health and Kenya National AIDs Control Council show that out of the 1.6 million Kenyans living with HIV, only 53 per cent are aware of their HIV status (NACC, 2016). This has affected the response especially for sero-discordant couples. To improve the uptake of HIV Counseling and Testing, several interventions have been employed including the door-to-door testing campaigns and self-testing kits. However, the availability of these services especially in rural areas has affected their uptake. The available studies on the availability of HIV Counseling and Testing services show that it differs across different countries.

In South Africa a study by Meehan et al. (2015) on the clients' experience and satisfaction towards availability of HIV counseling and testing services at public and Non-Governmental Organizations health facilities found that client's satisfaction was highly influenced by the reliability of the HIV Counseling and Testing services and the accessibility of the provider. Concerns were however registered on waiting times, and adequate privacy which resulted to stigma. In Kenya, a study by Mbogo (2016) investigating the performance of HIV/AIDs programs found that the availability and accessibility of HIV/AIDS information was a key factor affecting treatment outcomes. People who are financially constrained shy away from utilizing HIV Counseling and Testing services and people that lack information that they may get psychosocial support after testing fail the uptake HIV Counseling and Testing.

Young people are found to have higher infections in many African countries but have lower uptake of HIV Counseling and Testing. A study in Nigeria among youths

revealed that location of HIV testing facility, cost of the test, mode of pre-test counseling and the type of HIV test affect choice of utilization of HIV Counseling and Testing facilities among youths. Youths prefer HIV testing in the facilities that offer free testing or use of modern HIV testing options (Nwaozuru et al., 2019). The factors that influence utilization of HIV Counseling and Testing among youths are also similar with those influencing female sex workers. A study by Nnko et al. (2019) found that female sex workers choose service providers that are approachable, services are consistently available upon demand, and are affordable. However, despite the availability of HIV Counseling and Testing services, youths and Female Sex Workers, non-utilization is influenced by stigma of rejection due to social norm criminalize sex for work or sex before marriage.

The comprehensiveness of HIV Counseling and Testing services has been found to also influence HIV/AIDs satisfaction in the health facilities. A study on quality of HIV care and client satisfaction among individuals receiving HIV services found that attitude of healthcare workers, comprehensiveness of service offered that include testing and counseling and privacy and confidentiality of services were also found to affect satisfaction of clients (Hailemeskal et al., 2020). In South Africa, HIV clients are satisfied with factors such as waiting time, time spent at the reception, time spent on pre-test counseling, and post-test counseling. The median time spent for pre-test (counseling room) and post-test counseling was found significantly shorter than standard time but clients were more satisfied with longer times spent in the clinic as they felt they had enough time to ask questions and get answers. However, clients were dissatisfied with longer registration process or too much paper work.

2.2.3 Availability of HIV/AIDS Drugs

The availability of AIDS Drugs has been an important tool in the treatment of HIV/AIDs. However, in low-income countries access to antiretroviral (ARVs) has been a challenge (WHO, 2020). Data from UNAIDS project the population under Antiretroviral therapy (ART) will escalate from 24.7 million in 2020 to 28.5 million persons. However, a major challenge is the availability of these medicines and affordability (Gupta et al., 2016). During COVID-19 (UNAIDS,2020) found that lockdowns, border closures and challenges in cross border trade affected the production of medicines and their distribution of Antiretroviral which led to their shortages hence higher cost of treatments which resulted to lower client satisfaction.

Studies investigating the availability of HIV/AIDs drugs from various countries found that their availability affects client satisfaction and utilization of such services in future. In Nigeria, people infected with HIV/AIDs were satisfied with the availability of antiretroviral drugs, confidentiality, counseling, health workers attitude and interpersonal communication. However, due to shortages of drugs patients expressed concerns of overcrowding, long waiting queues, and expensive services when they were made available. In Ethiopia, Doyore and Moges (2015) found that 70 per cent of clients were satisfied with Antiretroviral Therapy treatment services but such was affected by the availability of drugs and services. However, availability was not the only predictor of client satisfaction, but other factors included patient interaction with the provider, privacy during examination, and confidentiality of the medical records. Similar findings were also established in Cameroon where patients expressed satisfaction with availability of drugs and services but however expressed concerns of cleanliness of health facility, access to water and sanitation, frequent shortages of

drugs, lack of female doctor, closure of facilities over the weekend, and small waiting rooms (Wung et al., 2016).

In countries with highest HIV/AIDS prevalence globally and in Africa, UNAIDs found that there exist challenges of Antiretroviral drugs with South Africa having only 62 per cent of people living with HIV having been receiving Antiretroviral treatment with more HIV positive women (65 per cent) accessing Antiretroviral compared to men (56 per cent). Due to persistent unavailability of these drugs, the attrition rate of 42 per cent for people receiving HIV/AIDs drugs (UNAIDS 2019). In Kenya, 75 per cent of adults living with HIV and 63 per cent of children with HIV are on antiretroviral treatment leaving more than a quarter people with no access to treatments. The availability of antiretroviral is reported at 64 per cent and 74 per cent of pregnant mother's access necessary antiretroviral for an intervention towards mother to children transmission. There is low availability of pre-exposure prophylaxis (Avert, 2020).

2.2.4 Availability of HIV/AIDS Care and Support

The Sub-Saharan Africa has progressed on well by improving their respectful performances in terms of community and health services. In spite this development, those individuals with HIV/AIDs yet still have experience relentless both cultural and social barriers in regard to accessing the community and health services. The social support and availability of treatment comprise of the key determinants of increasing and strengthening HIV service uptake (Musheke et al., 2013). Studies on the availability of HIV/AIDS care and support have found that stigma is a primary challenge affecting HIV/AIDs victims. In many Sub-Saharan Africa countries HIV victims lack social acceptance in the communities and are therefore not provided with

needed care and support (Bonnington, 2016). According to study done in Uganda by Twinomugisha et al. (2020), it was found that HIV positive employees were discriminated at the places of work with many co-workers avoiding associating with these people. Due to discrimination at workplace HIV victims lose hope to a point of developing suicidal thoughts. However, many HIV victims are fully supported by their employer.

In Kenya the government has provided support to HIV victims through national, county and private sector levels interventions to ensure victims live peacefully with people. Available studies show that HIV testing services have been made available and drugs are accessible by 6 out of 10 HIV victims. The patients experience in the Comprehensive Care Centre's is not well researched and such information is however scanty. The available data show that prostitutes, men engaging men sexually and the parenteral drug users have several challenges in accessing care and support both in the society and health facilities. Much of support needed by HIV patients include free HIV testing and counseling, free distribution of condoms, free mother-to-child transmission prevention (PMTCT), Voluntary medical male circumcision (VMMC), free provision of pre-exposure prophylaxis (PrEP), and provision of ART (Avert, 2020).

2.2.5 Availability of HIV Institutional Support

HIV/AIDs is a unique condition different from other tropical diseases affecting the human population. Although a lot of investment has been done in the HIV/AIDs care and support programs across the African continent, the support seems to be leaning towards the high epidemic countries and regions. Besides donor support in regard to HIV/AIDs program execution, the implementing organizations and health

departments seem to be not up to task and therefore some gaps still exist in regard to staffing level and budgetary allocation at the HIV/AIDs clinics. According to a study done in China on the barriers and facilitators to linkage to HIV care, it was found that awareness of responsibility, social support and relying on the services provided by the Centers for Disease Control and Prevention (CDC) were facilitators. Further, the authors recommended that there was need to enhance critical linkage support services among the local CDCs to enhance quality of care (Li et al., 2017).

To prevent the spread of HIV/AIDs, increase high quality care to the affected and increase awareness, many countries have opted for home-based HIV self-testing and care for people. Many African countries adopting home-based HIV self-testing and care has been found acceptable and accurate, with people that have received HIV self-testing showing higher utilization of HIV prevention and treatment. In Malawi, a study found that HIV Self-testing led to high utilization of HIV care and treatment especially in the women and youths with countries such as Kenya showing 98 per cent uptake of PrEP among users who received the tests. The HIV Self-test has also been found effective to reach 75-91 per cent of commercial sex workers (Avert, 2020).

HIV testing and counseling is an intervention that has been implemented in almost all countries to support its people. Countries such as Kenya, South Africa, Rwanda, Malawi, and Botswana have all implemented policies such as national campaigns to promote national wide HIV testing and counseling for free. HIV testing and counseling have been made mandatory for pregnant women to know the status of the mother and therefore protect children. In countries such Kenya, the government and NGOs have employed both provider-initiated testing and community-based testing

through community heath volunteers. The Kenya, Zimbabwe, Malawi and Zambia governments introduced self-test kits. Studies investigating community-based HTC found it has been very effective in increasing HIV awareness, identifying positive cases and self-test have also been found increasing proportion on the population that know there sero-status and ultimately leading to an increase in seeking HIV treatment (WHO, 2018).

According to a study by UNAIDs (2016) on HIV prevention programs in various countries found that many countries ministry of health is strengthening ministry of educations to implement programs promoting utilization sexual and reproductive health services, how to deal with gender-based violence, female genital mutilation and empowering women and girls. A study investigating effectiveness of institution intervention geared to prevent HIV/AIDs infections and uptake of HTC found that DREAMs a project aimed to reduce HIV infections among adolescent girls found the program resulted to reduction of HIV infections between 25 per cent to 40 per cent in Kenya, South Africa, Lesotho, Mozambique, Malawi, Zimbabwe, Uganda, and Tanzania. The success was attributed to institutional partnership between national governments, UNAIDS and UNICEF calling for more partnerships.

Interventions such as promotion of condoms availability and use, and HIV education and approach to sex education have been found in several countries positively reducing HIV infections and uptake of HCT. Studies investigating these interventions found that many Africa countries are still below United Nations Population Fund (UNFPA) regional benchmark of 30 ensuring every man is provided with at-least 30 condoms per year. On HIV education, study investigating implementation of such program found that only 14 countries in Africa have provided a Comprehensive

Sexuality Education (CSE) and teachers in these countries had received CSE education programs. Due to poor institutional support teachers faced challenges in accessing training for CSE compromising quality of information and teachings in some schools (UNAIDs, 2019).

Civil Society Organizations (CSO) have been very pivotal in fighting HIVAIDs in Africa especially on Sexual and Reproductive Health service delivery and advocacy. However, the funding of Civil Society Organizations in Africa has been from international donors. Many national governments have been positive to civil societies which has strengthened many countries ability to fight HIVAIDs. In Kenya, there are over 14,000 Civil Society Organizations engaged in HIV/AIDs with bias on people living with HIV and young people to avert infections lower than countries such as South Africa with 136,453 CSOs. However, many countries such as Tanzania and Uganda face several challenges in their operations. In Uganda, CSO must seek approval of government before carrying out any activity. In Tanzania, the government has continually criticized NGOs for propagating the rights of LHBTI people.

2.2.6 HIV/AIDs Clients Satisfaction

There is limited literature on the satisfaction at the Comprehensive Care Centre's among people living with HIV/AIDs in Kenya. However, available studies show that majority of people are satisfied but such studies does not show the effect of availability of testing services, availability of Drugs, and care and support. In Tanzania, a study by Ringo (2015) found that client's satisfaction was 98-100 per cent but concerns were expressed on drug shortage. Drivers of satisfaction include availability of equipment, short turnaround time in the facility, staffs who are sympathetic and reassuring; and reliability of services. In Cameroon, Wung et. al.

(2016), found that the overall satisfaction with HIV services was 91 per cent with concerns being raised on institution factors such as patient-staff communication, staff attitudes, availabilities of amenities, and staff patient ratios. In Vietnam, overall patient satisfaction with services at the HIV/AIDs care and treatment centers was 42 per cent driven by competency of healthcare workers, attention and the availability of comprehensive care drugs (Tran & Nguyen, 2012).

In Kenya, studies on patients' satisfaction with HIV/AIDS care at the Comprehensive Care Centre have been done in the urban areas and show that the overall satisfaction is 78.6 per cent with drivers of satisfaction being accessibility of services, availability of drugs, and referral when need arises (Mwihoti, 2015). Among special groups such as sex workers, a study done by Kimani (2014) found that the utilization of Comprehensive Care Centre's services was influenced by sex workers awareness, distance to the centers, friendliness of staffs at the centers, availability of health facilities such as condoms, drugs and laboratories; and quality of services. These studies cannot be generalized in Wajir County which has different population to those in urban areas.

2.3 Theoretical Literature Review

Various theories have been outlined in an attempt to explain client satisfaction and quality service delivery. The concept of client satisfaction process entails to that act of comparing of the expected product to perform and the process is termed as confirmation or disconfirmation procedures. According to Hill et al. (2017) argued that prompt service, safety and security, comfort, location convenience and security, and the friendliness of employees were very significant for customer satisfaction. On the same note, Waters, (2018) established that value of money, cleanliness, courtesy

of the staff and security determined satisfaction levels of clients. According to a study by Yarimoglu, (2014) emphasized that the critical factors included the behaviors of the employees, timeliness and cleanliness.

2.3.1 Dissonance Theory

The pioneer of this theory was Festinger's in 1957, where he posited that the respectful clients are able to make some cognitive comparison between the expectations in regard to the product and its performance. On the same breadth, D'costa and Jayasimha (2015), emphasize that clients ought to avoid the dissonance by adjusting the perceptions on a given commodity in bringing line to the expectations of the clients. For the purpose of this study, clients of HIV/AIDS can decrease their tension by resulting from the discrepancy which exists between the expectation and performance of the products or by raising satisfaction levels or minimizing relative significance of the disconfirmation experienced.

