ASSESSING FACTORS INFLUENCING DELIVERY OF HIV PRE EXPOSURE PROPHYLAXIS PROJECT IN PUBLIC HEALTH FACILITIES, THE CASE OF THIKA SUB COUNTY, KIAMBU COUNTY- KENYA.

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A RESEARCH PROJECT REPORT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE IN MASTER OF ARTS IN PROJECT PLANNING AND MANAGEMENT OF THE UNIVERSITY OF NAIROBI

DECLARATION

This is to certify that this project is my original work and has not been presented in any other university or learning institution for examination.

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This research project has been submitted for examination with my approval as university supervisor.

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DEDICATION

This project is dedicated to my husband Gilbert Mutonyi and our children Helga Nyeri, Griffin Gicheru and Abel Jimmy for their support and understanding of my school schedule. I give glory to God for renewing my strength.

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ABSTRACT

HIV Pre Exposure Prophylaxis is a new intervention tool for those who are at risk of acquiring HIV.HIV pre exposure prophylaxis is an antiretroviral tablet given to HIV negative person to reduce the risk of HIV acquisition. The topic of this study was assessing factors influencing delivery of HIV PrEP a project in public health facilities, the case of Thika sub county, Kiambu county- Kenya. Objectives were, To establish the influence of human behavior on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county. To determine the influence of clients waiting time on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county. To assess the influence of health providers competence on delivery of HIV Pre Exposure prophylaxis in public health facilities in Thika sub county. To assess the influence of clients privacy on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county. The study population was clients on HIV PrEP with sample size of 81 respondents sampled with 48 key informants who were health providers. The study adopted cross-sectional descriptive survey design. Qualitative data was analyzed using descriptive data technique backed up by statistical package for social sciences(SPSS) .From the analysis of the results human behaviour has influence on PrEP delivery at (.881b), client waiting time(.030b), providers competence (.421b)and clients privacy(.108b).

The study findings indicated that human behavior was found to be statistically significant in influencing the delivery of HIV PrEP to public health facilities in Thika Sub County. The study recommended trainings for providers who are to give the new service that is being introduce. This study most health providers reported to have moderate training from their colleagues who got an opportunity to receive the ideal training of HIV PrEP delivery. Counselors may be the best flag bearers of PrEP delivery. The government should consider merging HIV PrEP delivery fund with other private funds and form one large Public Private Partnership that will even allow both private practioners and govern entities to do joint partnership. This may assist providers to seek refresher training on new services incorporated inline of the duty. There is need for ongoing capacity building since in HIV management field there is a lot which keeps on changing in according to WHO.

CHAPTER ONE INTRODUCTION

1.1 Background of the Study

The history of HIV can be traced back to early in 1980s. This has been a long journey with different milestones in treatment and prevention of HIV. Clinical trials and researches have been conducted with promising results from one level to another. These are some of examples on efforts which were initiated since then. Guidelines on when to start antiretroviral therapy were implemented by World Health Organization (WHO) in 2015. This was geared towards making available two key recommendations that were developed during the revision process in 2015. First, antiretroviral therapy (ART) to be initiated in everyone living with HIV at any CD4 cell count. Second, the use of daily oral pre-exposure prophylaxis (PrEP) was recommended as a prevention choice for people at substantial risk of HIV infection as part of combination prevention approaches. The first of these recommendations was based on evidence from clinical trials and observational studies released since 2013 showing that earlier use of ART results in better clinical outcomes for people living with HIV compared with delayed treatment (Division of STD National Centre for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention in 2015).

The other recommendation which has served well in reduction of HIV acquisition is guideline on sexually transmitted disease. The guideline which was released by (WHO) in 2015, included recommendation for those who are sexually active to be tested for HIV focusing on diagnosis purposes. This recommendation has helped in real world setting for HIV diagnosis and partner notification. Partner notification involves people who tests HIV positive or found to have other sexual transmitted disease they are informed to come with their sexual partners for treatment and counseling. This guideline was released to help in capturing new infection and also to assist in managing sexual partners as a unit. (National Aids control Council, 2014 report) The current prevention tool that was declared recently for reduction of new infections is HIV Pre exposure prophylaxis. According to a Jonathan Volk (2012), Kaiser Permanente research organization in San Francisco they were the first researchers to discover effectiveness of PrEP. Kaiser Permanente 2012 clinical trial recommended PrEP for HIV prevention in most at risk population after the release of their study results.

Centre for disease and control (CDC 2014) defines PrEP as a way for people who do not have HIV but who are at substantial risk of getting it to prevent HIV infection by taking an oral pill every day. When someone is exposed to HIV through sex or injection drug use, PrEP can work to keep the virus from establishing a permanent infection. PrEP works well when taken consistently without missing some daily doses. A study conducted by Connie Celum on 4700 discordant couples back in 2008-2011 showed PrEP reduces the risk of HIV infection in people who are at high risk by up to 96%. (New England journal of Medicine) The results for Connie Celum study led to PrEP demonstration study which was conducted in Kenya and Uganda. The aim of PrEP study was to inform wether HIV negative individual would adhere to clinic visits for PrEP supply. The PrEP demonstration study informed policy makers it's possible for HIV negative person to adhere to clinic visit for PrEP supply. Therefore in 2017 PrEP was declared to be dispensed even in government facilities at no cost.

Demonstration Research article Published by Jared Mujugira in 2011 on Characteristics of HIV-1 Serodiscordant Couples enrolled in a Clinical trial of Antiretroviral Pre-Exposure Prophylaxis for HIV-1 Prevention. The results indicated PrEP is much less effective if it is not taken consistently without missing doses.

The second recommendation for PrEP guideline was based on clinical trial results confirming the efficacy of the ARV drug tenofovir for use as PrEP to prevent people from acquiring HIV in a wide variety of settings and populations. This has worked well in reducing HIV transmission within Kenya and other Nations that borrowed on the same idea. These clinical trials were Two Phase II studies which evaluated the safety of daily TDF 300 mg as PrEP. In 2007, FHI360 performed a 12-month study in 936 HIV-negative women from Ghana, Cameroon, and Nigeria who were at high risk for HIV infection. In 2012, favorable results from the Phase III TDF2 and Partners PrEP studies were published this was a study conducted on discordant couples some sites were in Kenya.

Based on these favorable results, this study investigated further four variables identified to make Independent variables. The variables which was investigated were the influence of human behavior on delivery of HIV PrEP, the influence of clients waiting time on delivery of HIV PrEP, the influence of health providers' competence on delivery of HIV PrEP and lastly influence of client's privacy on delivery of HIV PrEP in public health facilities.

The journal of England medicine reported Partners PrEP study done by Connie and Jared (2008) findings indicated PrEP reduces chances of HIV negative person acquiring HIV at 96%. These were the findings that led to guideline for PrEP to be released fully by National AIDS & STI control program in 2017. The National AIDS & STI Control Program (NASCOP) published this framework to provide guidance on the rollout of PrEP in Kenya (launched in May 2017).

According to HIV prevention revolution roadmap formed by NASCOP for 2016, indicated that high impact, evidence-based interventions should be sustained and targeted towards Counties and different population needs. It also focused on the need for efficient delivery of combination prevention packages, synergistic integration of biomedical, behavioural and structural interventions and sustainable investment in HIV prevention. Research was given a challenge to sharply reduce the annual number of new HIV infections from an estimated 101,560 in 2013 to near zero in 2030. (PrEP watch National policies guidelines 2017).

Therefore based on findings and comparison of different results of studies the most contributing factors to increase of HIV transmission has been ignorance, behavior modification and stigma. A Study conducted By Connie Celum in 2008-2012 on 4700 heterosexual respondents showed efficacy of Oral pre exposure prophylaxis (PrEP) provided substantial protection against HIV-1 acquisition in heterosexual men and women, with comparable efficacy.

This study helped in identifying the knowledge gap within study variables which will lead to new strategies to be put in place to assist in streamlining on PrEP delivery. The knowledge which gained in this study will help the policy makers to amend the guidelines for PrEP to suit the current scenarios in the real world settings.

The following is a summary of statistics and preferences for HIV/AIDS has a long history to be discussed; however the study gave details on HIV preference globally internationally and locally. According to CDC, an estimated 35 million people worldwide live with HIV/AIDS, more than two thirds of these live in sub Saharan Africa. Nearly three-fourths of the 2.1

million new HIV infections in 2013 occurred in these countries (Division of global HIV/AIDS report of November 2013.

The National Population-Based Household Survey, 2012 indicated Kenya has a mature HIV epidemic with HIV prevalence estimated to be 5.6% in the adult general population in 2012. These is embedded within this epidemic are several key populations that have substantially higher risks for HIV infection. Local population-based surveys conducted between 2008 & 2011 found high levels of HIV prevalence among female sex workers (FSW), estimated to range from 29.1% in Nairobi to 56.5% in Kisumu; men who have sex with men (MSM), with prevalence of 18.2% in Nairobi and 11.1% in Kisumu; and persons who inject drugs (PWID) of whom 18.7% were HIV infected in Nairobi.

There is need for a more proactive approach in countering new HIV infections in Kenya. The HIV prevalence rate in Kiambu County is 3.8%, which is lower than the national rate of 6%. According to Inerela preference report posted on blog in February 2016 indicated Kabete subcounty has the highest prevalence rate of preference rate for women stands at 5.6%, more than double that of men which stands at 2%.

There are 46,656 people in Kiambu living with HIV, out of which 4,256 are children. According to PPA report for Kiambu County posted by Inerela Kenya a positive faith action blog shows Thika Sub County has HIV prevalence of 4.5%. Since 2015 UNSAID program has been supporting Thika Sub County with diverse interventions for HIV prevention including door to door HIV testing and health talks at market centres. Studies have been conducted to help in reduction of HIV acquisitions in Sub Saharan African since 1984.

1.2 Statement of the problem

HIV infection has been a threat to Kenya. Studies conducted indicated upsurge of new infections from one year to another (America foundation for HIV Research 2014). The introduction of PrEP has greatly reduce these new infections (Partners PrEP trials 2011). The study therefore intended to establish factors influencing delivery of HIV PrEP can reduce new infections by focusing on investigating the following factors. The influence of human behavior on delivery of HIV PrEP, the influence of client waiting time on delivery of HIV PrEP, the influence of client waiting time on delivery of HIV PrEP, the influence of clients privacy on delivery of HIV PrEP lastly all the four factors was compared to investigate whether there is significant relationship.

1.3 Purpose of the study

The purpose of this study was to assess factors influencing PrEP delivery in public health facilities the case of Thika sub county, Kiambu County- Kenya.

1.4 Objectives of the study

The study sought to achieve the following objectives

- To establish the influence of human behaviour on delivery of HIV Pre Exposure
 Prophylaxis in public health facilities in Thika sub county.
- ii. To determine the influence of clients waiting time on delivery of HIV Pre ExposureProphylaxis in public health facilities in Thika sub county.
- iii. To assess the influence of health providers competence on delivery of HIV PreExposure prophylaxis in public health facilities in Thika sub county.

 iv. To assess the influence of clients privacy on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county.

1.5 Research questions

- i. What is the relationship between human behaviour and HIV Pre Exposure Prophylaxis delivery in public health facilities in Thika sub county, Kiambu County -Kenya
- To what level do clients waiting time influence delivery of HIV Exposure Prophylaxis in public health facilities in Thika Sub County
- iii. To what extent does health Providers competence influence delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County?
- iv. To what level does clients' privacy influence delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County?