In quality of service of HIV-AIDS clients, the application of assimilation theory is quite important. This theory further posit that a tendency exists among the individuals in seeking consistency in their cognitions that the opinions and cognitions. It argues that when consistency exists between the behaviors (dissonance) and attitudes, that something must have a change in order to eliminate the respectful dissonance. In the case of inconsistency which exist between behavior and attitudes, it is more likely that the respectful attitude will change in the accommodating that particular behavior. The providers of healthcare play a very critical role in encouraging and supporting the clients in adhering to medication with an aim to improve the quality of life. In the association to this study, the theory argue that clients are usually motivated enough to adjust both expectations and the perceptions of their product performance.

In the healthcare if the Clients adjust their expectations or product performance perceptions, dissatisfaction would not be a result of the post-usage process.

2.3.2 Contrast Theory

This theory was propounded by Jonathan Schaffer in 1972. The model is defined contrast theory as the tendency to magnify the discrepancy between one's own attitude and the attitudes represented by the opinion statements. Contrast theory presents an alternative view of the Clients post usage evaluation process than was presented in assimilation theory in that post-usage evaluation leads to result in opposite prediction for the effects of expectations on satisfaction. While assimilation theory posits that clients will seek to minimize the discrepancy between expectation and performance, contrast theory holds that a surprise effect occurs leading to the discrepancy being magnified or exaggerated. According to the contrast theory, any discrepancy or experience from expectations will be exaggerated in the direction of discrepancy.

Several studies have offered some support for this theory. The contrast theory of customer satisfaction predicts customer reaction instead of reducing dissonance; the consumer will magnify the difference between expectation and the performance of the product/services. Contrast theory is applicable in this study. This is because the theory has a tendency to magnify the discrepancy between one's own attitude and the attitudes represented by the opinion statements. It also presents an alternative view of the consumer post usage evaluation process than presented in assimilation theory in that post-usage evaluation leads to result in opposite prediction for the effects of expectations on satisfaction.

2.3.3 Assimilation-Contrast Theory

The assimilation-Contrast theory was introduced by Anderson in 1973 in the context of post-exposure product performance (De Bruyn & Prokopec, 2017). The theory is based on the discussion of assimilation and contrast effect. Assimilation-Contrast theory suggests that if performance is within customers latitude (range) of acceptance, even though may fall short of expectation, the discrepancy will be disregarded and assimilation will operate and the performance will be deemed as acceptable (Filtenborg et al., 2017). If the performance falls within latitude of rejection, contrast will prevail and the difference will be exaggerated, the produce/service deemed unacceptable.

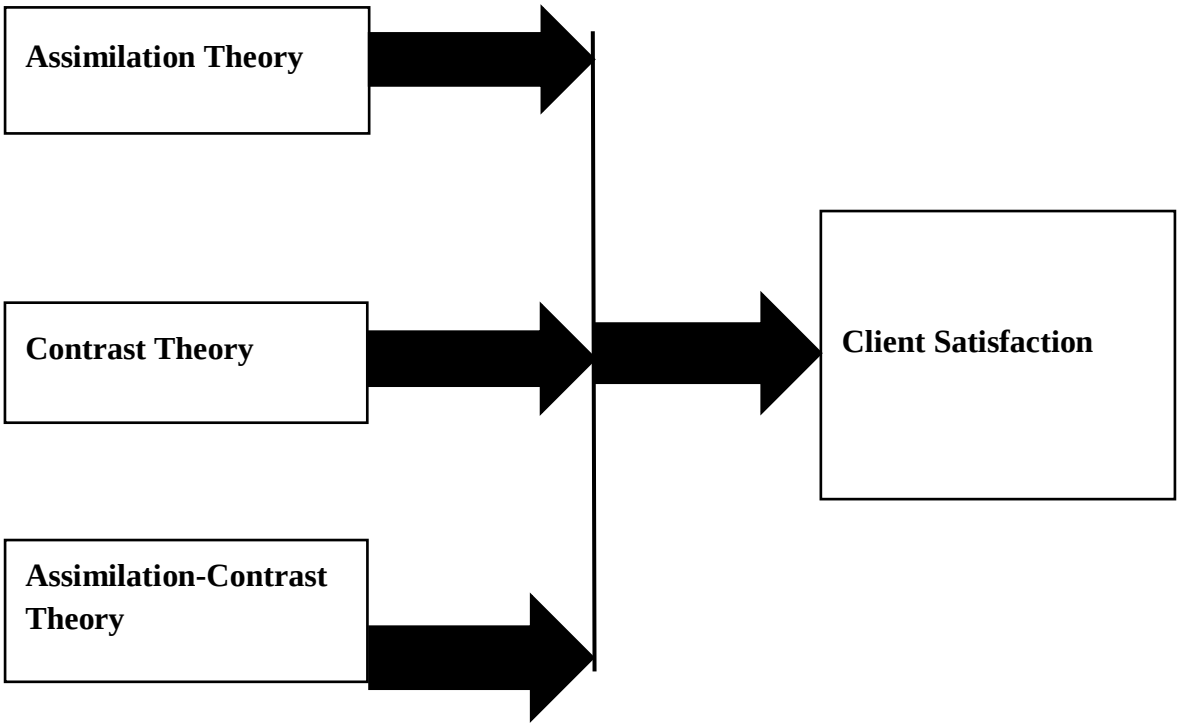
The assimilation contrast theory has been proposed yet another way to explain the relationships among the variables in the disconfirmation model. This theory is a combination of both assimilation and contrast theories. This paradigm posits that satisfaction is a function of the magnitude of discrepancy between expected and performance. As with assimilation theory, the clients will tend to assimilate or adjust differences in perception about product performance to bring it in line with prior expectations but only if the discrepancy is relatively small.

This theory is applicable in this study because, the assimilation effect is a frequently observed bias in evaluative judgments towards the position of a context stimulus.

2.4 Theoretical Framework

Figure 2.1

Theoretical Framework

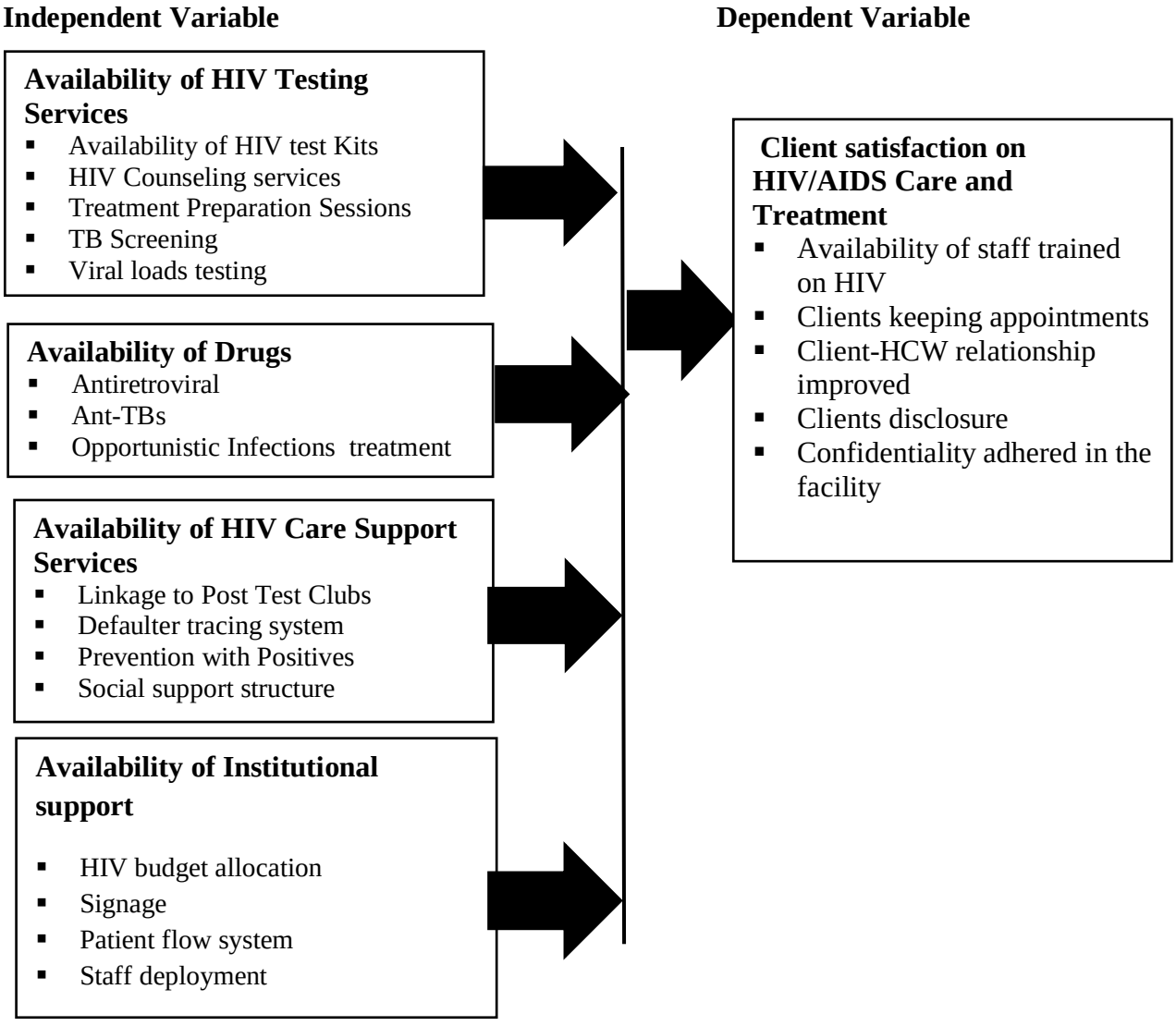


The study was anchored on the Assimilation-Contrast Theory. When an assimilation effect occurs, judgments and contextual information are correlated positively, i.e. a positive context stimulus results in a positive judgment, whereas a negative context stimulus results in a negative judgment. Assimilation effects are different from contrast effects, where a negative correlation between judgments and contextual information is observed.

2.5 Conceptual Framework for HIV/AIDS Patient satisfaction

Figure 2.2:

Conceptual Framework



The researcher conceptualized that availability of testing services (HIV test kits, counseling services, TB screening and viral load testing) had a link and association with client satisfaction on HIV/AID care treatment. Further, it was conceptualized that availability of drugs (ART, anti-TBs, and opportunistic infections treatments) has

a relation with HIV/AIDS client satisfaction in the HIV treatment and care. In addition, the researcher conceptualized that availability of HIV care support services and availability of institutional support have a link with Client satisfaction on HIV/AIDS treatment, care and support.

2.6 Research Gaps in the literature review

Researchers have deduced that client satisfaction is an important area that needs to be used in the contemporary. In the above theories, De Bruyn and Prokopec (2017) argues that the previous attempts at reconciling the two earlier theories was methodologically flawed. The attempts by various other researchers to test this theory empirically have brought out mixed results. Qazi et al. (2017) found some evidence to support the assimilation theory approach in regard to client satisfaction. In discussing both of these studies, Nam et al. (2011) argues that they only measured expectations and assumed that there were perceptual differences between disconfirmation and satisfaction.

There may be a possibility of differing results in the case of Wajir County. However, the study will greatly borrow from the empirical studies and adopt some variables used such as availability of antiretroviral, availability of HIV testing services, availability of social support systems and availability of institutional support.

CHAPTER THREE:

RESEARCH METHODOLOGY

3.1 Introduction

This section describes the research study design, the study population, sampling method and sample size. It further describes the process of data collection, the instruments to be used, and selection of enumerators, training, quality control methods and pre-testing of the instruments.

3.2. Research Design

A descriptive cross-sectional study design was carried out to yield quantitative data on clients' satisfaction of the HIV/AIDS care offered at the Comprehensive Care Centre's. In-depth interviews were conducted with a variety of stakeholders in different levels e.g. The management of the hospitals where the Comprehensive Care Centre's are located, the service providers at the Comprehensive Care Centre's, HIV/AIDS implementing partners supporting HIV programs in the County and Community based organization supporting the HIV Positive Clients in the County. In medical research and social science, a cross-sectional study is mostly used since it is a type of observational study that analyzes data collected from a population, or a representative subset, at a specific point in time (Rovai et al., 2013).

3.3. Definition and Measurement of Variables

Table 3.1 shows the definition of the dependent and independent variables, source of data and unit of measurements used during the study.

Table 3.1

Definition and Measurement of Variable

Variable	Definition	Unit of Measurement	Source of data
Client Satisfaction	The gap between what Clients expect to receive as a service and what they actually get.	Observation by interviewer and Likert scale.	SERVQUAL framework using a five-point Likert scale.
Availability of HIV Testing Services	Availability of HIV testing materials, VL, CD4 Counts and Counseling services	Interview and Likert scale.	Qualitative self-administered questionnaire
Availability of drugs	Consistent availability of ARVS, Anti-TBs and OI drugs	Interview and Likert scale	Qualitative self-administered questionnaire
Availability of HIV care support system	Available system in linking to Post Test Clubs, OVC linkage services, PWP	Interview and Likert scale	Qualitative self-administered questionnaire
Institutional Support system	Staff deployment, Budget allocation, signage and Client flow	Interview and Likert scale.	Interview guide and observation

3.4. Study Area

The study was carried out at Wajir County Referral Hospital, Habaswein Sub County Hospital and Bute Sub County Hospital Comprehensive Care Centre's targeting HIV Clients who are on care and treatment, the stakeholders, the management and the staffs working at the Comprehensive Care Centre's. Wajir County is found in the North Eastern part of Kenya as shown on the map in appendix IV.

3.5. The Target Population

The target population of this study was 265 HIV clients seeking services at the Comprehensive Care Centers, the Hospital Management, the service providers and the development partners' supporting HIV Programs in the County. The sample study was 157 Clients seeking services at the Comprehensive Care Centre's.