1.6 The following are Hypotheses for the study

- Ho1: There is no relationship between human behavior and delivery of HIV Pre ExposureProphylaxis in public health facilities Thika Sub County.
- **H**₀**2:** There is no relationship between waiting time taken and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County.
- **H**₀**3:** There is no relationship between health providers' competence and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.
- Ho4: There is no relationship between clients' privacy and delivery of HIV Pre ExposureProphylaxis in public health facilities in Thika Sub County.

1.7 Significance of the study

The study focused on assessing factors influencing HIV PrEP delivery in public health facilities. It is hoped the findings of the study will assist the following categories of people to gain an insight in the areas that concerns them. This study will help health providers, to improve skills on delivery of HIV PrEP. Project sponsors will be able to learn how their funds have assisted in knowing knowledge gap on delivery of PrEP in public health facilities. The general public is able to teach new information on delivery of HIV PrEP therefore clients concerns will be addressed accordingly. The government is able to give directives to the policy makers to make guidelines on new strategies to improve delivery of PrEP in public health facilities. The study allowed the facilities to continue with normal routine administration of service as providers' deal with clients because they comprehend well matters of work ethics and confidentiality as code of practice.

1.8 Delimitation of the study

The study was conducted in Kiambu County, Thika Sub County. Thika town is administratively in Kiambu County, the greater Thika area comprising residential areas. Thika has a population of 139,853which is growing rapidly, as is the entire greater Nairobi area. Its elevation is approximately 1,631 meters (5,351 ft). Therefore the number of clients taking HIV PrEP is estimated to be 500 in Thika sub county according report given from different centers for county government. There are 80 health providers serving in various comprehensive care centers for HIV management. The study was limited to clients who are most at risk of HIV acquisition receiving PrEP within Thika sub county, Kiambu-Kenya.

1.9 Limitation of the study

The study was conducted at Thika Level 5 hospital, Ruiru sub county hospital and Kiambu sub County hospital they are both public health facilities. The study experienced difficulty in locating respondents due to tight work schedule. However researcher tried to work with respondents schedule and ensure data was collected at convenient time. The resources of the study were limited such as stationery due to budget implication the study improvised cost effective budget. Confidentiality and fear of being labeled at service delivery point was an issue to respondents. Study respondents were reassured confidentiality at all cost. There were no shortcuts in responding to respondents all that was done it was in reference to research ethics.

1.10 Definition of significant terms

Competence - Level of health providers' ability to give service in HIV pre Exposure Prophylaxis.

County - Geographical region of study catchment area

HIV - Human immune virus, a virus that is acquired with high percentage of sexual contact

Human behavior - Characteristics and action associated with health providers and patients

Kiambu - The major county where the study will be conducted

PrEP - Pre Exposure Prophylaxis, a tablet given to HIV negative person to prevent HIV acquisition.

Privacy - The ability of an individual or group to seclude themselves, or information about themselves, and thereby express themselves selectively.

Time - Period spent by providers and patients at comprehensive care centre

1.11 Organization of the study

The study was organized into various sub topics that explains the whole of chapter one. Background of the study explains HIV milestones, PrEP introduction has been explained in details. Researches and studies conducted to give insight for HIV management have been quoted including findings of results. The trend in which HIV has been increasing and decreasing in reference to estimated periods of years, that is globally, internationally and locally. Statement of the study the researcher gave the reason why it was important to conduct this study. The study looked at what led to other studies to be conducted and knowledge of what informs this study to be done.

The justification of why it is important for this study to be conducted was given knowledge gap was to be identified and be filled. The study was built on a notion that, the findings will help policy makers to come up with new strategies for HIV intervention. The study had five objectives which guided the whole process up to the findings. Objectives of this study was elaborative and clearly stated in order to avoid dilemmas in the process of conducting the research. Research questions/Hypotheses was derived from the objectives of the study without diverting from what the study wanted to find out.

There are five research questions and five hypotheses which served as an eye opener to the study they all correlated. The research questions and hypotheses were marching in the order of how they were tested. Limitation of the study was well labelled and how to mitigate the dilemmas in case any. Assumption of the study the study affirms the findings will be of help to the community empowerment, researchers, and different organization and policy makers.

Definition of significant terms and acronyms are arranged in alphabetical order. New terms and phrases were explained in terms of the references in context of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter covers the following subtopics of the study as they follow one another. The new findings of studies continue to support literature review of oncoming researches. Therefore this chapter gives a sight of what other studied have done with the findings regarding the identified knowledge of references. The study borrowed heavily on articles, research findings and my own personal observation within what was happening in real world setting at PrEP sites. There are four independent variables which were studied within this study and informed knowledge gap.

2.2 The influence of human behavior on Prep delivery in Public health facilities in Thika Sub County, Kiambu County.

A study conducted by Michelle R. (2014) on Health Behavior Change Models for HIV Prevention and AIDS Care. The study used Practical Recommendations for a Multi-Level Approach. The study looked at the following dimensions of behaviors comprehensive list of relevant variables/factors related to behavior change at all points on the individual structural spectrum, to map out and compare the characteristics of important recent multi-level models, to reflect on the challenges of operating with such complex theoretical tools, and to identify next steps and make actionable recommendations.

The study recommended using a multi-level approach implies incorporating increasing numbers of variables and increasingly context-specific mechanisms, overall producing greater intricacies. Behavior Change factors, the study provided a menu of the various influences

on behavior change at each level of the socio-ecological framework based on the review of existing literature on behavior change interventions related to HIV prevention, treatment, and care.(Journal of acquired immune deficiency syndrome of 1999).

Therefore the findings of this study indicated clearly HIV risk and AIDS care involve complex behaviors influenced. Multiple levels, from an individual's knowledge, attitudes, emotions, and risk perception, to power dynamics between partners, accessibility of services, economic inequalities, criminalization of vulnerable groups, and policies that make HIV a priority health issue. For instance some of examples to suit criminalization of vulnerable groups behaviors are sharing; needles likely needs to include an understanding of social networks, condom use needs to include at least dyadic variables, medication adherence needs to include at least health practitioners and the patient, and all intervention efforts need to consider how difficult the environment is for the targeted populations. The lesson of multi-level theories of health behavior is that individuals and networks may have motivations in addition to those of good health outcomes or acting safely in any particular time and context.

The work of Michelle R. Suggested that health provider's researcher ought to consider the following; researchers and practitioners can advance in understanding behavior related to HIV prevention and care and incorporate these multi-level approaches into behavior change interventions. When trying to understand the process of behavior change or develop an intervention, consider levels of influence and related variables from individual to structural. This may help to identify potentially relevant variables that can help to understand cause of a certain characteristics. The study suggested select at least two levels to measure, test, and/or

include in an intervention. Unless extensive resources are available, measuring or intervening at all levels will be too expensive and complex for comprehensive research.

The knowledge gap identified was, a need to consider direct and indirect level of influence on behavior. Therefore this study investigated the influence of human behavior on delivery of HIV PrEP in public health facilities in Thika Sub County to fill the knowledge gap. This can be looked at as direct or indirect on how behavior can affect the need for patients to make informed decision whether to take PrEP.

Bandura Ross (1986) studied the social cognitive perspective of learning which seemed to challenge the possibility that all behavior could be accounted for by respondent and operant processes alone. The social cognitive perspective focused more explicitly on both modeling and cognition, and their role in understanding behavior. Modeling in behavior formation happens when an individual identifies a person who is experienced in a given duty and wants to perform as the person. Meanwhile, behavior analysts have continued to contend that observational learning can be explained through processes of generalized imitation, conditioned reinforcement, and rule-governed behavior.

Bandura Ross (1986) geared their work towards observation of behavior of individual. This study will seek to investigate the influence of behavior on delivery of HIV PrEP through observing respondents as they answer their questionnaires and also getting data of their experience through interviews. The data collected will inform of how patients perceives their behaviors and providers behaviors as they serve them.

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Modeling behavior as studied earlier by Huston, (1961); McDonald, (1963); Bandura, Ross (1961). An early and longstanding aim of the observational learning literature is to understand the role of modeling in behavior change For example; an early study examined how the incidental behaviors of an experimenter might be acquired in the context of learning another task (Bandura & Huston). The important conclusion of these studies is that behavior change can and does occur through observation, even when such observation is incidental, occurring in the context of other activities. While this finding seemed rather simple, it has significant implications for how we conceptualize learning. Therefore this study will investigate current scenario on how human behavior influence delivery of HIV PrEP in public health facilities.

An insight gained was the studies conducted by Bandura and colleagues seemed to question the role of rewards on the behavior of the observer. Importantly, Bandura believed that reinforcement history alone was not sufficient, and that the observation of a model was the most critical factor. Moreover, learning from observation was viewed to be a result of other processes. These general findings seemed to devalue the comprehensiveness of the behavioural position, and set the stage for the social cognitive perspective. However, it is crucial that we reiterate the fact that Bandura and colleagues often misused the *terms* reinforces *and* reinforcement, and thus, it is difficult to draw valid conclusions about the role of consequences from this line of research. What can be said is that observational learning is an important area for behavior science to consider.

The theory behind the study of Bandura asserts our cultures remains to be the backbone of our beliefs. The constructions of the model feature the concept of self-efficacy (Bandura 1997) alongside these beliefs about actions makes affirm foundation of this theory. These beliefs are

further supplemented by additional stimuli referred to as cues to action which trigger actual adoption of behavior.

Bandura & Walter (1963) suggest that learning can occur by observing a behavior and by observing the consequences of the behavior (vicarious reinforcement). Learning involves observation, extraction of information from those observations, and making decisions about the performance of the behavior (observational learning or modeling Reinforcement plays a role in learning but is not entirely responsible for learning. Therefore in behavior learning people can acquire maladaptive behavior which can be unlearned. Cognition, environment, and behavior all mutually influence each other (reciprocal determinism).Environment has a great influence of whom a person can perceive self or feature to come. For instance health providers in government facilities are perceived to behave differently with private sector health providers. This is because of some of working environment challenges has made these two groups of providers to behave differently.

The findings of a study done on couples in a discordant relationship outcome of sexual behavior indicated the following findings. The small decrease in unprotected sex following respondents joining the study indicates that PrEP delivered in the context of an HIV prevention package may be synergistic for risk reduction.

Ndase Thomas, (2008-2010) studied different patterns of behaviors in discordant couples on sexual issues. The findings indicated overall pattern of decline in sex acts with primary partner and rise in sex acts outside the primary relationship to be indicative of dissolution of the primary relationship and formation of new relationships. It was observed that unprotected sex with outside partners was high among the few participants who reported sex outside the

primary partnership an observation that accords with recent study findings that a quarter of HIV infections in sero-discordant partnerships arise from non-primary partners. Therefore behavior patterns defines a population favorable a certain kind of study in a given area of research.

Qualitative study conducted on health providers Thoughts on Implementing Pre-Exposure Prophylaxis (PrEP) in Clinical Settings to Providers by Emily A.(2017) revealed most providers felt that PrEP is best provided in primary care settings by providers who are comfortable working with gay men and TG women, able to discuss sexual behaviors in a nonstigmatizing manner, and are informed about HIV. Most affirmed that it was important that PrEP be offered in neutral clinical locations, where whose primary purpose was not for HIV treatment. Practitioners saw positive and negative patients felt they were at an advantage for being able to provide PrEP.

Knowledge gap for this study was identification of serodiscordant couples is a high priority for global public health, as it allows provision of HIV prevention services including counseling about condoms and ART provision. However, the study highlighted the need for more understanding of how the HIV risk behavior of the seronegative partner may change. In particular, ART initiation and viral suppression of the HIV-positive partner may not mitigate HIV risk for the seronegative partner, who may be exposed through other partnerships after a negative HIV test result.

Human behaviors accounts for major observation noticed in scenario of an ongoing project. This is based on characteristics manifested on individuals taking up the task in the given project. Behavior can be viewed out of character portrayed by an individual. The study investigated whether behavior for clients and providers affects the willingness of patients to disclose more information on PrEP initiation and whether informed decision making is controlled by health provider's behavior.

2.3 Influence of Clients' Time on delivery of Prep in public health facilities in Thika Sub County, Kiambu County

Time has been studied in the concept associated with ambiguities and even contradictions. Scenario of time has been described as anything more than the occurrence of events in sequence, one after another. Olpin and Hessen (2012, p.167), suggested time as a resource is lost or misplaced, is gone forever time management key in every Endeavour in order for a project to succeed. The scenarios of time in project planning and management based on my own observation there has to be sufficient period allocated with keen monitoring.

This study seeks to investigate the influence of clients' time on delivery of HIV PrEP in public health facilities in Thika Sub County.

As much as Olpin and Hessen studied time in terms of occurrence of events in sequence, one after another this study will investigate how much of time of patients spend on clinic day. The investigation of influence of waiting time for patients will be based on numbers he/she has visited the clinic.

Marquis and Huston (2009), urges time can only be managed by an individual who has made own schedule following what he/she intend to work on. Time work in line with the objectives and goal planned for certain project. The study looked at influence of waiting time for patient based on how the schedule is planned. The study investigated whether time taken at the clinic affects the schedule of clients on their daily routine.

Great time management means being effective as well as efficient. In the modern, fast paced workplace it can be hard to distinguish between what's important and urgent. We often fall in the trap of believing all urgent tasks are also important, even if that's seldom the case. Time is key in public and private sectors. Time for clients in various sectors is managed by people being assigned numbers to clients in the sense that first come first served. Based on time being the key factor in daily schedule this study established whether time can influence PrEP delivery in a negative way or positively.

The findings of the study concerning time will help facility managers to revise their time management system. Scholars attributes to time management being more productive. Green & Skinner, (2005) did a study on how to improve productivity and decrease cost in an organization. The consequences included increased workload, long working hours and greater time pressure. The results obtained were training to be conducted for time management in order for effectiveness of time use to flow accordingly. It was assumed training could give good results for time management and productivity for people to work in line with their interest. Time allocated for a service helps to yield good results with less supervision. This study investigated influence of clients waiting time on delivery of HIV PrEP in Thika Sub County to inform whether time affects negatively or positively PrEP uptake.

In various studies conducted in search for time management gave their contributions as follows; Felton & Sims, (2009), getting more things done a lot can be done depending on time management. Currently time plays a big role in dictating how casual and salaried people get

paid per working day. Casual workers get their payment based on number of hours taken on an assigned task. On the other hand salaried people, their working contract is indicted time they are supposed to work for the day. Therefore time is of great concern there is need to study time at length on how it can influence performance negatively or positively.

Green & Skinner (2005) and Mustric, (2008), suggested relating to others in more positive manner time motives the morale of clients coming for a given service positively hence yielding good results. Bhugra and Howes, (2007), studied feeling better about self-one has to appreciate himself for a well spend daily schedule by adhering to time management schedule. Clients who walk in for PrEP delivery facilities need to be planned for well, schedule for clinic visit not to be disrupt their daily routine schedule.

The findings for a study done by Emily A. On HIV PrEP implementation providers view indicated Public clinics with limited resources would have a more challenging time developing the billing capacity, if PrEP was to be charged the client will have to pass by accounts office for an invoice to pay for supply of Monthly Park. These may consume time for the client bearing in mind current scenario in our health care is first come first served. The study also informed training, a new schedule for trainings has to be factored in for successful delivery of PrEP. This will involve new systems to be put in place to yield good results. Staffing, infrastructure necessary to provide PrEP to their patients' new mechanism ought to be implemented to help staffs to understand the whole platform. Providers worried that PrEP would amplify current disparities between the public and private health systems. Boundaries between public and private sector will be another area of concern to be observed. This study

will investigate the integration of services within public health facilities for patients as they come for PrEP whether they are satisfied with time taken at the clinic site.

According to institute of medicine (IOM,) report published by Jesse White (2016) in an article of health care treatment and outcome suggests that overall factors contributing to delays in hospitals and other healthcare settings including: mismatched supply and demand, care and reimbursement complexity provider-focused approach to scheduling, and financial and geographic barriers. The findings were coupled with time management issues.

The knowledge gap identified was revamp the front-line scheduling process and reducing waiting time as part of the hospital's culture. Healthcare executives must make waiting time a priority in their facility. This means they must implement specific policies designed to address problems that can lead to increased waiting times, including staffing policies. They must also commit to regularly evaluating their hospitals' work flow and be willing to invest in solutions to speed up care delivery, including automated systems designed to streamline scheduling.

Incorporate patient preferences. Scheduling should be focused on patients, not providers. So it's important for hospitals to reach out to find out what kinds of changes would best suit patients' needs. Some hospitals have given patients access to systems where they can make their own appointments for less-critical issues or they'll give patients an estimated wait time over the phone before they arrive so they can make other arrangements, if necessary.

There has to be consideration of alternate methods of care delivery to ease the burden of high wait times, hospitals can try treating patients in various ways. Telemedicine may be one

solution for patients with less serious issues. Hospitals may also partner directly with nearby urgent care clinics and other healthcare entities in order provide patients with an alternative to lower their waiting time.

Therefore based on the findings of health care and outcome in hospital setting, this study investigated influence of patients waiting time on delivery of HIV PrEP in public health facilities in Thika Sub County. The study assumed the findings will be of great importance for hospital management to review their time schedule for patients getting PrEP refill.

2.4 The influence of health providers' competence on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County, Kiambu County

According to current situation I observed providers' role can be defined as work force that is responsible of bringing fourth good yield. Performance is defined as combination of staff equipment being available, competence available and responsible. Providers' competency is bound to be a success to an organization following the system in place. Systems approach to management provides a conceptual basis as well as guidelines for establishing a more efficient system for planning, organization, directing and controlling. It forces the manager to look upon his organization as open adaptive system. Hecker (2014) information is an important part of the system because an organization must act and interact with its environment.

According to Henry Taylor management principles' Remuneration motivation and productivity are close to one another as far as the smooth running of an organization is concerned. This management principle of the 14 principles of management argues that the remuneration should be sufficient to keep employees motivated and productive. Faylor came up with two types of remuneration namely non-monetary (compliment, more responsibilities,

credits) and monetary (compensation, bonus or other financial compensation). Ultimately, it is about rewarding the efforts that have been made. It is a dilemma for someone to carry on a service that one's has no an idea or experience and skills in the given scenario. This study will seek to learn whether level of trainings for health providers affects negatively delivery of PrEP in public health facilities.

According to federal work for HIV, a report up dated in 2016 by the federal governments reported PrEP framework identified knowledge gap on the following Provider training to improve in order to increase willingness of providers to engage patients about PrEP. Ability of providers to better identify and screen people who may benefit from PrEP they need adequate training to be updated with current guidelines for PrEP.

Another gap concerns improvement of PrEP uptake by expanding PrEP navigation services, addressing disparities across race/ethnicity and age groups. There are myths and beliefs on PrEP the community need to be empowered on importance of taking measure to reduce on HIV acquisition.

According to Emily A, article Published in, 2012 on Qualitative Study of provider thoughts on implementing Pre-Exposure Prophylaxis (PrEP) in clinical settings to prevent HIV infection. The results indicated little or no demand for PrEP from patients was reported at the time of the interviews for providers. Providers did not agree on the most appropriate patients for PrEP and believed that current models of care PrEP not involve routine frequent office visits, were not well suited for prescribing. This left a gap on need for providers to be trained sufficiently on matters to do with criteria for PrEP initiation based on the need at hand. More so guidelines keep on changing within a short period depending on research findings released. In order for provider to feel free to address issues raised by clients for PrEP there is need for capacity building. This study will seek to learn whether provider competency affects delivery of PrEP in public health facilities. However PrEP has been seen as potentially having impact on the epidemic but providers also noted that community education campaigns needed to be tailored to effectively reach specific vulnerable populations. Therefore based on the findings of this study there is need for providers follow up on knowledge sufficiency in PrEP delivery.

2.5 Influence of clients privacy on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county, Kiambu County.

Privacy remains to be an issue of major concern within facilities that deals with people. My own observation, most of public health facilities have shifted PrEP delivery services to Comprehensive Care Centers (CCC) units for HIV management. The CCC facilities are usually located at the far end of the health care facility compound. The decision of comprehensive care centre location in a site was arrived at due to stigma associated with people who attend HIV Management clinic. They used to miss their visits due to fear of being spotted by people they know at the clinic.

According to article published by government in (2015) concerning records confidentiality states issues involved when patient records from health care institutions are used in medical research. It also explored current regulations on patient confidentiality, the need for identifying information in research, and the effectiveness of de identification and data security. Study looked at present an algorithm for researchers to use to think about the data security needs of their research, the study introduced a vocabulary for documenting these techniques in proposals and publications.

The end point results indicated that it is clearly impractical and often detrimental to mask or obfuscate every field in a data set. Thus, after systematically hiding identifiable data, there is still left with a number of fields in their original form. As a final step in the construction of a research data set, it may be valuable to assess, if not further manipulate or eliminate, any remaining unique records.

Knowledge gap identified was given that each researcher may have different needs and data requirements; it may not be efficient to provide the same anonymized data to different researchers, even though information loss could be well balanced. It should be necessary to process electronic health data based on individual researcher needs so as to increase the utility of anonymized data and avoid unnecessary information loss. By retaining more information for attributes emphasized by researchers, utility-based anonymization offers an approach for reducing information loss as needed.

The AUM model proposed in this study aims to anonymize datasets based on the importance of attributes as specified by researchers, and maximize the utility of the dataset while minimizing the loss of information during anonymization. The insight gained was this model may thus provide researchers with different versions of anonymized data for the same original dataset. Therefore researchers need to do some baseline work to identify suitable way of data collection and storage for study work. An invention of new system for data privacy study on Attribute Utility Motivated k-anonymization of Datasets to Support the Heterogeneous Needs of Biomedical Researchers done by Huimin, it showed the following results. In order to support the increasing need to share electronic health data for research purposes, various methods have been proposed for privacy preservation. This is including k-anonymity many k-
anonymity models provide the same level of anoymization regardless of practical need, which may decrease the utility of the dataset for a particular research study.

In this study, they explored extensions to the k-anonymity algorithm that aimed at satisfy the heterogeneous needs of different researchers while preserving privacy as well as utility of the dataset. The proposed algorithm, Attribute Utility Motivated K-anonymization (AUM), involves analyzing the characteristics of attributes and utilizing them to minimize information loss during the anonymization process. The study carried on the work through comparison with two existing algorithms, Mondrian and Incognito; preliminary results indicate that AUM may preserve more information from original datasets thus providing higher quality results with lower distortion. Therefore there is need for exploration for another model which can serve well without factoring in high rate of information distortion.