3.6. Sampling Procedure

To obtain a sample that is representative of the target population, a proportional stratified sampling of both males and females was applied. From 265 Clients who are approximately attended to every month, a sample of 157 Clients was engaged using Krejcie and Morgan's method of sample determination. Stratified sampling methods was used where there were two categories of respondents; HIV clients for filling in the questionnaires, and the key stakeholders for the key informant interviews. Further, since the 265 clients were distributed in the three health facilities of Bute Sub County Hospital, Habaswein Sub County Hospital and Wajir County Referral Hospital, the final sample size was determined based on the proportions of the clients each facility served. The researcher identified two categories for each facility, primarily the HIV/AIDS clients and secondly, the management of the health facilities under the Comprehensive Care Centre's. Further, the clients were then sampled systematically, picking every fifth client visiting the facility, until the sample size allocated for each facility was achieved. After the HIV clients were sampled, then the researcher picked representatives from the Comprehensive Care Centre's, the facility management, from the three facilities, and engaging other two key informants from organizations implementing HIV Programs in the County.

However, 157 clients were sampled and 10 were non-respondents, thus the response was from 147 clients. Exit interviews were the approach used, before the Clients leave the Clinic.

3.6.1. Sample Size Determination

The sample size determined is 157 respondents. This was arrived at using Krejcie and Morgan's method of determination of a sample for a given population size, which is as shown in equation 1.

$$S = \frac{X^2 NP(1-P)}{d^2(N-1) + X^2 P(1-P)} \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \textit{Equation (1)}$$

Where:

S = Required Sample size

X = Z value (e.g. 1.96 for 95 per cent confidence level)

N = Population Size (approximate 265patients are attended to every month)

P = Population proportion (expressed as decimal) (assumed to be 0.5 (50 per cent)

d = Degree of accuracy (5 per cent), expressed as a proportion (.05); It is margin of error

Therefore; $S = \frac{(1.96)^2(265)(0.5)(1-0.5)}{(0.05)^2(265-1) + (1.96)^2(0.5)(1-0.5)} = 157$

The target population was 265 and the eventual sample size was 157. The sample size also satisfies the condition of sampling which, according to Chow et al., (2017), should be at least 30 per cent of the target population in order to be representative enough to allow for generalization of characteristic under investigation. According to

Central limit theorem, if the sample size is large enough (n > 30), the data followed will be a normal distribution curve (McDaniel & Gates, 2018).

Table 3.2

Distribution of the Study Sample

Facility	Actual number of clients on treatment per facility	Proportion on treatment per facility (per cent)	Sampled Clients on treatment for the study per facility
Wajir County Referral Hospital	225	85	134
Habaswein Sub County Hospital	15	6	9
Bute Sub County Hospital	25	9	14
Total	**265**	**100**	**157**

A total of eight Key Informants were also engaged for interviews (See Table 3.3).

Table 3.1

Key Informants' interviews

Facility/Organization	Cadre	Number
Wajir County Referral Hospital Management and the CCC Staff	-CEO	2
Habaswein Sub County Hospital Management and CCC Staff	-Clinical officer at the CCC -Medical Superintendent	2
Bute Sub County Hospital Management and the CCC Staff	-Clinical Officer at the CCC -Medical Superintendent	2
APHIAplus IMARISHA Project	-Clinical Officer at the CCC -HIV Project focal person	1
Organization of People Living with HIV/AIDS	The Project Coordinator	1
Total target population		**8**

3.7. Data Collection tools and techniques

The SERVQUAL tool developed by Mečev and Kardum (2015) was adapted for use in this study as a data collection tool in form of a structured questionnaire and administered by the interviewer. This was done for a period of two months so that the researcher could capture the required samples of the given target population. Key informant interview guide were also conducted targeting the program team and HIV implementing partners in identifying viable, sustainable and cost effective interventions in improving the quality of care for this special cohort population. Further, the researcher translated the tools to the local language to ensure it was easy to understand and administer among the clients, who were mostly local and semi-literate.

3.8. Data Collections Procedure

The data collection procedure involved visiting the target respondents and completing the responses on the questionnaire. The questions were put on the respondent sequentially. The researcher exercised care and control to ensure all questionnaires were completed and responses received were relevant to the question asked. The researcher also maintained a register of questionnaires so that a tally was maintained of the questionnaires containing responses compared to the sample selected. Use of a questionnaire allowed every participant to get a similar assessing tool to complete which resulted in standardized responses (Burns, 2010).

3.9. Pretesting

Pre-testing of the research tools was done in Wajir County Hospital Comprehensive Care Centre's before administering to ensure that the questions were relevant, clearly understandable. The pre-testing aimed at determining the reliability of the research tools including the wording, structure and sequence of the questions. This pre-testing involved eight (8) respondents (5 per cent of the sample) and the respondents were conveniently selected since statistical conditions may not necessary be in the pilot study (Hair et al., 2019). The objective was to improve the questionnaire so that respondents will not encounter challenges in answering the questions in the study. Expert opinion was sought on the representativeness and suitability of questions and given suggestions on corrections was made to the structure of the research tools. This helped to improve the content validity and reliability of the data that will be collected during the study.

3.9.1 Validity

Validity is the extent to which interpretation of statistical test scores is supported by theory and evidence. The validity of instrument is that the extent to which it does measure what it's alleged to measure. Mugenda and Mugenda (2012) points out that validity is the accuracy and meaningfulness of inferences supported by a given research results. It is the extent to which data analysis results actually represent the study's variables. Content and face validity of the research instrument was validated. The content related technique measured the extent to which the items in the questions mirrored the specific areas covered.

3.9.2 Reliability

Reliability is a research instrument's ability for over time consistently measure features of interest. It is a research instrument's ability to yield consistent results or data with repeated trials. According to Mugenda and Mugenda (2012), if a researcher tests a subject twice and obtains the same scores, then the instrument is reliable. Reliability is focus on a test's dependability, consistency or stability (Bolarinwa, 2015). The questionnaires' reliability was evaluated by estimating the pretest study's Cronbach Alpha results. Cronbach alpha is used to estimate internal consistency of data collected using questionnaires. Cronbach's alpha of $(\alpha) \geq 0.9$ is an indication of excellent internal consistency, while $0.7 \leq \alpha < 0.9$ indicates good internal consistency, if it is $0.6 \leq \alpha < 0.7$ it indicates acceptable internal consistency, then $0.5 \leq \alpha < 0.6$ indicates poor internal consistency, and unacceptable internal consistency is indicated by $\alpha < 0.5$ (Raykov & Marcoulides, 2019).

3.10. Exclusion Criteria

All clients that have not been initiated or have been on Antiretroviral Therapy for less than six months at the Comprehensive Care Centre's were excluded in the study.

3.11. Inclusion Criteria

All the Clients that have been on Antiretroviral Therapy for more than six months at the Comprehensive Care Centre's were included in the study.

3.12. Data Analysis

Data from the questionnaires was coded and cleaned for analysis. Coding was done in the data then transformed into symbols, this was tabulated and counted, and then analysis of the coded data was done using the statistical package for social sciences (SPSS) version 24. This was used to analyze data including descriptive statistics and presentations. The bivariate analysis was done using Chi-Square test of association where all cells had expected count greater than 5 per cent and fisher's exact test in the case where cells had expected count less than 5 per cent. The association results were further confirmed using Pearson correlation coefficient to test the strength and direction of association between the dependent variable and key predictor variables. The multivariate analysis was done using Logistic regression with marginal effect which were interpreted as probabilities. The study utilized a regression model as shown in equation 2.

$Y=X_1+X_2+X_3+X_4$ …… *Equation (2)*

Where Y= HIV/AIDS Client Satisfaction at the Comprehensive Care Centre's

X_1= Availability of HIV Testing services

X_2= Availability of antiretroviral drugs

X_3= Availability of HIV/AIDS Care and support System

X_4= HIV/AIDS institutional support System

3.13. Ethical Consideration

Ethical issues were adhered to in preparation for the study and during the study period, a letter from the department of health systems management with permission from KeMU-Scientific and Ethical Review Committee, NACOSTI and Wajir County Research Ethics and Review Committee was sought to undertake the study. Confidential and privacy was assured to the respondents before giving out information voluntarily and informed written consent from HSM-KeMU where necessary.

3.14. Utilization and Dissemination

Data was presented in tables and disseminated through reports, meetings and in conferences. Data was disseminated through the relevant authorities; that is KEMU, Wajir County health department which will all receive copies of the study findings.

CHAPTER FOUR:

RESULTS AND DISCUSSION

4.1. Introduction

This section covers presentation and interpretation of findings based on the data collected and analyzed. The study describes actual findings derived from data collected from the respondents which are linked to the objectives of the study. This section therefore captures the respondents' demographic characteristics; the descriptive statistics of both the independent and dependent variables, correlation and regression analysis of all the variables.

4.2. Response rate

The targeted sample size in the study was 157 HIV/AIDs clients that were sourced from three Sub County Hospitals Comprehensive Care Centers. However, 147 HIV/AIDs clients responded to the questionnaires translating to 93.6 per cent response which is an acceptable rate for analysis. According to Mugenda and Mugenda (2012) a response rate of 50 per cent is adequate for analysis and reporting, a rate of 60 per cent is good and a response rate of 70 per cent and over is excellent. This means that a response rate of 93.6 per cent is excellent to proceed for analysis and reporting.

4.3. Reliability Analysis

Reliability analysis was subsequently done using Cronbach's Alpha which measures the internal consistency by establishing if certain item within a scale measures the same construct. Hair et al. (2019) established the Alpha value threshold at 0.7 which the study benchmarked against. Cronbach Alpha was established for every variable in

order to determine if the scale used in the questions for each variable would produce consistent results should the research be done later on. Table 4.1 shows the reliability test results.

Table 4.1

Reliability Coefficients

Scale	Cronbach's Alpha	Number of Items
Availability of HIV/AIDS testing services	0.96	10
Availability of Drugs	0.958	9
Availability of HIV Care Support Systems	0.981	9
Availability of Institutional support	0.959	7
HIV/AIDS client satisfaction	0.962	10

The results in Table 4.1 shows that the scale used to collect data on each variable was reliable as indicated by the following Cronbach Alpha values greater than 0.9: availability of HIV/AIDS testing services (α=0.96), availability of Drugs (α=0.958), availability of HIV Care Support Systems (α=0.981), availability of Institutional support (α=0.959) and HIV/AIDS client satisfaction (α=0.962). This illustrates that all the five scales were reliable as their reliability values exceeded the prescribed threshold of 0.7 (Hair et al., 2019). Subsequently the study proceeded to descriptive and inferential statistics to answer the research objectives.

4.4. Demographic Characteristics of the Respondents

The study established the demographic characteristics of the respondents in terms of where the sought health services, gender, age in years, level of education and the number of years seeking services in the facility. The results are in Table 4.2 below.

Table 4.2

Demographic Characteristics of the Respondents

Variable	Frequency	Percentage
Health Facility		
Wajir County Referral Hospital	128	87.08
Bute Hospital	12	8.16
Habaswein Sub County Hospital	7	4.76
Gender		
Male	63	42.9
Female	84	57.1
Age (Years)		
17-26	11	7.5
27-36	52	35.4
37-46	56	38.1
47-56	18	12.2
57-Above	10	6.8
Level of Education		
Primary and below	84	57.14
Secondary	33	22.45
College and above	30	20.41
Years of being a client		
Less than 1 year	16	10.88
1-2 years	44	29.93
2-5 years	54	36.74
5-10 years	21	14.29
Over 10 years	12	8.16

The study findings in Table 4.2 shows that from a total of 147 respondents who participated in the study, majority (87.08 per cent) sought for health services at the Wajir County Referral Hospital followed by Bute Sub County Hospital (8.16 per cent) and Habaswein Sub County Hospital (4.76 per cent) respectively. The results indicate that the three hospitals were the main heath facilities where patients sought for treatment and management of HIV/AIDS.

In regard to gender composition, majority of the respondents were female (57.1 per cent) and the remaining 42.9 per cent of the respondents were male. The high female population infected with HIV in the study, is in line with other HIV/AIDS studies that women are more infected and affected compared to men respondents. According to a study done by Kharsany and Karim (2016) young women have up to eight times higher rates of HIV infection compared to their male peers.

The total number of the respondents who had completed primary school level and below were 57.14 per cent while those that attained secondary level of education were 22.4 per cent. However, 20.4 per cent of the clients had attained a tertiary (college) level of education and above. Despite the aggressive campaign and awareness on HIV/AIDS prevention, it is evident from the study that there is relationship between illiteracy and HIV/AIDS infection. A study done in Nigeria among the women respondents in Igueben, it was noted that the root cause of HIV/AIDS vulnerability is illiteracy (United Nation Development Program [UNDP], 2010).

The study findings in Table 4.2 further shows that 36.73 per cent had been seeking for health services at the Comprehensive Care Centre's for 2-5 years while 29.93 per cent of the clients had been seeking for health services for 1-2 years. Moreover, 10.88 per cent of the clients had been attending the clinic for less than a year (6months to one year) while 14.29 per cent (21) clients sought services in the clinic for 5-10 years. Lastly, only 8.16 per cent of the clients attended the clinic for more than 10 years. The study findings that only 8.16 per cent of the clients sought for health services for a decade at the Comprehensive Care Centre's could be attributed to issues related to retention and status of service provision. According to a study done by Roy et al. (2016), it posits that retention of HIV/AIDS Clients at the Comprehensive Care

Clinics can be due to structural related such as transport based on the distance to the facility, Poverty and work commitment among others.