The area concerning application of techniques such as K-anonymity can ensure that, although each record may be uniquely identifiable by use of obscured fields, no record will provide a starting point for breaking obfuscation techniques by standing out as unique in the unobscured fields. This is an open interest to study on current client data confidentiality. The findings will help the facility managers to learn on how they can keep confidentiality. It has been well understood studies have investigated more on patient information privacy. This study investigated diverse areas for privacy of clients on HIV PrEP delivery in public health facilities.

This study has a big role to investigate influence of clients' privacy on delivery of HIV PrEP in public health facilities. This is because the field of PrEP delivery has not been studied on

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much there was need for this study to be conducted in order to assist identifying knowledge gap in this area of privacy.

According to Beach (2005), Study on patients privacy, suggested being treated with dignity and involved in decision-making is associated with positive outcomes, such as high patient satisfaction (In a review of the World Health Organization (WHO)'s general population surveys in 41 countries, most participants selected dignity as the second most important domain in care - only 'promptness of care' was more highly rated Valentine (2008). The Amsterdam Declaration recognized dignity as one of the main rights for patients (World Health Organization WHO, (1994).

The findings on privacy of patients informed confidentiality: respecting confidentiality relates to you as an individual and to all NHS organizations. Information provided by those in your care is given in confidence; people in your care should be able to trust that you will keep their information safe and confidential; sharing it only with those involved in their care as necessary Baillie & Black (2014). There has been concern on sharing of information must be legitimate; the DH (2013) states: "For the purposes of direct care, relevant personal confidential data should be shared among the registered and regulated health and social care professionals who have a legitimate relationship with the individual" (DH 2013, p. 14).

The knowledge gap of the findings the researcher did not look at patients who walk in as outpatient for management of HIV and other stigmatizing illness. Therefore this study will consider investigating influence of patients' privacy on delivery of HIV PrEP. The area of concern is at comprehensive care Centre where PrEP clients come in and they are served as outpatients.

Table 2.1: Research gap

Variables	Indicator	Author	Title of the	Findings	Knowledge
		(Year)	study		gaps
Human behavior	Modeling Characteristi cs of individuals Surrounding of environment	Bandura Ross, Ross, (1986),	Social cognitive behavior	Modeling in behavior formation happens when an individual identifies a person who is experienced in a given duty and wants to perform as the person.	The researcher learned that there is need to study direct and indirect influence of behavior on a given task.
Time	Personal schedule Focus of person Interest	Marquis & Huston (2009),	Time management	Time can only be managed by an individual who has made own schedule following what he/she intend to work on.	This study identified there is need for time to be studied in line with objectives of a given project in order for satisfactory conclusion to be arrived based on the project suitability.
Clients privacy	System management Information recorded Storage of information Identification of information	Hecker, (2014)	Privacy of clients information kept in system	Information is an important part of the system because an organization must act and interact with its environment.	The researcher learned that information storage pattern has to be designed following the nature of information. Systems for information storage can be looked at depending on characters to be keyed in

Variables	Indicator	Author	Title of the	Findings	Knowledge
		(Year)	study		gaps
Providers competence	Level of trainings Expertise skills	Federal governme nts (2016).	Health providers capacity building	Health provider had gaps on updated information on areas of their specialty.	The federal government learned there was need for health providers to be trained
	making				adequately for good services.

2.6 Conceptual framework

The conceptual framework is an abstract or general idea inferred or derived from specific instances. According to Reichel& Ramey (1987) conceptual framework is aset of broad ideas and principles taken from relevant field of inquiry and used to structure subsequent presentation. These ideas can be illustrated in diagrammatic way to show variables being studied in a given concept. These variables are expected to change as a result of an experimental manipulation of the independent variable or variables. It refers to the condition of an experiment that is systematically manipulated by the investigator. Therefore conceptual framework of this study was constructed based on five independent variables which form dependent variable. The five independent variables were; the influence of human behavior on HIV PrEP delivery, the influence of clients waiting time on delivery of HIV PrEP, the influence of providers competence on delivery of HIV PrEP and lastly influence of clients privacy on delivery of HIV PrEP in public health facilities. Dependent variable was delivery of HIV PrEP in public health facilities in Thika Sub County.

Independent variables



2.7 Theoretical framework

Social Cognitive Theory (SCT) was used to inform the study of what the researcher was aiming at. The main proponent of this theory is Albert Bandura (1960). This theory developed into social life of people and informs that learning occurs in a social context with a dynamic and reciprocal interaction of the person, environment, and behavior. This theory suited this study because Social cognitive models have been used to explain health risk behaviours such as sexual transmission risk behavior in a variety of populations, including people with HIV.

The existing HIV prevention literature has also documented the importance of a theoretical framework in guiding the development of an HIV prevention program. One of such theoretical framework is the protection motivation theory (PMT). PMT is a social cognitive theory, which emphasizes the cognitive processes of behavioral change indeed people learn from the surroundings from where they are.

This theory suited this study because it has been applied in other studies related to HIV prevention with good results. The coping appraisal technique associated to this theory for individuals going through self-identification includes three factors. These are self-efficacy which is the perceived ability to carry out the adaptive response, response efficacy which is the belief of the adaptive response being effective and response cost which is associated with taking the adaptive coping response .The unique feature of SCT is the emphasis on social influence and its emphasis on external and internal social reinforcement. Majority of people acquire maladaptive behaviors which controls the way they behave. SCT considers the unique way in which individuals acquire and maintain behavior, while also considering the social environment in which individuals perform the behavior. The current scenarios for behaviors

suggest most of maladaptive behaviors are practiced in areas of privacy. Maladaptive behavior are habits that can be unlearned slowly by slowly.

The theory takes into account a person's past experiences, which factor into whether behavioral action will occur. These past experiences influences reinforcements, expectations, and expectancies, all of which shape whether a person will engage in a specific behavior and the reasons why a person engages in that behavior. Current studies that are conducted in HIV prevention selection criteria are for most at risk are geared towards behavior modification. Therefore this theory was suitable for the study and helped to work in line with objectives listed for the study.

2.8 Summary of literature review

The limitations of Bandura's work notwithstanding, the process of learning from observation is interesting and relevant to a comprehensive analysis of behavior. Indeed, if one values such comprehensiveness, our most basic concepts and principles must be relevant to, and provide an account of observational learning. Moreover, this comprehensiveness is only valuable when it is achieved within the context of validity (internal consistency) and significance (external consistency within the greater field of the sciences. The interbehavioral perspective is particularly valuable in this regard. Kantor's conceptualization of the psychological event, with all of its fullness, provides an avenue by which the most complex sorts of behavior, including those involved in observational learning, might be fully integrated into a natural science approach to the analysis of behavior.

Therefore there was need for this study to be done in order to know influence of behaviour on delivery of HIV PrEP in public health facilities across the world. The list of selected activities

for each of the essential components reveals the following potential gaps and areas for further improvement. Increase provider training to improve willingness of providers to engage clients about PrEP. Another area identified was providers to be trained better on how to identify and screen people who may benefit from PrEP.

According to Emily R work suggested there is need for improve PrEP uptake by expanding PrEP navigation services and addressing disparities across race/ethnicity and age groups. Therefore there is need to reduce barriers to PrEP medication by working towards Increasing the number of effective PrEP formulations that are approved for use (researching, reviewing, and approving other formulations of PrEP; including generic medications). Addressing the cost of PrEP, which can be a barrier for those without insurance or with high co pays. Supporting work to assess whether the strength of the evidence suggests that PrEP should be a covered preventive service. In addition, the HIV PrEP Framework suggests potential gaps in Federal efforts to support PrEP adherence among persons who are prescribed PrEP and to expand implementation research to identify best practices and evidence-based models. The study will work in line with knowledge gap identified to seek to know whether a project geared on loopholes will be implemented to facilitate smooth PrEP delivery. A lot has been done on patient information privacy for researchers' database. There is need for a study in the area of service delivery, physical environment of the site and how rooms for providers are strategized. Based on the knowledge gap that has been identified by other studies conducted in this area of HIV prevention. There was need for this study to be conducted to help in knowing how other interventions can be employed in public health facilities that offers PrEP

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter concerns on the research methodology that was used while conducting the study. It explains of the target population, sample size of the study, outlines sampling technique, data collection instruments, data collection method data. Therefore the chapter gives an insight of methodology to be employed in this study.

3.1 Research design

A cross- sectional survey design was used in this study. The study chose on this design because it is suitable to conduct than other individual-based studies because no follow-up is required. It provides a good picture of the health care needs of the population at a particular point in time. Lastly it can be used to investigate multiple exposures and multiple outcomes. The tools which used in collecting data were questionnaires, observation checklist tool and interviews.

3.2 Target Population

A population is referred to as set of persons or objects that have similarities at least one common characteristic Busha and Harter, (1980). The study targeted three facilities within Thika sub county which offers PrEP as public health facilities in Thika Sub County, Kiambu-Kenya. Sample size is presented in the table below

Table 3.1 Sample of Respondents

Groups	Health providers		Patien	ts for PrEP	
Thika level	Male 5	Female 10	Male 10	Female 15	<mark>25</mark>
Ruiru	5	5	10	10	<mark>10</mark>
Kiambu hospital	5	5	10	10	
Total	20	20	35	45	

Sampling Matrix

3.3 Sampling Size and Technique

According to Mugenda (2013) in descriptive studies 10% or above of available drawn population sample is enough for the study to be conducted. Stratified sample method will be used as the population is readily available and sub divides the sample into strata in various facilities within Thika Sub County. According to creative research system calculator my sample size will be 81 respondents. Confidence level was 95%Confidence interval was 10% Population was 500.

3.4 Data collection procedures

Data was collected first after obtaining clearance letter from the university of Nairobi and research permit from National commission for science technology and innovation (NACOSTI) which was shared with head of County health officer, County head of education, County commissioner and the respondents. The study used questionnaires, interviews, and checklists in collecting data. These instruments were used for the fallowing reasons; questionnaires are Practical, large amounts of information can be collected from a large number of people in a short period of time and in a relatively cost effective way. The

positivists believes that quantitative data can be used to create new theories and / or test existing hypotheses .The self-administered questionnaire and interview scheduled will be used to obtain data.

Interviews were important because face to face information allowed more in-depth data collection and comprehensive understanding. It helped in observing body language and facial expressions. They were more clearly identified and understood. The interviewer probed for explanations of responses in case of further clarification of what had not been reported by respondent. The checklist helped in ensuring all procedures that was supposed to be done have been contacted without missing on any. Checklist helped in identifying all instruments to be used have been utilized accordingly.

3.5 Validity of Research Instruments

According to Joppe (2000) validity refers to the degree to which a study accurately reflected on assessing the specific concept that the researcher was attempting to measure. Validity was important in this study in the sense that it checked on usefulness of the results not to be meaningless. It measured what the study intended to find out with the results whether it was of help and also not worth then results could be used to answer the research question, which is the main aim of the study. The instruments were pre-tested before being used for the mother study. This was done to ensure clear understanding and flow of questionnaires.

Triangulation was used as a powerful technique to facilitate validation of data; this was in conjunction with other instruments verification from more than one source. Observation helped the study to pick direct method for collecting data or information best for the study of human behavior. Data collected by observation was very accurate in nature and also very reliable therefore it facilitated easy interpretation. Observation assisted in managing well on use of good and modern gadgets – observation was done continuously for entire period of the study.

3.5. 1 Reliability of the Instruments

Mugenda and Mugenda (1999) defined reliability as a measure of the degree to which a research instrument yields consistent results or data after repeated trials. An instrument is said to be reliable when it can measure a variable accurately and obtain the same results over duration of time. However, reliability in this research was used to control random errors, the pre-test was helped the study to identify the most likely source of errors and hence respond to. Test re-test method was used to pilot the questionnaires, which formed sample of the study. Reliability was calculated with the help of Statistical Package for Social Sciences (SPSS).

3.6 Data analysis method

The study used descriptive statistics and inferential statistics to analyze the data collected. Descriptive statics was used to analyze data that helped to describe, show or summarize data in a meaningful way such that, for example, patterns emerged from the data. Descriptive statics was also helpful in limitation of making conclusions beyond the data the study was analyzed and arrived at conclusions regarding any hypotheses which was made. Charts, graphs and tables was used to describe information gathered hence make comparison.

Inferential statistics which was used are two the estimation of parameters, and testing of statistical hypotheses. Since the study had hypothesis it called for inferential statistics to test for hypothesis. Therefore inferential statistics helped in making inferences about population using data drawn from the population. The case of probability distribution was worked on

using inferential statistics. Inferential statics was used to compare test and predict data gathered in the study.

3.7 Ethical review of the study

The researcher obtained introduction letter from the university of Nairobi and research permit from National council for science and Technology to conduct the study. Ethical guideline was strictly followed without violation. According to Foulkes (2011) a study involving human subjects as respondents should be mindful and keen on ethical issues involved in research. The study observed research principles which took care of respondents fear. Time was observed keenly in order for the study to work within allocated period for the whole process to be accomplished. Confidentiality was of great concern for all respondents and facility at large. Therefore in order for the study to get valid information without biasness respondents was taken care of based on principles of research such as respect for persons, beneficence, and justice. Respect of a person is one of the fundamental principles in research. It is the recognition of a person as autonomous, unique, and free individual. It also meant that researcher recognized that each person has the right and capacity to make her or his own decisions.

Respondents were empowered to make free decisions and also were given all the information needed to make informed decisions. Beneficence avoids doing any harm (non-malfeasance).

Table 3.2 Table operationalization of variables

Objectives and themes the study	Type of variables	Indicators	Measuring of	Scale	Tools of analysis	Type of analysis
To establish the	Independent	Human	I evel of	Nominal	Percentage	Descriptive
influence of human	Variable	behavior	information	Nommai	Tercentage	statistics
behavior on delivery			disclosure	Intervals	Mean score	-
of HIV PrEP in public				Ordinal		Percentages
health facilities in						Inferential
Thika sub county,						statistics
Klambu County						Percentages
To establish the	Independent	Clients	Return rate	Nominal	Percentage	Descriptive
influence of clients	variable	waiting time	for clients	Interval	mean score	Statistics
waiting time on			clinic visits			Inferential
in public health			Integration	Ordinal		statistics
facilities in Thika sub			of services			
county, Kiambu						
County.						
To assess the	Independent	Providers	Ability to	Nominal	Percentage	Descriptive
influence of health	variable:	competence	screen and	Interval	Mean score	statistics
on delivery of HIV			patients for	Ordinal		percentages
PrEP in public health			PrEP.	Orumar		Inferential
facilities in Thika sub			Level of			Statistics
county, Kiambu			trainings			
county.			providers			
To assess the	Independent	Clients	Location of	Nominal	Percentage	Descriptive
influence of clients	variable:	privacy	service	Nomman	reicentage	statistics
privacy on delivery of		1 2	rooms	Interval	score	,
HIV PrEP in Thika			File	Ordinal		percentages
sub county, Kiambu			identificati			Inferential
County.			on			statistics
			Provider			
			tone			

To investigate the	Independent	Behavior	Retention,	Nominal	Percentage	Descriptive
influence of Human behaviour, clients waiting time, health providers competency, clients privacy on delivery of HIV PrEP in public health facilities in Thika sub county, Kiambu county	variables:	Time taken Providers trainings Location of rooms	Positive feedback Willingness to take	Interval Ordinal	Mean score	statistics Inferential statistics

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND ANALYSIS 4.1 Introduction

This chapter contains detailed information on data analysis, presentation and interpretation of the study findings. The subtitles follow each other according to how the study objectives are organized. Data was collected from clients collecting HIV PrEP in Thika sub county, Kiambu county government facilities. Data was interpreted as per the research questions. Presentation of the data was done using frequencies and percentages which were guided by the questionnaire of the study.

4.2 Questionnaire return rate

The study targeted 81 respondents from Kiambu county government facilities .Analysis was done and presented in the table 4.1

Table 4.1: Questionnaire return rate

The study targeted 81 respondents from Kiambu county government health care facilities. The analysis was done and presented in Table 4.1.

Target respondents	Actual responded	Return rate
81	90	94%
Total	88	92

A total of 81 questionnaires were distributed among the clients who get HIV PrEP supply in Kiambu county government facilities. 90 questionnaires were duly filled and returned representing a response rate of 94%. A response rate of 80 to 90% which was enough for descriptive survey study (Nachimais and Nachimais, 2008). Therefore return rate was perceived to be excellent for the analysis of the study findings.

4.3 Social demographic information of respondents

This section indicates the personal information of the respondents which includes level of education, Age of the respondents, occupation, marital status and duration they have been on HIV PrEP.

4.3.1 Level of education for respondents

The level of education of the clients taking HIV PrEP was established to find out the ability to make an informed decision based on information given to them by health providers.

Respondents	Frequency	Percent	Valid Percent	Cumulative
				Percent
Primary	14	17.5	17.5	17.5
Secondary	25	31.3	31.3	48.8
Diploma	26	32.5	32.5	81.3
University	15	18.8	18.8	100.0
Total	80	100.0	100.0	

 Table 4.2: Distribution of responses on level of education of respondents

From the results indicated in Table 4.2, 14 (17.5%) respondents had primary education, 25 (31.3%) respondents had secondary education, 26 (32.5%) respondents had college education and 15 (18.8%) respondents had university education. This implies that a most of the respondents had reached Diploma level of education.

4.3.2 Age of the Respondents

The age of the respondents was considered in order to determine the dominant age of clients who receives HIV PrEP at the government facilities in Kiambu County. The age of clients ranged between 18 - 50 years. Respondents were requested to indicate their exact age groups and results were.

	Frequency	Percent	Valid	Cumulative
			Percent	Percent
15-19	3	3.8	3.8	3.8
20-24	28	35.0	35.0	38.8
25 20	15		18.8	57.5
23-27		18.8		
30-34	19	23.8	23.8	81.3
>35	15	18.8	18.8	100.0
Total	80	100.0	100.0	

 Table 4.3 Table of the age of respondents

Results in Table 4.3 indicate that majority of respondents were 20-24 years represented by 28 (35.0%) respondents. 3 (3.8%) respondents were 15-19 years at the time the study was being conducted. 15 (18.8%) respondents were 25-29 years of age. 19(23.8%) were 30-34 years of age. However 15 (18.8%) of the respondents were 35 years and above of age.

4.3.3 Period of Prep taking.

The researcher wanted to understand the period in which the clients have been on HIV PrEP. The respondents were asked to indicate their duration (in months) on PrEP which was analyzed and tabulated in Table 4.4.

Months on	Frequency	Percent	Valid	Cumulative Percent
PrEP			Percent	
0-5	21	26.3	26.3	26.3
6-10	24	30.0	30.0	56.3
11-15	33	41.3	41.3	97.5
>16	2	2.5	2.5	100.0
Total	80	100.0	100.0	

Table 4.4: Responses on period on HIV PrEP

In Table 4.4, 21 (26.3%) of the respondents had been on HIV PrEP for 0-5 months, 24 (30%) of the respondents had been on PrEP for 6-10 months, 33 (41.3%) of the respondents had been on PrEP for 11-16 months and 2 (2.5%) of the respondents had been in their group for above 16 months. Therefore it was noted that most of the respondents were on PrEP for 11-15 months.

4.3.4 Influence of human behavior on delivery of HIV Prep in public health facilities Kiambu County

These tables inform of how much information is shared by clients and providers during session of HIV PrEP resupply. The tables informs of verbal and nonverbal behaviour of both parties in relation to satisfaction of the services offered.

The table gives information for the first variable to which was studied. The variable was governed by the first objective listed below.

I. First objective

To establish the influence of human behavior on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county.

Private information shared with health provider	Frequency	Percent	Valid Percent	Cumulative Percent	Chi- square, df, P-value
Strongly Agree	22	27.5	27.5	27.5	
Agree	34	42.5	42.5	70.0	
Disagree	3	3.8	3.8	73.8	
Disagree	21	26.3	26.3	100.0	24.500, 3, 0.0001
Providers personal values have an effect on you		Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	10	12.5	12.5	12.5	
Agree	37	46.3	46.3	58.8	
Strongly Disagree	2	2.5	2.5	61.3	
Disagree	31	38.8	38.8	100.0	12.765, 3, 0.005
Having confidence in providers service	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	17	21.3	21.3	21.3	
Agree	45	56.3	56.3	77.5	
Strongly Disagree	1	1.3	1.3	78.8	
Disagree	17	21.3	21.3	100.0	50.200, 3, 0.0001
Attentiveness of health provider to his work.	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	20	25.0	25.0	25.0	
Agree	44	55.0	55.0	80.0	17 200 2
Disagree	16	20.0	20.0	100.0	17.200, 2, 0.0001

Table 4.5: Influence of human behavior to PrEP delivery to health facilities

Extent did you like providers attitude towards the service	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	21	26.3	26.3	26.3	
Agree	47	58.8	58.8	85.0	
Strongly Disagree	1	1.3	1.3	86.3	
Disagree	11	13.8	13.8	100.0	58.600, 3, 0.0001
Sharing your life challenges with provider	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	17	21.3	21.3	21.3	
Agree	45	56.3	56.3	77.5	
Strongly Disagree	1	1.3	1.3	78.8	
Disagree	17	21.3	21.3	100.0	50.200, 3, 0.0001

Table 4.5, on private information shared with the health provider (p=0.0001), 22 (27.5%) strongly agreed, 37(46.3%) agreed, 2(2.5%) strongly disagreed and 21(26.3%) disagreed.

On providers personal values having effect on you (p=0.005), 10 (12.5%) strongly agreed, 34(42.5%) agreed, 3(3.8%) strongly disagreed and 31(38.8%) disagreed.

On having confidence of provider services (p=0.0001), 17 (21.3%) strongly agreed, 45(56.3%) agreed, 1(1.3%) strongly disagreed and 17(21.3%) disagreed.

On attentiveness of health provider to his work (p=0.0001), 20 (25.0%) strongly agreed, 45(55.0%) agreed, and 16(20.0%) disagreed.

On extend you like the providers attitude towards the service (p=0.0001) 21 (26.3%) strongly agreed, 47(58.8%) agreed, 1(1.3%) strongly disagreed and 11(13.8%) disagreed.

On sharing your challenges with health providers (p=0.0001), 17 (21.3%) strongly agreed, 45(56.3%) agreed, 1(1.3%) strongly disagreed and 17(21.3%) disagreed.

Testing the first hypothesis

There is no relationship between human behavior and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County.