4.5. HIV/AIDS Client Satisfaction at the Comprehensive Care Centre's in Wajir

Results presented in table 4.3 show HIV/AIDS client satisfaction at the Comprehensive Care Centre's in Wajir County.

Table 4.3

HIV/AIDS Client satisfaction (n=147)

Statement	SD	D	N	A	SA	Mean	SD
	n. (%)	n. (%)	n. (%)	n (%)	n (%)		
Am satisfied with waiting time and Contact time with the service provider at the CCC	2 (1.4)	6 (4.1)	5 (3.4)	58 (39.5)	76 (51.7)	4.36	0.84
The process flow within the CCC and other service area is well organized	3 (2.1)	6 (4.1)	10(6.8)	51 (34.7)	77 (52.4)	4.31	0.92
Client Confidentiality is observed in the Comprehensive Care Centre	1 (0.7)	4 (2.7)	13 (8.8)	74 (50.4)	55 (37.4)	4.21	0.77
I have been consistently keeping the clinic appointments as scheduled	1 (0.7)	4 (2.7)	2 (1.4)	103 (70.1)	37 (25.2)	4.16	0.64
The Comprehensive Care Centre is within my reach	4 (2.7)	22 (14.7)	1 (0.7)	53 (36.1)	67 (45.6)	4.07	1.15
The Comprehensive Care Centre is open on the time that is convenient to me	5 (3.4)	6 (4.1)	4 (2.7)	93 (63.3)	39 (26.5)	4.05	0.87
My appointment schedule is convenient to me	1 (0.7)	15 (10.2)	10 (6.8)	100 (68)	21 (14.3)	3.85	0.81
The service providers in the CCC are trained on HIV/AIDS	1 (0.7)	3 (2.1)	63 (42.9)	33 (22.5)	47 (32.0)	3.83	0.93
The mix of services offered in the clinic meets my needs	38 (25.9)	15 (10.2)	7 (4.76)	52 (35.4)	35 (23.8)	3.21	1.55
There is complaint and compliment mechanism in place at the CCC and feedback is given on the same by the CCC staff and or the management	52 (35.4)	28 (19.1)	8 (5.5)	44 (29.9)	15 (10.2)	2.61	1.47

Key: strongly disagree=1 (SD), disagree =2 (D) neutral=3 (N), agree=4 (A) and strongly agree (SA) is 5.

From the study findings in Table 4.3, majority of the respondents agreed that they were satisfied with waiting time and contact time with the service provider at the CCC (M=4.36, S.D.=0.844). Majority of the respondents agreed that the process flow within the CCC and other service area was well organized (M=4.31, S.D.=0.92), client confidentiality was observed (M=4.21, S.D.=0.77) and were therefore keeping the clinic appointments as scheduled (M=4.16, S.D.=0.641). The Comprehensive Care Centre was within their reach of majority of people (M=4.07, S.D.=1.145), was open at their convenient time (M=4.05, S.D.=0.874), the service providers were trained on HIV/AIDS (M=3.83, S.D.=0.932) and the mix of services offered in the clinic met the respondents' needs (M=3.21, S.D.=1.554). However, majority of the respondents disagreed with the statement that there were complaint and compliment mechanism in place and feedback was given on the same by the staff or the management (M=2.61, S.D. =1.474).

The findings of this study show that on average 69.6 per cent (CI: 67.9-71.2 per cent) of clients seeking services at the CCC were satisfied. These clients were satisfied with waiting and contact time with the service provider; the process flow; confidentiality; honoring appointments; proximity of the CCC; opening hours; and staffs' professionalism. However, clients expressed dissatisfaction with complaint, compliment and feedback reporting mechanisms which were poorly done. The findings of this study show that HIV/AIDs clients in Wajir county are less satisfied when compared to clients receiving similar services in Mbagathi hospital and in other countries such as Tanzania. A study by Ringo, (2015) in Tanzania found that the HIV/AIDs client satisfaction is between 98-100 per cent. Unlike Wajir county where

clients expressed dissatisfaction with feedback reporting mechanisms, in Tanzania clients were dissatisfied with drug shortages. Another study by Mwihoti, (2015) show that HIV/AIDs clients seeking services at Mbagathi District Hospital's Comprehensive Care Centre's were more satisfied than those seeking services in Wajir health facilities with satisfaction levels of 78.6 per cent. The drivers of satisfaction were similar with that of the study and included available facilities, reasonable turnaround time in the facility, staffs who are sympathetic and reassuring; personal attention; and reliability of services. Drivers of clients' satisfaction are universal with a study by Kimani, (2014) also showing that sex workers also seek availability of services, location of a facility, friendliness of staffs at the centers, and quality of services.

4.6 Availability of HIV/AIDS Testing Services

The first objective of this study was to establish how the availability of HIV/AIDS Testing services influences the HIV/AIDS client satisfaction at the comprehensive care Centre's in Wajir County. There were several statements under this variable and responses captured in a Likert scale and Table 4.4 shows the results.

Table 4.4

Availability of HIV/AIDS Testing Services

Statement	SD n (%)	D n (%)	N n (%)	A n (%)	SA n (%)	Mean	SD
HIV testing services is available all through	1 (0.7)	2 (1.4)	12 (8.2)	84 (57.2)	48 (32.7)	4.2	0.699
The service provider gives me time to think on whether to start the treatment immediately or at a later date	3 (2.1)	4 (2.7)	9 (6.1)	83 (56.5)	48 (32.7)	4.15	0.814
The service provider shares with me the implication of the CD4 count and Viral loads results	1 (0.7)	6 (4.1)	6 (4.1)	93 (63.3)	41 (27.9)	4.14	0.728
The Service provider gives detailed Treatment Preparation Session after testing positive for HIV	0 (0)	1 (0.7)	10 (6.8)	108 (73.5)	28 (19.1)	4.11	0.525
The Service provider gives detailed pre-test Counselling during the HIV testing	2 (1.4)	1 (0.7)	9 (6.1)	106 (72.1)	29 (19.7)	4.08	0.636
The service provider does checking and testing on TB infections every appointment I come to the clinic	6 (4.1)	20 (13.6)	0(0)	66 (44.9)	55 (37.4)	3.98	1.138
The Health Worker insist on Couple and or Family testing in the facility	5 (3.4)	6 (4.1)	3(2.1)	109 (74.2)	24 (16.4)	3.96	0.81
The Health worker checks my Viral load as per the standard requirement	5 (3.4)	2 (1.4)	42 (28.6)	55 (37.4)	43 (29.3)	3.88	0.964
I do receive the results of the Viral loads on timely basis	22 (15.0)	18 (12.3)	6 (4.1)	68 (46.3)	33 (22.5)	3.49	1.362
The Service provider interprets the results of the HIV test for me	37 (25.2)	95 (64.6)	9 (6.1)	3 (2.1)	3 (2.1)	1.91	0.758

Key: strongly disagree=1 (SD), disagree =2 (D) neutral=3 (N), agree=4 (A) and strongly agree (SA) is 5.

The study findings in Table 4.4 indicate that majority of the respondents agreed to the statements that HIV testing services was available all through (Mean=4.2, S.D =0.699) and the service provider gave clients time to think on whether to start the treatment immediately or at a later date (M=4.15, S.D =0.814). Majority of the

respondents agreed that the service provider shared with them the implication of the CD4 count and Viral loads results (M=4.14, S.D.=0.728), the service provider gave detailed treatment preparation session after testing positive for HIV (M=4.11, S.D.=0.525) and detailed pre-test counseling during the HIV testing (M=4.08, S.D.=0.636).

Majority of the respondents agreed that the service provider checked and tested TB infections during every appointment to the clinic (M=3.98, S.D.=1.138), the health worker insisted on couple and or family testing in the facility (M=3.96, S.D.=0.81) and the health worker checked the viral load of clients as per the standard requirement (M=3.88, S.D.=0.964) and the clients received the results of the Viral loads on timely basis (M=3.49, S.D.=1.362). However, majority of the respondents disagreed the statements that the service providers interpreted the results of the HIV test for the clients (M=1.91, S.D.= 0.758).

The study has established that the respondents were satisfied with the availability of testing services in at the Comprehensive Care Centre's in Wajir County. The testing's services at the Comprehensive Care Centre's were available and accessible to the clients and the health care providers handled the clients with professionalism. The clients at the health facilities were counseled and guided on the implication of the test results. The findings in the study are in consistent with a study by Dawit, (2017) who established that that patient accessibility and convenience to the service delivery points and client-physician interactions enhanced customer satisfaction in HIV/AIDS Testing Services in Ethiopia.

The study findings indicate that viral suppression is a critical goal in HIV/AIDS patient care translating to improved adherence to treatment and retention of the

Clients. It is clear that adherence is vital and improves the quality of life of the clients on HIV/AIDS care and treatment. In a nutshell, it is therefore important to do baseline and routine viral load testing for the HIV/AIDS Clients with the objective of monitoring the effectiveness of the antiretroviral and client adherences to treatment. The study findings are similar to a study in Cambodia by Chhim et al. (2018) who established that the viral suppression is low among some of the HIV/AIDS population especially in various age cohorts that are on Care and treatment. The disparity in the viral loads suppressions is associated with cognition on the importance of adherence by the older clients over the younger generations on treatment. It is therefore essential to bring on board programmatic interventions to address the high viral loads across the board while giving a lot of focus to the adolescents and children.

The progress of the clients in terms of viral load and opportunistic infections such as TB were satisfactorily monitored at the Comprehensive Care Centre's. It is essentially important to assess the HIV/AIDS Clients for TB with the objective of reducing disease burden and mortality. This is similar to the findings of the WHO, (2011) which found that tuberculosis is the most serious common opportunistic infections among the people living with HIV and the commonest cause of death among the HIV/AIDS Clients. It is therefore recommended that all the HIV/AIDS Clients to be assessed for the signs and symptoms of Tuberculosis in every clinic visit (WHO, 2011).

4.7 Availability of Drugs in the Comprehensive Care Centre's

The second objective of this study was to establish how the availability of HIV/AIDS Drugs influences the HIV/AIDS Client satisfaction at the comprehensive care centers

in Wajir County. There were various statements under this variable too and the responses were captured in a Likert scale as shown in the Table 4.5.

Table 4.5

Availability of Drugs in the Comprehensive Care Centre's

Statement	SD	D	N	A	SA	Mean	SD
	n (%)	n (%)	n (%)	n (%)	n (%)		
Antiretroviral has been consistently available in this facility and never missed refill of the pills	0(0)	7 (4.8)	1 (0.7)	97 (66.0)	42 (28.6)	4.18	0.673
The Healthcare providers support and encourage patients to adhere to their medication.	1 (0.7)	4 (2.7)	5 (3.4)	94 (64.0)	43 (29.3)	4.18	0.683
The health care workers are very strict on the number of pills given to the clients.	1 (0.7)	7 (4.8)	0(0)	95 (64.6)	44 (29.9)	4.18	0.722
Adherence is vital to the effectiveness of the ART it has helped me realize a significant reduction in viral load, it has lowered drug resistance and slowed progression to AIDS	1 (0.7)	2 (1.4)	5 (3.4)	106 (72.1)	33 (22.5)	4.14	0.597
Medicines for the prevention of TB is consistently available in the facility	1 (0.7)	5 (3.4)	14 (9.5)	88 (59.9)	39 (26.5)	4.08	0.745
The Healthcare providers promote optimal adherence by giving clear instructions.	4 (2.7)	22 (15.0)	5 (3.4)	88 (59.9)	28 (19.1)	3.78	1.012
Decentralizing ART drug collection points rather than limited number of selected central level sites may alleviate the travel cost issues around having only a short period refills.	26 (17.7)	4 (2.7)	4 (2.7)	76 (51.7)	37 (25.2)	3.64	1.365
My uptake of HIV care service has been poor due to distance from the facility	37 (25.2)	73 (49.7)	5 (3.4)	23 (15.7)	9 (6.1)	2.28	1.181
The health care workers do medical follow-ups that address possible side effects and how to handle these in order to reinforce adherence.	37 (25.2)	73 (49.7)	5 (3.4)	23 (15.6)	9 (6.2)	2.28	1.181

Key: strongly disagree=1 (SD), disagree =2 (D) neutral=3 (N), agree=4 (A) and strongly agree (SA) is 5.

The results Table 4.5 indicate that majority of the respondents agreed to the statements that antiretroviral was consistently available in this facility and never missed refill of the pills (M=4.18, S.D.=0.673), the healthcare providers supported and encouraged patients to adhere to their medication (M=4.18, S.D.=0.683), the health care workers were very strict on the number of pills given to the clients (M=4.18, S.D.=0.722) and adherence was vital to the effectiveness of the Antiretroviral Therapy it has helped clients realize a significant reduction in viral load, lowered drug resistance and slowed progression to AIDS (M=4.14, S.D.=0.597).

Moreover, majority of the respondents agreed to the statements that medicines for the prevention of TB were consistently available in the facilities (M=4.08, S.D. =0.745), the healthcare providers promoted optimal adherence by giving clear instructions (M=3.78, S.D.=1.012), decentralizing ART drug collection points rather than limited number of selected central level sites alleviated the travel cost issues around having only a short period refills (M=3.64, S.D.=1.365).

From the results in Table 4.5, majority of the respondents disagreed to the statements that their uptake of HIV care service was poor due to distance from the facility (M=2.28, S.D. =1.181) and that the health care workers did medical follow-ups that address possible side effects and how to handle them in order to reinforce adherence (M=2.28, S.D.=1.181).