Moo	lel	Sum of Squa	ares df	Mean Squar	e F	Sig.	
1	Regression	2.545	6	.424	.393	.881b	
	Residual	78.842	73	1.080			
	Total	81.388	79				

Table 4 6: ANOVA

Results on Table 4.6 indicate that F value at 5% significance level was 3.393. Significance value obtained was 0.881 which is more than 0.5 significance level of the study this indicated that the whole model was not significant to the study. This further indicate that model was not statistically significant since the first hypothesis that there is no relationship between human behavior and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County was rejected

II. Second objective

To determine the influence of clients waiting time on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county.

4.3.5 Influence of clients waiting time on delivery of HIV Prep in public health facilities

Kiambu County

The table drawn below gives findings on the second variable which was guided by second objective of the study listed below.

Table 4.7: Influence of human behavior to PrEP delivery to health facilities.

Valid **Frequency Percent** Cumulative Chi-Percent Percent square, df, Pvalue Strongly Agree 20.0 20.0 16 20.0 45.0 65.0 Agree 36 45.0 2.5 Strongly Disagree 2 2.5 67.5 32.5 31.600,3, 26 32.5 100.0 Disagree 0.0001 Time taken per Frequency Percent Valid Cumulative Chi-square, procedure in the Percent Percent df, P-value clinic affects your daily schedule. Strongly Agree 9 11.3 11.3 11.3 39 48.8 48.8 60.0 Agree 5.0 5.0 65.0 Strongly Disagree 4 40.100,3, 28 35.0 35.0 100.0 Disagree 0.0001 Waiting bay time **Frequency** Percent Valid Cumulative Chi-square, affects your decision Percent df, P-value Percent to come for the next visit Strongly Agree 11 13.8 13.8 13.8 Agree 44 55.0 55.0 68.8

Time taken at the clinic affect your daily routine.

Strongly Disagree	7	8.8	8	8.8	77.5		
Disagree	18	22	5	22.5	100.0	41.500,3 0.0001	8,
Health provider takes adequate time to address your concerns on clinic visits	Frequency	Percent	Valid perce	nt	Cumulative Percent	Chi-squ df, P-va	are, lue
Strongly Agree	22	27.5	27.5		27.5		
Agree	37	46.3	46.3		73.8		
Disagree	21	26.3	26.3		100.0	6.025, 0.049	2,

Results on Table 4.7, on effect of time taken at the clinic affecting clients daily routine (p=0.0001), 16 (20.0%) strongly agreed, 36(45.0%) agreed, 2(2.5%) strongly disagreed and 26(35.0%) disagreed.

On effects on time per procedure affecting clients daily schedule (p=0.0001), 9 (11.3%) strongly agreed, 39(48.8%) agreed, 4(5.0%) strongly disagreed and 28(35.0%) disagreed.

On effects of waiting time affecting the decision to come for the next visit (p=0.0001), 11 (13.8%) strongly agreed, 44(55.0%) agreed, 7(8.8%) strongly disagreed and 18(22.5%) disagreed.

On health provider taking adequate time to address clients concern on clinic visits (p=0.049), 22(27.5%) strongly agreed, 37(46.3%) agreed, and 21(26.3%) disagreed.

4.3.6 Testing the second hypothesis

There is no relationship between waiting time taken and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County.

Mod	el	Sum Square	df	Mean Square	F	Sig.	
1	Regression Residual	10.708 4 70.680 75	2.677 .942	.030 ^b	2.8	40	
Total		81.38	79				

Table 4.8: ANOVA

Results in Table 4.8 indicate that F value at 5% significance level was 2.677. Significance value obtained was 0.030 which is less than 0.5 significance level of the study this indicated that the whole model was significant to the study. This further indicate that model was statistically significant to the hypothesis that there is there is no relationship between waiting time taken and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County.

III. Third objective;

To assess the influence of health providers competence on delivery of HIV Pre Exposure prophylaxis in public health facilities in Thika sub county.

4.3.7 Influence of health Providers competence on delivery of HIV Prep in public

health facilities Kiambu County.

The third variable of the study was health providers' competence which was supported by objective

listed below.

Table 4.9: Influence of providers	' competence to deliver	y of HIV PrEP
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Health provider gave adequate information for PrEP	Frequency	Percent	Valid Percent	Cumulative Percent	Chi- square, df, P-value
Strongly Agree	27	33.8	33.8	33.8	
Agree	33	41.3	41.3	75.0	
Strongly Disagree	2	2.5	2.5	77.5	
Disagree	18	22.5	22.5	100.0	22.800, 3, 0.0001
Health provider orientation for PrEP informed your decision to take PrEP	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	16	20.0	20.0	20.0	
Agree	42	52.5	52.5	72.5	
Strongly Disagree	4	5.0	5.0	77.5	
Disagree	18	22.5	22.5	100.0	38.000, 3, 0.0001
Health providers confidence influence your willingness to take PrEP	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	21	26.3	26.3	26.3	
Agree	39	48.8	48.8	75.0	
Strongly Disagree	6	7.5	7.5	82.5	
Disagree	14	17.5	17.5	100.0	29.700, 3, 0.0001

Health providers level of multitask influence your satisfaction of the service	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	26	32.5	32.5	32.5	
Agree	39	48.8	48.8	81.3	
Strongly Disagree	2	2.5	2.5	83.8	
Disagree	13	16.3	16.3	100.0	38.500,3, 0.0001
Do you like the	Frequency	Percent	Valid	Cumulative	Chi-square,
by the provide			Percent	Percent	df, P-value
Strongly Agree	27	33	.8 33.8	33.8	
Agree	39	48	.8 48.8	82.5	
Strongly Disagree	2	2.5	5 2.5	85.0	
Disagree	12	15	.0 15.0	100.0	39.900, 3, 0.0001
Presentation of information by provider attract	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
your participation in PrEP taking					
Strongly Agree	30	37.5	37.5	37.5	
Agree	31	38.8	38.8	76.3	
Strongly Disagree	3	3.8	3.8	80.0	
Disagree	16	20.0	20.0	100.0	26.300,3, 0.0001

According to Table 4.9, on health provider gave adequate information about PrEP (p=0.0001), 39(33.8%) strongly agreed, 33(41.3%) agreed, 2(2.5%) strongly disagreed and 18(22.5%) disagreed.

On health provider orientation for PrEP informing clients decision to take PrEP (p=0.0001), 16(20.0%) strongly agreed, 42(52.5%) agreed, 4(5.0%) strongly disagreed and 18(22.5%) disagreed.

On health providers confidence influence clients willingness to take PrEP (p=0.0001), 21 (26.3%) strongly agreed, 39(48.8%) agreed, 6(7.5%) strongly disagreed and 14(17.5%) disagreed. On health providers level of multitask influence clients satisfaction of the service (p=0.0001), 26 (32.5%) strongly agreed, 39(48.8%) agreed, 2(2.5%) strongly disagreed and 13(16.3%) disagreed.

On whether the client likes the service offered by the provider (p=0.0001) 27 (33.8%) strongly agreed, 39(48.8%) agreed, 2(2.5%) strongly disagreed and 12(15.0%) disagreed.

On presentation of information by provider attracting clients participation in PrEP taking (p=0.0001), 30 (37.5%) strongly agreed, 31(38.8%) agreed, 3(3.8%) strongly disagreed and 16(20.0%) disagreed.

4.3.8 Testing the Third hypothesis

There is no relationship between health providers' competence and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

Mode	l Sum o	of Squares	df	Mean Square	F	Sig.	
1	Regression	6.276	6	1.046	1.017	.421b	
	Residual	75.111	73	1.029			
Tota	l	81.388	79				

Table 4.10: ANOVA

Results in Table 4.10 indicate that F value at 5% significance level was 1.017. Significance value obtained was 0.421 which is less than 0.5 significance level of the study this indicated that the whole model was significant to the study. These further indicate that model was statistically significant to the hypothesis that there is there is no relationship between health providers' competence and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

IV. Fourth objective

To assess the influence of clients privacy on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county.

4.3.9 Influence of clients privacy on delivery of HIV Prep in Public health facilities

Kiambu County.

This table gives information shared by clients on influence of privacy on delivery of HIV Prep. The findings were guided by the fourth objective of the study which is listed below.

Location of the facility have effect on your privacy	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	20	25.0	25.0	25.0	
Agree	36 6	45.0 7.5	45.0 7.5	70.0 77.5	
Strongly Disagree					
Disagree	18	22.5	22.5	100.0	22.800, 3, 0.0001

Table 4.11: Influence of clients'	privacy t	to delivery	of HIV PrEP
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Location of the room have	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df. P-value
effect on your		1 01 00110	1 01 00110	10100110	ui, i vaiac
privacy					
Strongly Agree	15	18.8	18.8	18.8	
Agree	28	35.0	35.0	53.8	
Strongly	5	6.3	6.3	60.0	
Disagree					
Disagree	32	40.0	40.0	100.0	22.900,3, 0.0001
File	Frequency	Percent	Valid	Cumulative	Chi-square,
identification	1		Percent	Percent	df, P-value
have effect on					,
your privacy					
Strongly	24		30.0	30.0	12.500,
Agree		30.0			3,
rigiee					0.006
Agree	28	35.0	35.0	65.0	
Strongly	7	8.8	8.8	73.8	
Disagree	21		26.2	100.0	10,500 2
Disagree	21	26.3	26.3	100.0	12.500, 3, 0.006
Clients waiting bay have effect on privacy	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly	25	31.3	31.3	31.3	
Agree					
Agree	30	37.5	37.5	68.8	
Strongly Disagree	5	6.3	6.3	75.0	
Disagree	20	25.0	25.0	100.0	17.500, 3, 0.001
Providers tone have influence on your privacy	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	15	18.8	18.8	18.8	
Agree	40	50.1	48.8	68.9	
Strongly	5	6.3	6.3	75.0	
Disagree	20	25.0	25.0	100.0	57.750, 4, 0.0001

History taken by provider have influence on your privacy	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	9	11.3	11.3	11.3	
Agree	46	57.5	57.5	68.8	
Strongly Disagree	3	3.8	3.8	72.5	
Disagree	22	27.5	27.5	100.0	54.500, 3, 0.0001

According to Table 4.11, on location of the facility have effect on clients privacy (p=0.0001), 20(25.0%) strongly agreed, 36(45.0%) agreed, 6(7.5%) strongly disagreed and 18(22.5%) disagreed.

On location of the room have effect on clients privacy (p=0.006), 15(18.8%) strongly agreed, 28(35.0%) agreed, 5(6.3%) strongly disagreed and 32(40.0%) disagreed.

On file identification have effect on clients privacy (p=0.0001), 24 (30%) strongly agreed, 28(35.0%) agreed, 7(8.8%) strongly disagreed and 21(26.3%) disagreed.

On clients waiting bay have effect on privacy (p=0.001), 25 (31.3%) strongly agreed, 30(37.5%) agreed, 5(6.3%) strongly disagreed and 20(25.0%) disagreed.

On providers tone having influence on clients privacy (p=0.0001), 15 (18.8%) strongly agreed, 40(50.1%) agreed, 5(6.3%) strongly disagreed and 20(25.0%) disagreed.

On history taken by provider having influence on clients privacy (p=0.0001), 9 (11.3%) strongly agreed, 46(57.5%) agreed, 3 (3.8%) strongly disagreed and 22(27.5%) disagreed.