The study findings imply that the HIV/AIDS clients were satisfied with the availability of HIV/AIDs drugs at the comprehensive care centers in Wajir County. The HIV/AIDS clients visiting the health facilities did not lack drugs for HIV management and treatment of opportunistic infections such as TB during their visits for refill. The decentralizing ART drug collection points alleviated the travel cost

issues around having only a short period refill. The study findings are in tandem with similar study by Dixit et al. (2018) in India that established that availability of medicines at the HIV/AIDS clinics was an important component of the antiretroviral services and it accounted for high level of client satisfaction, improved retention and continuum of care at the comprehensive care centers.

The respondents were satisfied with the management of drugs and the guidance by healthcare providers on drug administration. The healthcare providers at the comprehensive care centers in Wajir County assisted clients in administration of antiretroviral therapy and adherence to medication. The clients appreciated the importance of strictness of the health care workers in enhancing effectiveness of HIV therapy in the reduction in viral load, minimization of incidents of drug resistance and slowed progression to AIDS. This study is in agreement with Dixit et al. (2018) who concluded that a good service provider-client relationship improved behavior change and client satisfaction at the service delivery points. It is therefore very important for the service providers at the Comprehensive Care Centre's to create a good rapport with the clients while giving correct information on the HIV/AIDS medicines and commodities to the patients with the objective of achieving client retention, continuum of care and improve quality of life of the clients in the Counties like Wajir.

4.8 Availability of HIV/AIDS care and social support Systems

The third objective of this study was to establish how the availability of HIV/AIDS Care and Support System services, influences the HIV/AIDS client satisfaction at the comprehensive care centers in Wajir County. The results are shown in Table 4.6.

Table 4.6

Availability of HIV/AIDS Care Support Systems at the CCCs

Statement	SD n (%)	D n (%)	N n (%)	A n (%)	SA n (%)	Mean	SD
The HIV/AIDS Clients are given free healthcare services in all the departments	53 (36.1)	8 (5.5)	5 (3.4)	34 (23.2)	47 (32.0)	3.10	1.737
There is a robust defaulter tracing mechanism in the CCC that helps to follow up patients who have missed appointments in the past three (3) months	57 (38.8)	48 (32.7)	16(10.9)	20 (13.6)	6 (4.08)	2.12	1.185
There is prevention with positive program offered at the CCC Clinic and involves the HIV Positive clients	60 (40.9)	49 (33.3)	10 (6.8)	22 (15.0)	6 (4.08)	2.08	1.202
The existing local HIV community-based organizations consistently supports and links the HIV Clients to the CCCs and other organizations	61 (41.5)	51 (34.7)	13 (8.9)	13 (8.84)	9 (6.12)	2.03	1.19
The new HIV Positive Clients are immediately linked to the existing Post Test Clubs (Where the HIV Positive Clients interacts with the other Clients)	61 (41.5)	53 (36.1)	10 (6.8)	17 (11.6)	6 (4.08)	2.01	1.15
HIV/AIDS Clients are linked to the other key departments like children's department, Social services and office of the president for support	62(42.2)	58(39.5)	7(4.8)	15(10.2)	5(3.40)	1.93	1.09
There is existing Social welfare scheme that targets the HIV Positive Clients and their family members	69 (47.0)	51 (34.7)	14 (9.5)	5 (3.40)	8 (5.44)	1.86	1.085
There is an expert HIV Client that is based in the clinic and supports the new HIV Positive Clients	62 (42.2)	68 (46.3)	8 (5.44)	7 (4.67)	2 (1.36)	1.77	0.861
There exist a structured HIV/AIDS support system in the County that helps to address Stigma and Discrimination	62 (42.2)	72 (49.0)	3 (2.04)	6 (4.08)	4 (2.72)	1.76	0.894

Key: strongly disagree=1 (SD), disagree =2 (D) neutral=3 (N), agree=4 (A) and strongly agree (SA) is 5.

The results in Table 4.6 indicate that majority of the respondents agreed to the statement that the HIV/AIDS Clients were given free healthcare services in all the departments at the CCCs in Wajir County (M=3.1, S.D.=1.737). On the contrary, majority of the respondents disagreed to the statements that there was a robust defaulter tracing mechanism in the CCC that helped to follow up patients who missed appointments in the previous three (3) months (M=2.12, S.D.=1.185), there were prevention with positive programs offered at the CCC Clinic and they involved the HIV positive clients (M=2.08, S.D.=1.202), the existing local HIV community based organizations consistently supported and linked the HIV clients to the CCCs and other organizations (M=2.03, S.D.=1.19).

Majority of the respondents also disagreed to the statements that the new HIV positive clients were immediately linked to the existing post-test clubs where the HIV positive clients interacted with the other clients (M=2.01, S.D.=1.15) and HIV/AIDS clients were linked to the other key departments like children's department, social services and office of the president for support (M=1.93, S.D.=1.09). Besides, majority of the respondents disagreed to the statements that there were social welfare schemes that targeted the HIV positive clients and their family members (M=1.86, S.D.=1.085), there were expert HIV clients that were based in the clinics and supported the new HIV positive clients (M=1.77, S.D.=0.861). The respondents also disagreed that there were structured HIV/AIDS support systems in the County that helped to address stigma and discrimination (M=1.76, S.D.=0.894).

The study has established that the majority of the respondents were not satisfied with availability of HIV/AIDS care and support systems at the at the comprehensive care centers in Wajir County. Clients at the CCCs were only satisfied with the fact that

healthcare services for HIV/AIDS Clients were free in all the departments at the CCCs in Wajir County. However, the health centers lacked HIV prevention programs that involved HIV positive clients as change ambassadors. The centers lacked local HIV community-based organizations that could link HIV clients to CCCs, post-test clubs, other key departments like children's department, social services and office of the president for support. The findings also revealed that there was lack of an effective client tracing system for defaulters and patients who miss appointments, there was a shortage of social welfare schemes that targeted the HIV positive clients and their family members, and there are inadequate HIV/AIDS support systems in the County to address stigma and discrimination.

The findings of the study contradict several reports that argue that Sub Saharan Africa have progressed on well by improving their respectful performances in terms of community and health services. The study however is in line with a study by Bonnington et al. (2017) who found that stigma is a primary challenge affecting HIV/AIDs clients and therefore health facilities should help such people access special care and support that can overcome stigma. In many Sub-Saharan Africa countries HIV victims lack social acceptance in the communities and they are not provided with needed care and support at the health facilities either. Similar study in Kenya by Avert (2020), also revealed that the ministry of health has been very vocal on infection prevention of HIV/AIDs through promotion of important programs of such as HIV testing and counseling (HTC), free distribution of condoms, HIV awareness through education with Kenya school curriculum, free mother-to-child transmission prevention (PMTCT), voluntary medical male circumcision (VMMC), free provision of pre-exposure prophylaxis (PrEP), and provision of ART to HIV victims. However, there is little being done to already existing HIV/AIDs victims

(Avert, 2020). The availability of HIV Care and support system services in health facilities are avenue of improving client retention and strengthening satisfaction. It is therefore prudent to address the social support system gap and avail integrate HIV/AIDS care and treatment services in the Comprehensive Care Centre's with ultimate objective of strengthening client's quality of Care and retention.

4.9 Availability of HIV/AIDS Institutional Support System

The fourth objective of this study was to establish how the availability of the existing HIV/AIDS institutional Support Systems influences the HIV/AIDS client satisfaction at the comprehensive care centers in Wajir County. Table 4.7 shows the results.

Table 4.7

Availability of Institutional Support

Statement	SD n (%)	D n (%)	N n (%)	A n (%)	SA n (%)	M	SD
The staffs working in the Comprehensive Care Centre are adequate and available.	8 (5.5)	6 (4.1)	5 (3.4)	84 (57.2)	44 (29.9)	4.02	0.996
Viral load testing is done within the hospital to reduce the Turn Around Time	28 (19.1)	19 (12.9)	19 (12.9)	40 (27.3)	41 (27.9)	3.32	1.48
The signage with in the Comprehensive Care Centre is clearly marked and easy to follow	23 (15.7)	29 (19.7)	7 (4.8)	63 (42.9)	25 (17.0)	3.26	1.37
The hospital has weak leadership and its poorly management hence a barrier to my uptake of HIV care service	8 (5.5)	56 (38.1)	59 (40.2)	22 (15.0)	2 (1.36)	2.69	0.842
The hospital management has allocated significant budget to the CCC to strengthen HIV/AIDS services	7 (4.8)	64 (43.5)	59 (40.2)	15 (10.2)	2 (1.4)	2.60	0.791
Due to space, the HIV/AIDS Clinic is congested with clients	40 (27.2)	74 (50.4)	7 (4.8)	18 (12.3)	8 (5.5)	2.18	1.129
There is a monthly/ quarterly meeting involving the hospital Management, CCC staff and HIV Clients to deliberate on HIV services in the institution	60 (40.8)	63 (42.9)	12 (8.2)	10 (6.8)	2 (1.4)	1.85	0.932

Key: strongly disagree=1 (SD), disagree =2 (D) neutral=3 (N), agree=4 (A) and strongly agree (SA) is 5.

The results in Table 4.7 shows that majority of the respondents agreed to the statements that the staffs working in the Comprehensive Care Centre were adequate

and available (M=4.02, S.D.=0.996) and viral load testing was done within the hospital to reduce the turnaround time (M=3.32, S.D.=1.48). Majority of the respondents also agreed to the statements that the signage with in the Comprehensive Care Centre were clearly marked and easy to follow (M=3.26, S.D.=1.37).

The opinion of majority of the respondents expressed was neutral in regard to the statement that the hospitals had weak leadership and they were poorly management hence a barrier to the uptake of HIV care service (M=2.69, S.D.=0.842). This result indicates that the HIV/AIDS clients were not knowledgeable on the effectiveness of management at the health centers.

Majority of the respondents disagreed to the statements that the hospital management allocated significant budget to the CCC to strengthen HIV/AIDS services (M=2.6, S.D.=0.791), due to space, the HIV/AIDS clinics were congested with clients (M=2.18, S.D.=1.129), there were monthly or quarterly meetings involving the hospital management, CCC staff and HIV clients to deliberate on HIV services in the institution (M=1.85, S.D.=0.932).

The study findings indicate that majority of the comprehensive care centers in Wajir County had adequate staff and the staffs were available to attend to HIV/AIDS clients. However, there were differences in terms of the number of staff in different hospitals. Wajir County Referral Hospital Comprehensive Care Clinic has more staffs compared to Habaswein and Bute Sub County Hospitals. Sometimes the disparity led to some clients to change their drug refill points from the other two Comprehensive Care Centre's.

HIV/AIDs is a unique condition different from other tropical diseases affecting the human population. Although a lot of investment has been done in the HIV/AIDs care and support programs across the African continent, the support seems to be leaning towards the high epidemic countries and regions. Besides donor support in regard to HIV/AIDs program execution, the implementing organizations and health departments seem to be not up to task and therefore some gaps still exist in regard staffing level and budgetary allocation at the HIV/AIDs clinics. To strengthen institutions, Avert (2020) reporting on UNAIDs report of 2019, found many countries have resolved for home-based HIV self-testing and care for people, free distribution of condoms, Comprehensive Sexuality Education (CSE) for teachers, and use of Civil Society Organizations (CSO) for advocacy which has not worked very well in East Africa. The findings of this study reveal that hospitals have adequate and available staff's hence promoting clients' satisfaction. The study also found that testing of viral load within the hospitals reduced the turnaround time which is similar study by Chhim et al. (2018) who emphasized the importance of routine monitoring the viral suppression of the HIV clients especially the young population to improve adherence and the quality of life. The comprehensive care centers were clearly labeled to enable easy identification and accessibility.

4.10 Key Informants Interview

The researcher further engaged the key informants to give their take on the HIV/AIDS Service provision in the respective Comprehensive Care Centre's in their hospitals. The key informants includes the Hospitals Chief Executive Officer and the Medical Superintendent, the in charges of the respective Comprehensive Care Centre's, the program coordinator of APHIA Plus IMARISHA which is an implementing program

supporting HIV/AIDS programs in the County and the focal person for the organization of people living with HIV/AIDS. Key Informant guide was used to engage the respondents. Below are some of the quotes from the respondents.

> "… *I have no role on the HIV/AIDS activities at the County referral hospital and I have no much information on the services offered at the Comprehensive Care Centre. There is no specific budgetary allocation for the HIV/AIDS support at the referral hospital since HIV/AIDS is not a priority in Wajir County. Am told there is an organization that supports the HIV/AIDS activities and further information on this can be given by the County AIDS and STI Coordinator (CASCO) …"*
>
> *The Chief Executive Officer, Wajir County Referral Hospital.*

Likewise the responses from the in charge of the Comprehensive Care Centre at the Referral hospital are as below;

''...My role is to oversee the activities at the Comprehensive Care Centre and to ensure that Care and Treatment are offered to the HIV Clients seeking services. The Clients are given standard HIV care including viral load monitoring, provision of Antiretroviral. There is consistency on the availability of HIV Testing Services and Drugs but challenges with budgetary allocation from the County government of Wajir. There is only one major partner supporting HIV Program through technical assistance. There is a huge challenge in regard to social support mechanisms for the HIV Clients especially social welfare support. There is no exiting feedback mechanism in place except on request from the clients…''

Clinical Officer Incharge Comprehensive Care Centre, Wajir County referral hospital.

The responses from the in charges of the Comprehensive Care Centre's for Habaswein and Bute Siub County Referral Hospital are same as above. Similarly, below are some of the responses from the HIV Implementing Partners in the County.

''...I believe, the project supports HIV/AIDS activities in the County through technical support to the service providers working at the various Comprehensive Care Centre's. Adherence and client retention is a challenge in the County. Clients do not keep appointments and defaulter tracing have been a gap. Stigma and discrimination within the staffs and Clients is an issue across the facilities and is a hindrance to the service provision. HIV testing and antiretroviral has not been an issue since they are available all through in the facilities. There is no budgetary allocation for the HIV/AIDS program from the County government. APHIAplus IMARISHA project is the only partner supporting HIV/AIDS programs and once the project life comes to an end, there shall be no any other support until another partner comes on board. Literally there is no sustainability in the program. Social support is also a huge challenge coupled with the community stigma...''

APHIA Plus IMARISHA project Coordinator.

Lastly, below are some of the responses from the Coordinator for the Organization of People Living with HIV/AIDS (OPAHA).

''...My role as the coordinator of the organization is to support the reduction of Stigma and discrimination against the people living with HIV/AIDS within the Community. Services are available at the Comprehensive Care Centre's but there is

an existing gap towards the social support for the HIV/AIDS clients. There is no budgetary available except from the donors through implanting partners which is not sustainable. There are significant number of Clients who have defaulted treatments and some of them are known to us since they appear in our register at the organizations office. Overally, the County gives priority to other services but not HIV/AIDS. People view HIV/AIDS as a curse…''

The focal person for the Organization of people living with HIV/AIDS (OPAHA).

During the study, the researcher did a quick observation of the Comprehensive Care Centre's. Below is brief observation in the facilities;

The Comprehensive Care Centre's are located within the hospitals and within the outpatient department except the CCC at Wajir County Referral Hospital which is a stand-alone. The services are not integrated with the laboratory and pharmacy being at the main hospital. The HIV/AIDS clients are not given special consideration in the laboratory and the pharmacy since they join other regular patients in the hospital. The space at the Comprehensive Care Centre's is small with squeezed waiting bay. Wall charts on HIV/AIDS are well displayed at the Comprehensive Care Centre's but are outdated. The washrooms are outside the CCCs and clients share with the usual patients seeking services in the hospital. The environment at the CCCs are clean and tidy, the staffs are friendly and though information on HIV drug adherence are available at the main CCC but not in the pharmacy. The antiretroviral are under lock and key at the main pharmacy and cannot be dispensed by everyone except the designated pharmacy staff.

4.11 Inferential statistical analysis on the Variables

4.11.1 Bivariate Analysis (Chi-square and correlation analysis)

To estimate factors that influence HIV/AIDs patients' satisfaction at the comprehensive care centers, bivariate analysis was done using chi-square and correlation. For the purpose of hypothesis testing, factor analysis was used to generate variables from each of the set of Likert items for each objective. The results were later classified as clients were either satisfied or not-satisfied on the four independent variables; availability of HIV testing services, availability of HIV drugs, HIV care and support and HIV institutional support systems. In preparing the data for analysis, the researcher converted the five-point Likert scale for the five variables into binary, with two options, either available or not available. The researcher further recoded the variables, with the responses of 1-3 (strongly disagree to neutral) showing not available, and options 4-5 (agree and strongly agree) showing availability of the services. After preparing the variables, they were then subjected to bivariate analysis, that is, chi-square and correlation analysis.

The chi-square analysis was done through cross-tabulation in SPSS, where the independent variable (HIV client satisfaction- in the column) was cross-tabulated with the demographic variables and the independent variables (put on the rows). Chi-square statistics were selected where the results were shown on table 4.8. The purpose of the chi-square results was to show whether or not the demographic and the predictor variables had any significant association with the dependent variable at p-value of 0.05. The interpretation of whether significant was based on if the variable had a p-value of below 0.05. The results are shown on table 4.8 below.

Table 4.8

Bivariate analysis of relationship between client satisfaction at the Comprehensive Care Centre's and its predictors using Chi-2 Test or Fishers exact test

		Satisfied		
		Not Satisfied	Satisfied	p-value[1]
Age	<35 years	28	43	0.259
	>=35 Years	37	39	
Health Facility	Bute	5	7	0.010
	HSCH	6	1	
	WCRH	53	75	
Gender	Male	22	29	0.194
	Female	43	53	
Education	None	22	29	0.134
	Primary	18	33	
	Secondary	25	20	
Years of visiting CCC	<5 Years	45	69	0.026
	>5 Years	20	13	
Availability of testing services	Not available	36	1	0.010
	Available	15	95	
Availability of Drugs	Not available	35	1	0.010
	Available	15	95	
Accessible care and social support	Not available	50	76	0.002
	Available	1	20	
Institutional support	Not available	50	63	0.010
	Available	1	33	
Total		51	96	

The results from bivariate analysis revealed a significant relationship between dependent and predictor variables. The results show that there is a statistically significant relationship between a client being satisfied at the Comprehensive Care Centre's and the health facility the client is seeking services, the number of years the client has been visiting the health facility for services, availability of testing services, availability of drugs, availability of Care and Social support, and institutional support.

[1] The association between satisfaction and age, Gender, Education, and Years of visiting CCC p-values were estimated using Chi-square test of association while health facility, availability of testing services, availability of drugs, accessible care and social support and institutional support p-values were estimated using fishers exact test due to expected count of <5% in some cells

This is based on the interpretation that their p-values were below the set alpha value of 0.05; hence they significantly influenced client satisfaction.

Since the chi-square analysis showed simply whether the variables were significant, it was perfect to show the extent and strength of association, hence Pearson correlation was done. Pearson correlation coefficient was used to test the strength and relationship between the dependent variable (client satisfaction) and key predictor variables (availability of HIV testing services, availability of HIV Drugs, availability of HIV care and social support, and availability of institutional support) as shown in table 4.9. The interpretation was based on the aspect that any Pearson correlation coefficient above 0.5 towards 1 (or -0.5 to -1) translates to strong positive (or negative) relationship and any correlation below 0.5 was a weak one, and zero shows that there was no correlation at all.

Table 4.9

Correlation between client satisfaction at the Comprehensive Care Centre's and its predictors

	Availability of HIV testing services	Availability of HIV Drugs	Availability of HIV care and social support	Availability of institutional support	Client satisfaction
Availability of HIV testing services	1				
Availability of HIV Drugs	1.000***	1			
	0.000				
Availability of HIV care and social support	0.192**	0.189**	1		
	0.020	0.0222			
Availability of institutional support	0.281***	0.278***	0.744***	1	
	0.001	0.001	0.000		
Client satisfaction	0.763***	0.759***	0.2567***	0.366***	1
	0.000	0.000	0.002	0.000	

Note: The first row of figures are the correlation coefficients; the second row represents the p-values

, * denotes significance level at 5% and 1% respectively

Results indicate a strong positive and significant relationship between client satisfaction and availability of HIV testing services (0.763, sig. 0.000) and availability of HIV Drugs (0.759, sig.0.000) at 1 per cent significance level. Further, the researcher identified that availability of HIV care and social support (0.257, sig. 0.002) and availability of institutional support (0.366, sig. 0.000) had positive but weak significant relationship with client satisfaction. This implies availability to HIV testing services, drugs, care and social support and institutional support positively influences client satisfaction.

4.11.2 Multivariate Analysis (Logistic regression)

The researcher therefore did a multivariate analysis using logistic regression. The researcher subjected the data to logistic regression, where the dependent variable was Client satisfaction (1- satisfied, 0-not satisfied). The dependent variable was regressed against the independent variables as well as the demographic variables to understand their influence on the predictor variables. The reference options were the last categories in each variable as earlier indicated on table 4.8 second column.

Table 4.10

Logistic regression analysis of relationship between Client satisfaction at the Comprehensive Care Centre's and its predictors

Variable	Coefficient *[Marginal effects*	Std error	p-value
Health facility (1- WCRH, 2- Bute, 3- HSCH)	-0.328***	0.100	0.001
Number of years one been seeking CCC Services	-0.091**	0.039	0.022
Gender (0 Female, 1 Male)	0.191**	0.075	0.011
Age of client (Years)	0.096**	0.074	0.016
Education (1-none, 5 post-secondary)	-0.112**	0.047	0.016
Availability of HIV testing services (0 No, 1 Yes)	0.513***	0.085	0.010
Availability of HIV Drugs (0 No, 1 Yes)	-0.053	0.075	0.480
Accessible HIV care and social support (0 No, 1 Yes)	0.569***	0.045	0.005
Availability of institutional support (0 No, 1 Yes)	0.078	0.0697	0.263

Note: Dependent Variable=1 if an individual is satisfied with at the Comprehensive Care Centre's and 0 otherwise
, * denotes significance level at 5% and 1% respectively

Results presented in table 4.10 show that the likelihood of being satisfied with services in the Comprehensive Care Centre's was 9.1 per cent lower for less experienced clients compared with more experienced clients. The Likelihood of more learned people being satisfied is lower by 11.2 per cent compared to non-educated clients. The likelihood of being satisfied was 51.3 per cent higher for people who reported availability of HIV testing services and 56.9 per cent higher for people who reported availability of HIV care and social support. There was also a significant relationship between availability of HIV Drugs and Institutional support with patient's satisfaction. Further, the researcher established that the seven variables with p-values below 0.05 had significant association with client satisfaction.

The findings of this study are in consistent with several other studies that found the variables tested in this study have significant influence on patient's satisfaction. Studies by (Kimani 2014; Mwihoti 2015; Ringo 2015 and Dawit 2017), found that patients are normally satisfied with the availability of drug and other medical supplies, availability of care and support from medical personnel's, reliability of services and friendliness of staffs at the centers. Studies from other countries such as India also found that the availability of medicines at the HIV/AIDS clinics was an important component of the antiretroviral services and it accounted for high level of client satisfaction, improved retention and continuum of care at the CCC (Dixit et al., 2018). This shows the effort of Kenya Government through Ministry of Health on infection prevention of HIV/AIDs through free HIV testing and counseling (HTC), distribution of condoms, PMTCT, VMMC, PrEP, and provision of ART to HIV victims are improving patient satisfaction in the CCCs.

CHAPTER FIVE:

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1. Summary

The chapter provides a summary of the key study findings, conclusion and the recommendations based on the research objectives.

5.2. Summary of the Main Findings of the Study.

The purpose of this study was to determine the factors that influence HIV/AIDS client Satisfaction at the Comprehensive Care Centre's in Wajir County. Specifically, the study examined the influence of the availability of HIV testing services, drugs, social support and institutional support on the client satisfaction on HIV/AIDS care and treatment at the comprehensive care centers in Wajir County.

5.2.1. Availability of HIV/AIDS Testing Services and HIV/AIDS Client satisfaction

The study established that the HIV/AIDS client satisfaction at the comprehensive care centers in Wajir County was influenced by the availability of HIV/AIDS testing services. The likelihood of being satisfied was 51.3 per cent higher for people who reported availability of HIV testing services and was found to be statistically significant($P<0.5$). The study findings indicate that viral suppression is a critical goal in HIV/AIDS patient care translating to improved adherence to treatment and retention of the Clients. It is clear that adherence is vital and improves the quality of life of the clients on HIV/AIDS care and treatment. In a nutshell, it is therefore

important to do baseline and routine viral load testing for the HIV/AIDS Clients with the objective of monitoring the effectiveness of the antiretroviral and client adherences to treatment. The progress of the clients in terms of viral load and opportunistic infections such as TB were satisfactorily monitored at the Comprehensive Care Centre's. It is essentially important to assess the HIV/AIDS Clients for TB with the objective of reducing disease burden and mortality.

5.2.2. Availability of HIV/AIDS Drugs and HIV/AIDS Client satisfaction

The study established that HIV/AIDS client satisfaction at the comprehensive care centers in Wajir County was significantly influenced by the availability of HIV/AIDS drugs. The likelihood of being satisfied with services at the Comprehensive Care Centre's was 5.3 per cent lower for people who reported availability of HIV drugs but such as was statistically insignificant($P>0.5$). The HIV/AIDS clients receiving care and treatment at the comprehensive care centers in Wajir County appreciated the fact that drugs were available and accessible at the service delivery points. The decentralizing ART drug collection points alleviated the travel cost issues around having only a short period refill. The healthcare providers at the comprehensive care centers in Wajir County assisted clients in administration of antiretroviral therapy and adherence to medication. The clients appreciated the importance of strictness of the health care workers in enhancing effectiveness of HIV therapy in the reduction in viral load, minimization of incidents of drug resistance and slowed progression to AIDS.

5.2.3. Availability of HIV/AIDS Care and Social support system and Client Satisfaction

The study found out that the HIV/AIDS client satisfaction at the comprehensive Care Centers in Wajir County was significantly influenced by the availability of HIV/AIDS

Care and Social support system. The likelihood of being satisfied with services in the Comprehensive Care Centre's was 56.9 per cent higher for people who reported availability of HIV care and social support system and statistically significant (P<0.5). The study established that there were low levels of satisfaction of HIV/AIDS client with the care and support systems as they were not involved in support groups and Community Based Organizations (CBOs) dealing with HIV prevention and management were not widely recognized. Besides there was lack of linkage of HIV/AIDS client to post-test clubs as well as Community based organizations and non-governmental agencies providing support to the programs. The health centers lacked HIV prevention programs that involved HIV positive clients as change ambassadors. The study established that there was lack of an effective client tracing system for defaulters and patients who miss appointments. The study further established that there were non-existing social welfare schemes that targeted the HIV positive clients and their family members and lack of structured HIV/AIDS support systems in the County to address stigma and discrimination. Nevertheless, the clients at the CCCs were satisfied with the fact that healthcare services for HIV/AIDS Clients were free in all the departments at the CCCs in Wajir County.