4.3.10 Testing the fourth hypothesis

There is no relationship between clients' privacy and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County

Table	Гable 4.12: Anova						
Model		Sum of Squares	df	Mean Square	F	Sig.	
1	Regressior	10.561	6	1.760	1.81	.108b	
	Residual	70.826	73	.970			
Total		81.388	79				

Results in Table 12 indicate that F value at 5% significance level was 1.814. Significance value obtained was 0.108 which is less than 0.5 significance level of the study this indicated that the whole model was significant to the study. This further indicates that model was statistically significant to the hypothesis that there is there is no relationship between clients' privacy and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

4.4. Inferential statistics

The inferential statistics was used in the study to verify whether a relationship between the variables as well as the strength of that relationship was there. Inferential analysis targeted at reaching to a conclusion that goes further form data obtained between the independent and dependent variables in the study (Human behaviour, influence of waiting time, influence of providers competence and influence on clients privacy).

Results in Table 6.0 indicate that F value at 5% significance level was 1.017. Significance value obtained was 0.421 which is less than 0.5 significance level of the study this indicated.

4.5 Information about HIV Prep from key informants health providers

This section captures information about the providers' perceptions on provision of HIV PrEP, human behavior, trainings; tools used Time management and their own contributions.

4.5.1 Age of key informant

The age of key informant was analyzed according to what they reported on the questionnaires.

	Frequency	Percent	Valid Percent	Cumulative Percent
18-21	4	8.0	8.0	8.0
22-25	14	28.0	28.0	36.0
26-29	9	18.0	18.0	54.0
>33	23	46.0	46.0	100.0
Total	50	100.0	100.0	

 Table 4.13: Age of Health Providers' Respondents

Results in Table 4.13 indicate that majority of respondents were >33 years represented by 23 (46.0%) respondents. 4 (8.0%) respondents were 18-21 years at the time the study was being conducted. 14 (28.0%) respondents were 22-25 years of age. 90(18.0%) were 26-29 years of age.

4.5.2 Gender of key informant

Results on the table shows the gender of respondents as appeared in the questionnaires.

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
F	36	72.0	72.0	72.0
М	14	28.0	28.0	100.0
Total	50	100.0	100.0	

 Table 4.14: Gender Distribution of respondents

Results in Table 4.14 indicate that majority of respondents 36 (72.0%) were female whereas

14 (28.0%) were male.

4.5.3 Education Level of Key Informant

Table 4.15 has indication for level of education of respondents

	Frequency	Percent	Valid Percent	Cumulative Percent
Certificate	6	12.0	12.0	12.0
Diploma	37	74.0	74.0	86.0
University	7	14.0	14.0	100.0
Total	50	100.0	100.0	

 Table 4.15: Level of Education of Respondents

From the results indicated in the Table 4.15, 6 (12.0%) respondents had Certificate, 37 (74.0%) respondents had Diploma, 7 (14.0%) respondents had reached University. This implies that a most of the respondents had reached Diploma level of education.

4.5.4 Profession title for key informants

The table gives profession level of respondent respectively their job titles.

	Frequency	Percent	Valid Percent	Cumulative Percent
Counselors	1	2.0	2.0	2.0
HTS	18	36.0	36.0	38.0
Nurse	31	62.0	62.0	100.0
Total	50	100.0	100.0	

Table 4.16: Profession level

From the results indicated in the Table 4.16, 31(62.0%) respondents were Nurses, 18 (36.0%) respondents were HTS, 1 (2.0%) respondents was a counselor. This implies that a most of the respondents were Nurses.

4.5.5 Years of experience

According to the below table shows the number of years the providers have worked since they

professed.

Number of years	Frequency	Percent	Valid Percent	Cumulative Percent
2-8	39	78.0	78.0	78.0
8-12	6	12.0	12.0	90.0
>12	5	10.0	10.0	100.0
Total	50	100.0	100.0	

Table 4.17: Years of Experience

From Table 4.17, 39(78.0%) of respondents had worked for 2-8 Years, 6(12.0%) had worked for 8-12 years, and 5(10.0%) had worked for >12 years. This implies that most of the health providers were young and gaining experience threshold.

4.6 Response on human behavior

According to the table below information of providers 'behavior as the give the services to clients who comes for HIV PrEP on a monthly basis. The objective towards this variable has been listed below.

I .First objective

To establish the influence of human behavior on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county.

Does your personal values have influence on patient decision making concerning PrEP	Frequency	Percent	Valid Percen	nt	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	8	16.0	16.0		16.0	
Agree	17	34.0	34.0		50.0	
Strongly Disagree	5	0.0	10.0		60.0	10 0 10 0
Disagree	20	40.0	40.0		100.0	12.240,3, 0.007
Clients characteristics have an effect on your professionalism	Frequency	Percent	Valid Percen	t	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	6	12.0		12.0	12.0	
Agree	15	30.0		30.0	42.0	
Strongly Disagree	29	58.0		58.0	100.0	16.120, 3, 0.0001
Strongly Agree	14	28.0	28.0		28.0	
Agree	18	36.0	36.0		64.0	
Strongly Disagree	18	36	5.0 3	36.0	100.0	0.640, 2, 0.726

 Table 4.18: Response of human behavior reported by health providers
Getting furious with the information given by clients as to why they are to take HIV PrEP	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	10	20.	0 20.0	20.0	
Agree	12	24. 56	0 24.0	44.0	11 (90
Strongly Disagree	28 e	50.	.0 56.0	100.0	11.680, 2, 0.003
Do you feel comfortable giving information on HIV PrEP orientation to new clients easily without difficult	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	6	12.0	12.0	12.0	
Agree	21	42.0	42.0	54.0	
Strongly Disagree	e 4	8.0	8.0	62.0	
Disagree	19	38.0	38.0	100.0	18.300,3, 0.0001
Have you received training on new clinical guidelines for offering PrEP	Frequency	Percent	Valid Percent	Cumulative Percent	Chi-square, df, P-value
Strongly Agree	10	20.0	20.0	20.0	
Agree	20	40.0	40.0	60.0	
Strongly Disagree	e 3	6.0	6.0	66.0	
Disagree	17	34.0	34.0	100.0	13.840, 3, 0.003

According to Table 4.18, on where health providers personal values have influence on clients decision making concerning PrEP (p=0.007), 8(16.0%) strongly agreed, 17(34.0%) agreed, 5(10.0%) strongly disagreed and 20(40.0%) disagreed.

On clients characteristics have an effect on health providers professionalism (p=0.0001), 6(12.0%) strongly agreed, 15(30.0%) agreed, and 29(58.0%) strongly disagreed.

On communicating with clients throughout the procedure have effect on provision of HIV PrEP service (p=0.726), 14 (28.0%) strongly agreed, 18(36.0%) agreed, and 18(36.0%) strongly disagreed.

On do health providers get judgmental while attending clients based on information clients share (p=0.771), 16 (32.0%) strongly agreed, 15(30.0%) agreed, and 19(38.0%) disagreed.

On whether health providers get furious with the information given by clients as to why they are to take HIV PrEP (p=0.003), 10 (20.0%) strongly agreed, 12(24.0%) agreed, and 28(56.0%) disagreed.

On do health provider feel comfortable giving information on HIV PrEP orientation to new clients easily without difficult (p=0.0001), 6 (12.0%) strongly agreed, 21(42.0%) agreed, 4 (8.0%) strongly disagreed and 19(38.0%) disagreed.

On whether health provider had received training on new clinical guidelines for offering PrEP (p=0.003), 10 (20.0%) strongly agreed, 20(40.0%) agreed, 3 (6.0%) strongly disagreed and 17(34.0%) disagreed.

4.7 Testing the first hypothesis

There is no relationship between human behavior and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County.

Table 4.19 Anova

	Model	Sum	of	df	Mean	F	Sig.
		Squares			Square		
	Regression	2.545		6	.424	.393	.881 ^b
1	Residual	78.842		73	1.080		
	Total	81.388		79			

Results in Table 4.19 indicate that F value at 5% significance level was 3.393. Significance value obtained was 0.881 which is more than 0.5 significance level of the study this indicated that the whole model was not significant to the study. This further indicate that model was not statistically significant since the first hypothesis that there is no relationship between human behavior and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County was rejected.

4.7.1 Response on time management

This section gives an analysis on how providers manage time at the clinic with clients coming for HIV PrEP. The second objective of this variable has been listed down as part of analysis.

i. Objective

To determine the influence of clients waiting time on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county.

Table 4.20: Time management by health providers

This table gives information on how health providers manage their time with clients on the

visit for PrEP supply.

Describe the	Frequency	Percent	Valid	Cumulative	Chi-square,
workload and time			Percent	Percent	df, P-value
allocated to attend					
PrEP clients					
Very Low	3	6.0	6.0	6.0	
Low	5	10.0	10.0	16.0	
Moderate	27	54.0	54.0	70.0	
Heavy	9	18.0	18.0	88.0	
Very Heavy	6	12.0	12.0	100.0	15.120, 3, 0.002
Does perception	Frequency	Percent	Valid	Cumulative	Chi-square,
workload affect your	1 0		Percent	Percent	df, P-value
performance in					
general based on time					
allocated for your					
duties					
Very Low	8	16.0	16.0	16.0	
Low	0	0.0	0.0	0.0	
Moderate	23	46.0	46.0	62.0	
Heavy	14	28.0	28.0	90.0	
Very Heavy	5	10.0	10.0	100.0	27.920, 3, 0.0001
Number of patients you seen per day and time spend	Frequency	Percent	Valid	Cumulative Percent	Chi-square, df, P-value
			Percent		
Very Low	0	0.0	0.0	0.0	
Low	1	2.0	2.0	2.0	
Moderate	24	48.0	48.0	50.0	
Heavy	19	38.0	38.0	88.0	
Very Heavy	6	12.0	12.0	100.0	26.930,2

If you were to judge	Frequency	Percent	Valid	Cumulative	Chi-square, df,
your own			Percent	Percent	P-value
performance, how					
would you rate on the scale 1 to 5 1 being the					
noorest nerformance					
and 5 being the best					
performance					
Very poor	5	10.0	10.0	10.0	
Poor	12	24.0	24.0	34.0	
Neutral	21	42.0	42.0	76.0	
High	11	22.0	22.0	98.0	
Very High	1	2.0	2.0	100.0	23.200, 4,
					0.0001
Rate your	Frequency	Percent	Valid	Cumulative	Chi-square,
performance to a			Percent	Percent	df, P-value
scale of 1 to 5. 1					
being the poorest					
performance and 5					
being the best					
performance this on					
time management					
Very poor	0	0.0	0.0	0.0	
Poor	4	8.0	8.0	8.0	
Neutral	16	32.0	32.0	40.0	
High	21	42.0	42.0	82.0	
Very High	9	18.0	18.0	100.0	13.520, 3, 0.004

According to Table 4.20, on evaluating the workload and time allocated to attend PrEP clients p=0.0001, 3(6.0%) reported to be very low, 5(10.0%) reported as low, 27(54.0%) reported to be moderate, 9(18.0%) reported as heavy whereas 6(12.0%) reported as very heavy.

On whether perception workload affect health providers' performance in general based on time allocated for your duties p=0.002, 8(16.0%) reported as very low, 23(46.0%) reported as

moderate, 14(28.0%) reported as heavy while 5(10.0%) reported as very heavy. There was no respondents who reported as low.