5.2.4. The availability of Institutional Support and HIV/AIDS Client satisfaction

The study found out that the HIV/AIDS client satisfaction at the comprehensive care centers in Wajir County was significantly influenced by the availability of HIV/AIDS institutional support system. The likelihood of being satisfied with services in the Comprehensive Care Centre's was 7.8 per cent higher for people who reported availability of institutional support such as Civil Society Organizations but such was not statistically significant (P>0.5). The study established that while the comprehensive care Centre's at the Wajir County Referral Hospital was well staffed,

the clinics at Habaswein and Bute Sub County Hospitals did not have adequate staff. Nevertheless, the available staff made great efforts to ensure that clients visiting comprehensive care clinics were served. The study also established that funds allocated to comprehensive care clinics were not sufficient and the service delivery points did not conduct regular meetings involving hospital management, CCC staff and HIV Clients to deliberate on HIV services in the institutions.

5.3. Conclusion

The study concludes that the four factors under examination (the availability of HIV testing services, drugs, social support and institutional support) were major determinants of client satisfaction on HIV/AIDS care and treatment at the comprehensive care centers in Wajir County. The availability and access to HIV/AIDS testing services raises the level of satisfaction of HIV/AIDS client at the Comprehensive Care Centers because it forms the basis of treatment and management of HIV/AIDS. Important services such HIV testing, determination of viral load and assessment for opportunistic infections such as TB and any other underlying diseases plays a critical role in HIV/AIDS client's satisfaction.

Similarly, availability and access to Antiretroviral and TB drugs is a cardinal factor in client satisfaction at the comprehensive care centers. HIV/AIDS clients become satisfied when the drugs are dispensed at a nearby health facilities and when the drugs are always in stock for refill. The decentralizing ART drug collection points alleviated the travel cost issues around having only a short period refill. The healthcare providers at the comprehensive care centers assist in the implementation and the effectiveness of treatment regimens for HIV/AIDS through continuous monitoring of drug intake by the clients. The involvement of health workers at the

CCCs in drug administration improves client satisfaction and assist in the reduction in viral load, minimization of incidents of drug resistance and slow progression to AIDS.

The study also concludes that the availability of HIV/AIDS care and social support system improves HIV/AIDS client satisfaction at the comprehensive care centers. The recruitment and active involvement of HIV/AIDS client in social support programs such as post-test clubs help HIV positive persons deal with stigma and health challenges associated with HIV/AIDS thus improves the levels of satisfaction with services offered at the comprehensive care centers. HIV/AIDS client derive more satisfaction at the comprehensive care centers when they are linked to support programs run by Community Based Organizations (CBOs), Non-Governmental Organization (NGOs) and government agencies involved in the fight against HIV/AIDS. The senior management in the health department through the comprehensive care centers should identify key stakeholders and partners for support, multisectoral approach is needed to address stigma and discrimination through HIV Care support services.

Lastly, the HIV/AIDS Institutional support systems also play a critical role in the HIV/AIDS client satisfaction at the comprehensive care centers. The levels of satisfaction among the HIV client rises when the heath institutions positively contributes to client management through allocation of sufficient funds to the comprehensive care centers, adequate human resource and implementation of policies and programs on HIV/AIDS. Equally, the level of satisfaction of HIV/AIDS client with services offered at the comprehensive care centers dwindles in the face of low support from health institutions towards HIV/AIDS management. Involvement of HIV/AIDS client as stakeholders in management of programs at the CCCs through

regular meetings improves the levels of satisfaction in comprehensive care centers. The County executive team and management should convene and attend a forum with the HIV Clients as an avenue of addressing key issues of concern for the HIV clients and strengthen the HIV service delivery in the County.

5.4. Recommendations

This study makes the following recommendations for each of the study objectives.

i. The County Government of Wajir through the department of health services, need to priorities and give focus to HIV/AIDS services like any other health services
ii. Hospitals management needs to ensure that HIV Testing Services are available throughout without interruption of the services and with adequate stock of test kits and other supplies for the opportunistic infections. This will strengthen and improve the status of HIV/AIDS among the population living in Wajir County.
iii. The management needs to provide HIV/AIDS Care support system with focus on stigma and discrimination, psychosocial support and social welfare scheme through the involvement of implementing partners and government departments.
iv. Strengthening of HIV institutional support through budget allocation, periodic review meetings involving the HIV/AIDS Clients, Hospital management and the senior technical persons in the County government of Wajir.

5.5 Suggestion for further study

The study revealed that HIV/AIDs client's satisfaction levels are lower when compared with urban areas hospitals and other countries average. Future studies can do a comparative study to explore the driving factors of HIV/AIDs clients' satisfaction between urban and rural health facilities.

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APPENDICES

Appendix I: Consent Form

Kenya Methodist University
P. 0 Box 267-60200
MERU, Kenya

SUBJECT: INFORMED CONSENT

Dear Respondent,

My names are **Ibrahim Abdi Mohamed**. I am MSc student from Kenya Methodist University. I am conducting a study titled: **Factors Influencing Client Satisfaction at The Comprehensive Care Centre's, A Case of Wajir County**.

The findings will help to strengthen the health systems in Kenya and other low-income countries in Africa. As a result, countries, communities and individuals will benefit from improved quality of healthcare services. This research proposal is critical to strengthening health systems, as it will generate new knowledge in this area that will inform decision makers to make decisions that are research based.

Procedure to be followed

Participation in this study will require that I ask you some questions and access all the hospital's department to address the six pillars of the health system. I will record the information from you in a questionnaire checklist.

You have the right to refuse the participation in this study. You will not be penalized nor victimized for not joining the study and your decision will not be used against you nor affect you at your place of employment.

Please remember that participation in the study is voluntary. You may ask questions related to the study at any time. You may refuse to respond to any questions and you may stop an interview at any time. You may also stop being in the study at any time without any consequences to the services you are rendering.

Discomforts and risks.

Some of the questions you will be asked are on intimate subject and may be embarrassing or make you uncomfortable. If this happens, you may refuse to answer if you choose. You may also stop the interview at any time. The interview may take about 40 minutes to complete.

Benefits

If you participate in this study, you will help us to strengthen the health systems in Kenya and other Low-in- come countries in Africa. As a result, countries, communities and individuals will benefit from improved quality of healthcare services. This field attachment is critical to strengthening the health systems, as it will generate new knowledge in this area that will inform decision makers to make decisions that are research based.

Rewards

There is no reward for anyone who chooses to participate in the study.

Confidentiality

The interviews will be conducted in a private setting within the hospital. Your name will not be recorded on the questionnaire and the questionnaires will be kept in a safe place at the University.

Contact Information

If you have any questions, you may contact the researcher via below cellphone number and or Email:

Name: Ibrahim Abdi Mohamed: Cellphone:+254720 252696.

Email: ibrahimabdimohamed@yahoo.com

Department of Health Systems Management and Medical Education

Kenya Methodist University, Nairobi campus.

Participant's Statement

The above statement regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will not be victimized at my place of work whether I decide to leave the study or not and my decision will not affect the way I am treated at my work place.

Participants'

signature…….**Date**……..

Investigator's Statement

I, the undersigned, have explained to the volunteer in a language s/he understands the procedures to be followed in the study and the risks and the benefits involved.

Interviewers' name ……Date…….

Interviewers' Signature……Date…….

Appendix II: Study Questionnaire

Instructions:

1. Please do not indicate your name anywhere on this questionnaire

2. Kindly respond to all questions as honestly as possible

3. Please answer within the space provided or place a tick (√) as appropriate. Kindly make only one selection unless otherwise instructed.

NB: All information gathered will be kept strictly confidential

Facility Name:_____

SECTION A: DEMOGRAPHIC DATA

1. Gender Male [ ] Female [ ]
2. Age in complete years …….
3. Please indicate your level of education

   None [ ] Primary [ ] Secondary Level [ ] Tertiary [ ] Graduate [ ] Post Graduate [ ]
4. How long have you been a Client in this Facility?

   Less than One year [ ] 1-2 years [ ] 2-5 years [ ] 5-10 years [ ] Over 10 years [ ]

SECTION B: AVAILABILITY OF HIV/AIDS TESTING SERVICES

5. To what extent do you agree with the following statements on HIV/AIDS Testing Services in this Comprehensive Care Centre?

   Where 1= Strongly Disagree, 2=Disagree 3=Neutral, 4=Agree and 5=Strongly Agree

STATEMENT	**1**	**2**	**3**	**4**	**5**
HIV testing services is available all through					
The Service provider gives detailed pre-test Counseling during the HIV testing					
The Service provider interprets the results of the HIV test for me					
The Health Worker insist on Couple and or Family testing in the facility					
The Service provider gives detailed Treatment Preparation Session after testing positive for HIV					
The service provider gives me time to think on whether to start the treatment immediately or at a later date					
The service provider shares with me the implication of the CD4 count and Viral loads results					
The Health worker checks my Viral load as per the standard requirement					
I do receive the results of the Viral loads on timely basis					

The service provider does checking and testing on TB infections every appointment I come to the clinic					

SECTION C: AVAILABILITY OF DRUGS IN THE COMPREHENSIVE CARE CENTRE

6. To what extent do you agree with the following statements on the availability of Antiretroviral in this facility? Where 1= strongly disagree, 2=disagree 3=neutral, 4=agree and 5=strongly agree

STATEMENT	**1**	**2**	**3**	**4**	**5**
My uptake of HIV care service has been poor due to distance from the facility					
Antiretroviral has been consistently available in this facility and never missed refill of the pills					
Medicines for the prevention of TB is consistently available in the facility					
Adherence is vital to the effectiveness of the ART it has helped me realize a significant reduction in viral load, it has lowered drug resistance and slowed progression to AIDS					
Decentralizing ART drug collection points rather than limited number of selected central level sites may alleviate the travel cost issues around having only a short period refills.					
The Healthcare providers support and encourage patients to adhere to their medication.					
The health care workers are very strict on the number of pills given to the clients.					
The Healthcare providers promote optimal adherence by giving clear instructions.					
The health care workers do medical follow-ups that address possible side effects and how to handle these in order to reinforce adherence.					

SECTION D: AVAILABILITY OF HIV/AIDS CARE SUPPORT SYSTEMS AT THE COMPREHENSIVE CARE.

7. To what extent do you agree with the following statements on the availability of HIV/AIDS Care Support systems at the Comprehensive Care Centre (CCC)?

   Where I= strongly disagree, 2=disagree 3=neutral, 4=agree and 5=strongly agree

STATEMENT	1	2	3	4	5
There is an expert HIV Client that is based in the clinic and supports the new HIV Positive Clients					
There exist a structured HIV/AIDS support system in the County that helps to address Stigma and Discrimination					
The new HIV Positive Clients are immediately linked to the existing Post Test Clubs(Where the HIV Positive Clients interacts with the other Clients)					
The HIV/AIDS Clients are given free healthcare services in all the departments					
There is existing Social welfare scheme that targets the HIV Positive Clients and their family members					
HIV/AIDS Clients are linked to the other key departments like children's department, Social services and office of the president for support					
There is prevention with positive program offered at the CCC Clinic and involves the HIV Positive clients					
There is a robust defaulter tracing mechanism in the CCC that helps to follow up patients who have missed appointments in the past three(3) months					
The existing local HIV community based organizations consistently supports and links the HIV Clients to the CCCs and other organizations					

SECTION E: HIV/AIDS INSTITUTIONAL SUPPORT IN WAJIR COUNTY.

8. To what extent do you agree with the following statements on the HIV/AIDS institutional support in Wajir County? Where 1= strongly disagree, 2=disagree 3=neutral, 4=agree and 5=strongly agree

STATEMENT	1	2	3	4	5
Due to space, the HIV/AIDS Clinic is congested with clients					
The signage with in the Comprehensive Care Centre is clearly marked and easy to follow					
The staffs working in the Comprehensive Care Centre are adequate an available.					
The hospital has weak leadership and its poorly management hence a barrier to my uptake of HIV care service					
The hospital management has allocated significant budget to the CCC to strengthen HIV/AIDS services					

There is a monthly/quarterly meetings involving the hospital Management, CCC staff and HIV Clients to deliberate on HIV services in the institution					
Viral load testing is done within the hospital to reduce the Turn Around Time					

SECTION F: HIV/AIDS CLIENT SATISFACTION

9. To what extent do you agree with the following statements on the HIV/AIDS Client Satisfaction? Where 1= strongly disagree, 2=disagree 3=neutral, 4=agree and 5=strongly agree

STATEMENT	**1**	**2**	**3**	**4**	**5**
The Comprehensive Care Centre is within my reach					
My appointment schedule is convenient to me					
There is complaint and compliment mechanism in place at the CCC and feedback is given on the same by the CCC staff and or the management					
The Comprehensive Care Centre is open on the time that is convenient to me					
I have been consistently keeping the clinic appointments as scheduled					
Am satisfied with waiting time and Contact time with the service provider at the CCC					
The process flow within the CCC and other service area is well organized					
The mix of services offered in the clinic meets my needs					
The service providers in the CCC are trained on HIV/AIDS					
Client Confidentiality is observed in the Comprehensive Care Centre					

Thank you

Appendix III: KEY INFORMANT INTERVIEW GUIDE

Date:…….

Instructions: Kindly respond to all questions as honestly as possible

1.What is your role in HIV/AIDS activities in the County?.....
.....
.....

2.Give brief description of HIV/AIDS services in the Comprehensive Care Centres in the County……
……
……

3. What is the Status of HIV Testing Services in the Comprehensive Care Centres in the County……
……
……

4.What mechanism is available in getting feedback from the clients whether they are satisfied or dissatisfied with the Services offered in this facility?……
……

5. What is the Consistency of Antiretroviral stock in the Comprehensive Care Centres……
……
……..

6. What is the budgetary allocation of HIV/AIDS activities in the County……
……

7.Apart from NASCOP, who else support HIV activities in the County?.....
.....
.....

8.Apart from the Comprehensive Care Centres, where else do the HIV/AIDS Clients get support?.....
.....
.....

9. How committed are the HIV Clients to their clinic appointments? How are the defaulters followed up?.....
.....
.....

10. What are the major challenges to HIV/AIDS programs in the County? How can you address this challenges……..

Appendix IV: Guide for Observation of the Facility

Date……..
The researcher shall conduct the observation.
The purpose is to give description of the setting under which care takes place.

1. Describe hospital setting in general
.....……
……
…….....

1. Are there adequate staff available in the Comprehensive Care Centre? How many are they and there designation?.....

3. Describe the location and setting of the Comprehensive Care Centre and support services (Consultation room, pharmacy, Laboratory, TB Clinic, counseling room)
.....……
……
…….....

4. How is the antiretroviral and other supplies stored and secured in the CCC?.....
.....
.....

5. Describe the sanitary conditions of the environment, how clean or dirty is it? Check out the Washrooms.....……
……
……

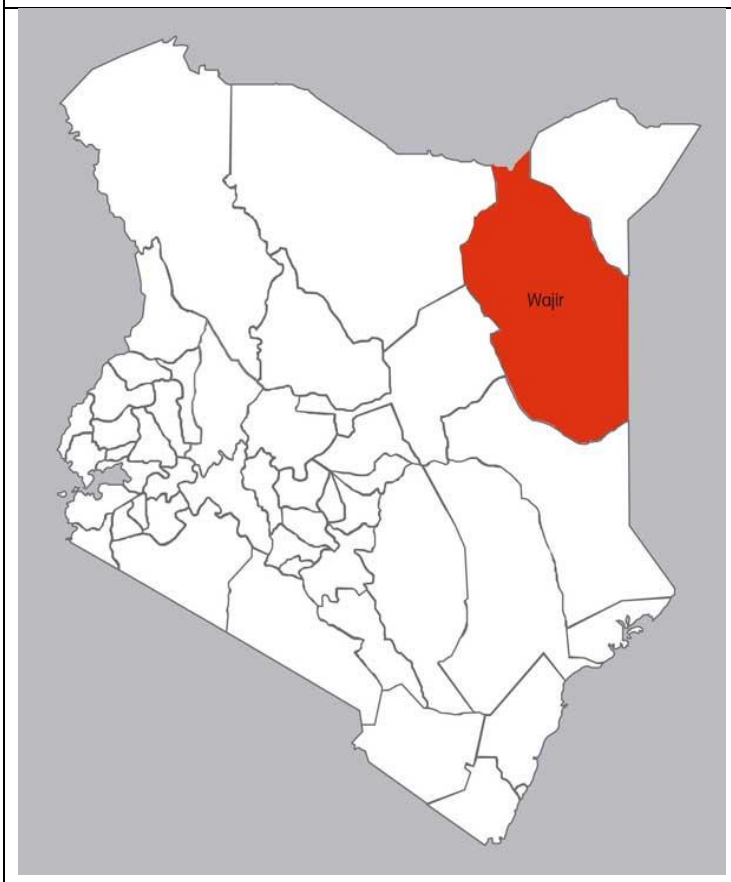
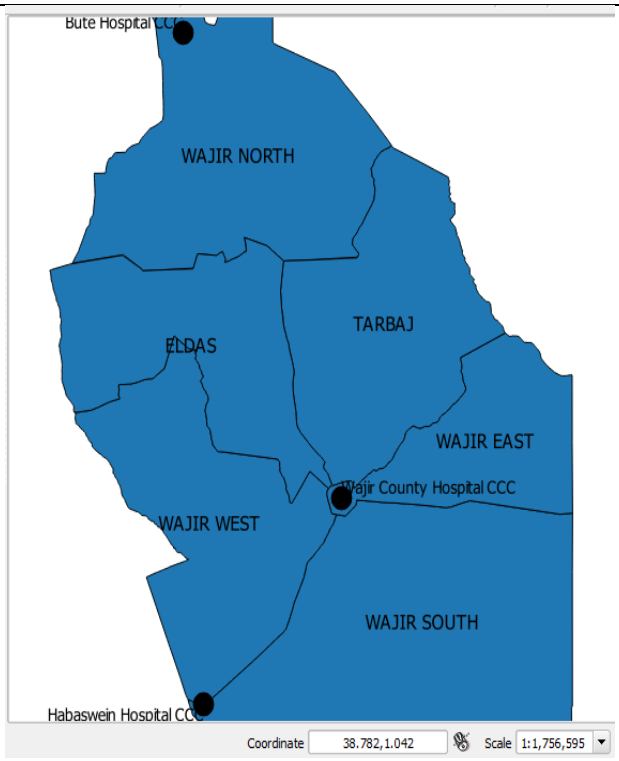
6. Where are the Clients received? Is there privacy? Describe what you see……
…
……
…

7. What is the general attitude of the workers, are they receptive and willing to assist clients? Describe what you see.
…….....
……
…

8. What notices or information are displayed for clients to read, describe.....
....
.....
....
.....
....

9. Specifically look through the where patients get ARVs to see if there is any piece of information emphasizing the need for good adherence or telling people how to improve adherence .....

Appendix V: Map of Wajir County in Kenya

Map of Kenya, showing Wair County in North Eastern	Map of Wajir County showing the three study areas
	

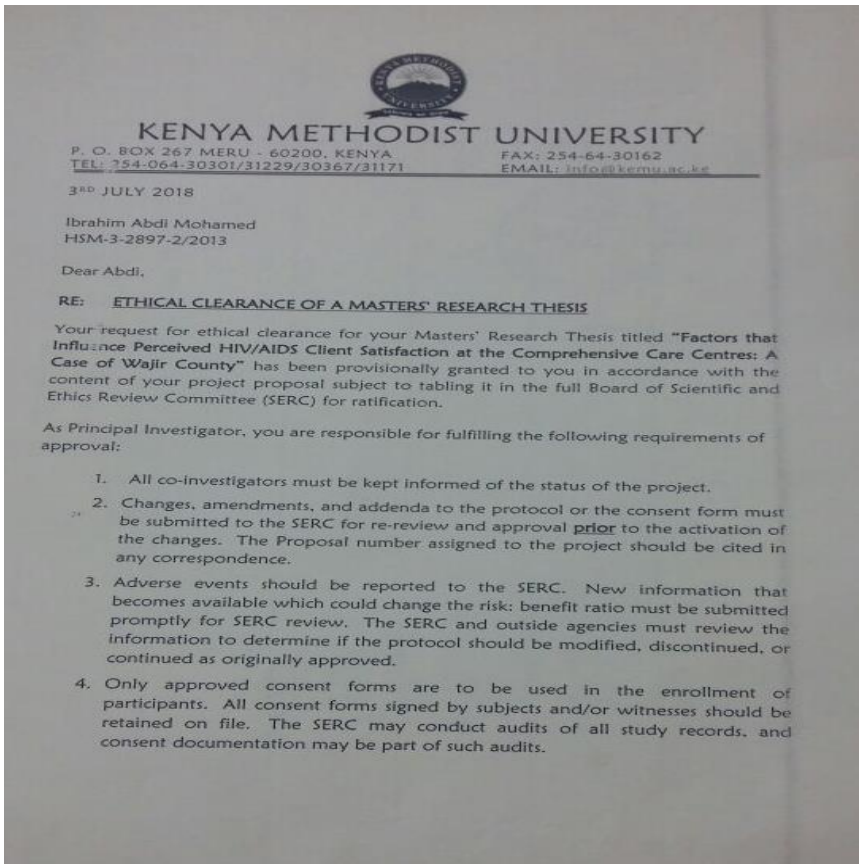
Appendix VI: Sample Size

n	*S*	*n*	*S*	*n*	*S*
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note. n is population size.

S is sample size.

Appendix VII: KeMU Ethical Approval



KENYA METHODIST UNIVERSITY

P. O. BOX 267 MERU - 60200, KENYA
TEL: 254-064-30301/31229/30367/31171
FAX: 254-64-30162
EMAIL: info@kemu.ac.ke

3RD JULY 2018

Ibrahim Abdi Mohamed
HSM-3-2897-2/2013

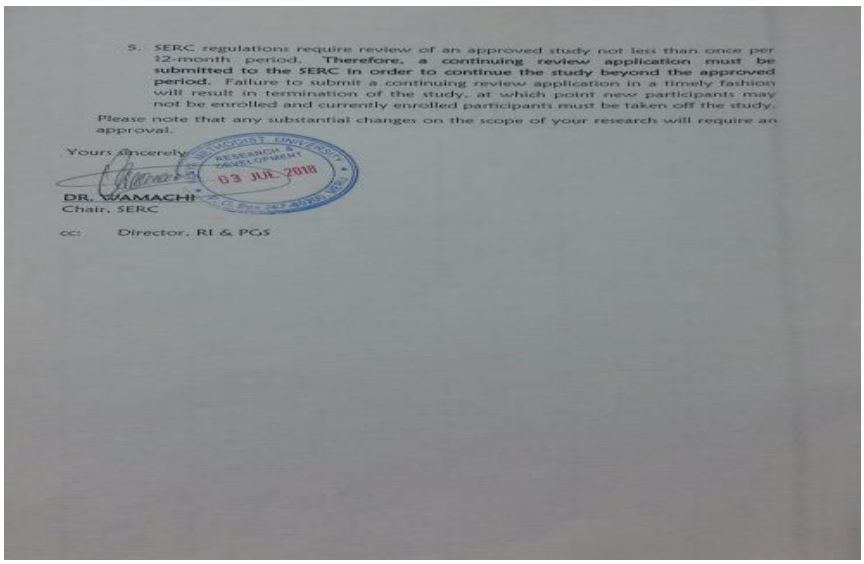
Dear Abdi,

RE: ETHICAL CLEARANCE OF A MASTERS' RESEARCH THESIS

Your request for ethical clearance for your Masters' Research Thesis titled **"Factors that Influence Perceived HIV/AIDS Client Satisfaction at the Comprehensive Care Centres: A Case of Wajir County"** has been provisionally granted to you in accordance with the content of your project proposal subject to tabling it in the full Board of Scientific and Ethics Review Committee (SERC) for ratification.

As Principal Investigator, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the project.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the SERC for re-review and approval **prior** to the activation of the changes. The Proposal number assigned to the project should be cited in any correspondence.
3. Adverse events should be reported to the SERC. New information that becomes available which could change the risk: benefit ratio must be submitted promptly for SERC review. The SERC and outside agencies must review the information to determine if the protocol should be modified, discontinued, or continued as originally approved.
4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by subjects and/or witnesses should be retained on file. The SERC may conduct audits of all study records, and consent documentation may be part of such audits.



5. SERC regulations require review of an approved study not less than once per 12-month period. **Therefore, a continuing review application must be submitted to the SERC in order to continue the study beyond the approved period.** Failure to submit a continuing review application in a timely fashion will result in termination of the study, at which point new participants may not be enrolled and currently enrolled participants must be taken off the study.

Please note that any substantial changes on the scope of your research will require an approval.

Yours Sincerely

RESEARCH & PGS DEVELOPMENT
03 JUL 2018

DR. WAMACHI
Chair, SERC

cc: Director, RI & PGS

Appendix VIII: WAJIR COUNTY Ethical Approval

COUNTY GOVERNMENT OF WAJIR

DEPARTMENT OF MEDICAL SERVICES, PUBLIC HEALTH AND SANITATION

When replying, please
Quote our Ref & Date
WCG/DOH/Research /VOL 111/
20/2018

DEPARTMENT OF RESEARCH AND
LEARNING
PO BOX 2 – 70200
WAJIR

6th August, 2018.

To
Mr. Ibrahim Abdi Mohamed

RE: APPROVAL TO COLLECT DATA ON PERCEIVED HIV/AIDS CLIENT SATISFACTION AT THE COMPREHENSIVE CARE CENTRES-WAJIR COUNTY

The above matter refers.

Permission is hereby granted to you to collect data on the above research topic.

Kindly ensure to provide a copy of the research study findings and recommendation for execution and references.

Sincerely

HALIMA MOHAMED OMAR

DEPUTY DIRECTOR, RESEARCH & LEARNING

FOR: DIRECTOR RESEARCH AND LEARNING

Appendix IX: NACOSTI Ethical Approval

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471, 2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/19/43630/28215**

Date: **27th February, 2019**

Ibrahim Abdi Mohamed
Kenya Methodist University
P.O. Box 267- 60200
MERU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Factors that influence perceived HIV/AIDs client satisfaction at the comprehensive care centers: A case of Wajir County"*** I am pleased to inform you that you have been authorized to undertake research in **Wajir County** for the period ending **27th February, 2020.**

You are advised to report to **the County Commissioner, the County Director of Education and the County Director of Health Services, Wajir County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Wajir County.

The County Director of Education
Wajir County.

The County Director of Health Services
Wajir County.

THIS IS TO CERTIFY THAT:
MR. IBRAHIM ABDI MOHAMED
of KENYA METHODIST UNIVERSITY,
407-70200 WAJIR,has been permitted to
conduct research in *Wajir County*

on the topic: *FACTORS THAT INFLUENCE PERCEIVED HIV/AIDS CLIENT SATISFACTION AT THE COMPREHENSIVE CARE CENTERS: A CASE OF WAJIR COUNTY*

for the period ending:
27th February,2020

.....
Applicant's
Signature

Permit No : NACOSTI/P/19/43630/28215
Date Of Issue : 27th February,2019
Fee Recieved :Ksh 1000

.....
Director General
National Commission for Science,
Technology & Innovation