On evaluating the average number of patients a health provider sees per day and time spend p=0.0001, 1(2.0%) of respondents reported as low, 24(48.0%) reported to be moderate, 19(38.0%) reported as heavy whereas 6(12.0%) reported as very heavy. None of respondents reported very low.

On health providers own performance rating 1 to 5. 5(10.0%) of the respondents reported very poor performance p=0.0001, 12(24.0%) of the respondents reported poor performance, 21(42.0%) of the respondents neutral performance, 11(22.0%) of the respondents reported high performance whereas 1(2.0%) of the respondents very high performance. On health providers own performance rating 1 to 5 based on time management p=0.004, 4(8.0%) of the respondents reported neutral time management, 21(42.0%) of the respondents high time management, 9(18.0%) of the respondents reported very poor time management.

4.7.2 Testing the second hypothesis

There is no relationship between waiting time taken and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County.

Table 4.21: Anova

Model		Sum of Squares	df	Mean Square	F Sig.
	Regression	10.708	4	2.677	2.840.030 ^b
1	Residual	70.680	75	.942	
	Total	81.388	79		

Results in Table 4.21 indicate that F value at 5% significance level was 2.677. Significance value obtained was 0.030 which is less than 0.5 significance level of the study this indicated that the whole model was significant to the study. This further indicate that model was statistically significant to the hypothesis that there is there is no relationship between waiting time taken and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County.

The third variable was assessed to inform the researcher of the findings that has been analyzed below. The third objective that governed the assessment is listed below.

iii. Third objective

To assess the influence of health providers competence on delivery of HIV Pre Exposure prophylaxis in public health facilities in Thika sub county.

Describe	Frequency	Percent	Valid	Cumulative	Chi-square,
training in			Percent	Percent	ai, P-value
relation to					
service you					
offer		• •	• •	• • •	
Bad	1	2.0	2.0	2.0	
Moderate	20	40.0	40.0	42.0	
Good	25	50.0	50.0	92.0	22.250.2.0.0001
Very good	4	8.0	8.0	100.0	33.360, 2, 0.0001
Describe your	Frequency	Percent	Valid	Cumulative	Chi-square, df,
orientation			Percent	Percent	P-value
level on clients					
who come for					
PrEP					
Bad	6	12.0	12.0	12.0	
Moderate	24	48.0	48.0	60.0	
Good	17	34.0	34.0	94.0	
Very good	3	6.0	6.0	100.0	22.800, 3, 0.002
Describe your	Frequency	Percent	Valid	Cumulative	Chi-square, df,
understanding			Percent	Percent	P-value
of NASCOP					
guidelines for					
HIV PrEP					
Bad	1	2.0	2.0	2.0	20.560, 3,
Duu					0.0001
Moderate	20	40.0	40.0	42.0	
Good	20	40.0	40.0	82.0	
Very Good	9	18.0	18.0	100.0	
Describe	Frequency	Percent	Valid	Cumulative	Chi-square, df,
knowledge			Percent	Percent	P-value
you have for					
PrEP					
information					
Moderate	26	52.0	52.0	52.0	13.720, 2,
moderate					0.0001
Good	19	38.0	38.0	90.0	
Very good	5	10.0	10.0	100.0	

Describe your	Frequency	Percent	Valid	Cumulative	Chi-square, df,
level of			Percent	Percent	P-value
knowledge on					
screening					
clients for					
HIV PrEP					
using					
NASCOP tool					
for assessment					
Moderate	23	46.0	46.0	46.0	
Good	21	42.0	42.0	88.0	
Very good	6	12.0	12.0	100.0	10.360, 2, 0.006
To what	Frequency	Percent	Valid	Cumulative	Chi-square, df,
extend do you			Percent	Percent	P-value
give feedback					
to clients					
concerning					
HIV PrEP					
Moderate	19	38.0	38.0	38.0	
Good	20	40.0	40.0	78.0	
Very good	11	22.0	22.0	100.0	2.920, 2, 0.232

According to Table 4.22, on health providers' level of training in relation to service offered p=0.0001, 1(1.0%) of the respondents reported bad training, 20(40.0%) reported moderate training, 25(50.0%) reported good training whereas 4(8.0%) reported very good training.

On orientation level on clients coming for PrEP p=0.002, 6(12.0%) of the respondents reported bad orientation, 24(48.0%) reported moderate orientation, 17(34.0%) reported good orientation whereas 3(6.0%) reported very good orientation.

On understanding of NASCOP guidelines for HIV PrEP p=0.0001, 1(2.0%) of the respondents reported bad understanding, 20(40.0%) reported moderate understanding, 20(40.0%) reported good understanding whereas 9(18.0%) reported very good understanding of the NASCOP guidelines.

On level of knowledge on HIV PrEP information p=0.0001, 26(52.0%) reported moderate information about PrEP, 19(38.0%) reported good information whereas 5(10.0%) reported very good information about HIV PrEP.

On level of knowledge on screening clients for HIV PrEP using NASCOP tool for assessment p=0.006, 23(46.0%) reported moderate orientation, 21(42.0%) reported good orientation whereas 6(12.0%) reported very good orientation.

On extend giving feedback to clients concerning HIV PrEP p=0.232, 19(38.0%) reported moderate, 20(40.0%) reported good extend whereas 11(22.0%) reported very good extend of giving feedback.

4.7.3 Testing the Third hypothesis

There is no relationship between health providers' competence and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

Model		Sumof	df	Mean	F	Sig.
		Squares		Square		
1	Regression	6.276	6	1.046	1.017	.421 ^b
	Residual	75.111	73	1.029		
	Total	81.388	79			

l

Results in Table 4.23 indicate that F value at 5% significance level was 1.017. Significance value obtained was 0.421 which is less than 0.5 significance level of the study this indicated that the whole model was significant to the study. This further indicate that model was

statistically significant to the hypothesis that there is there is no relationship between health providers' competence and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

4.7.4 Response clients' privacy

The table below gives information on clients privacy data collected from individuals who collects HIV PrEP in public health facilities in Kiambu County. The variable was supported by the objective listed below.

IV. Fourth objective

To assess the influence of clients privacy on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika sub county.

Does noise affect your work?	Frequency	Percent	Valid Percent	Cumulative Percent	Chi- square, df, P-value
Strongly Agree	6	12.0	12.0	12.0	
Agree	27	54.0	54.0	66.0	
Strongly Disagree	4	8.0	8.0	74.0	
Disagree	13	26.0	26.0	100.0	26.00, 3, 0.0001

 Table 4.24: Clients' Privacy Response by Health Providers'

Working environment affects clients privacy

This section gives information on how the environment within the facility has an effect on client's privacy.

	Frequency	Percent	Valid	Cumulative	Chi- square,
			Percent	Percent	df, P-value
Strongly Agree	9	18.0	18.0	18.0	
Agree	31	62.0	62.0	80.0	
-	10	20.0	20.0	100.0	18.520, 2,
Disagree					0.0001
-					

	Frequency	Percent	Valid Percent	Cumulative Percent	Chi- square, df, P-value
Strongly Agree	8	16.0	16.0	16.0	
Agree	31	62.0	62.0	78.0	
Strongly Disagree	2	4.0	4.0	82.0	
Disagree	9	18.0	18.0	100.0	38.800, 3, 0.0001

Clients expresses themselves freely based on location of room

Location of the facility have effect on clients privacy

	Frequency	Percent	Valid Percent	Cumulative Percent	Chi- square, df, P-value
Strongly Agree	7	14.0	14.0	14.0	
Agree	25	50.0	50.0	64.0	
Strongly	3	6.0	6.0	70.0	
Disagree					
Diagana	15	30.0	30.0	100.0	22.640, 3,
Disagree					0.0001

On Table 4.24, on whether noise affects work p=0.001, strongly agreed, 27 agreed, 4(8.0) strongly disagreed and 13(26.0) disagreed.

On whether working environment affects clients privacy p=0.0001, 6(18.0) strongly agreed,

31(62.0) agreed, and 10(20.0) disagreed. None of the respondents strongly disagreed.

On whether clients expresses themselves freely based on location of room p=0.001, 8(16.0) strongly agreed, 31(62.0) agreed, 2(4.0) strongly disagreed and 9(18.0) disagreed.

On whether Location of the facility have effect on clients privacy p=0.0001, 7(14.0) strongly agreed, 25(50.0) agreed, 3(6.0) strongly disagreed and 15(30.0) disagreed.

4.7.5 Testing the four hypothesis

There is no relationship between clients' privacy and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

Mod	el	Sum Squares	of df	Mean Square	F	Sig.
1	Regression	10.561	6	1.760	1.814	.108 ^b
	Residual	70.826	73	.970		
	Total	81.388	79			

Table 4.25: ANOVA

Results in Table 4.25 indicate that F value at 5% significance level was 1.814. Significance value obtained was 0.108 which is less than 0.5 significance level of the study this indicated that the whole model was significant to the study. This further indicate that model was statistically significant to the hypothesis that there is there is no relationship between clients' privacy and delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

4.8 Inferential statistics

The inferential statistics was used in the study to verify whether a relationship between the variables as well as the strength of that relationship was there. Inferential analysis targeted at reaching to a conclusion that goes further form data obtained between the independent and

dependent variables in the study (Human behavior, influence of waiting time, influence of providers competence and influence on clients privacy).

Results in Table 4.25 indicate that F value at 5% significance level was 1.017. Significance value obtained was 0.421 which is less than 0.5 significance level of the study this indicated

4.9 Testing the fifth hypothesis

The fifth hypothesis was to test all variables together to learn whether there is a significant relationship between all of them. The findings indicated the following results for all variables.

There is no relationship between human behavior, clients waiting time, providers' competence and clients' privacy in delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers the following; summary of the findings, conclusion of the study, recommendation of the study and suggestions for further studies.

5.2 Summary of the findings

The study was based on influence assessing factors influencing delivery of HIV Pre Exposure Prophylaxis project in public health facilities: the case of Thika sub county, Kiambu county-Kenya. Responses from the respondents were obtained and analyzed. The findings are summarized in the subsequent sub sections.

5.2.1 Influence of human behavior on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County.

The first objective of this study was to establish the influence of human behavior on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County. The analysis indicated there was an established effect of human behavior on the delivery of HIV PrEP to health facilities in Thika Sub-County.5.2.2 Influence of clients waiting time on delivery of HIV Pre Exposure Prophylaxis in Public health facilities in Thika Sub County.

The second objective was to determine the influence of clients waiting time on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County. The findings on this objective showed that there is no relationship between waiting time taken and delivery of HIV Pre Exposure Prophylaxis in public health facilities Thika Sub County. This means waiting time does not in any way affect delivery of PrEP to public health facilities in Thika Sub County.

5.2.3 Influence of health providers competence on delivery Of HIV Pre Exposure Prophylaxis in Public health facilities in Thika Sub County.

The third objective of this study was to assess the influence of health providers' competence on delivery of HIV Pre Exposure prophylaxis in public health facilities in Thika Sub County. The analysis pointed out that there was no relationship between health providers' competence and delivery of HIV Pre Exposure Prophylaxis in public health facilities. In regards to this, competence of heath provider was not a direct factor that influences delivery of HIV Pre-Exposure Prophylaxis in Thika Sub County.

5.2.4 Influence of clients privacy on delivery of HIV Pre Exposure Prophylaxis in public health Facilities in Thika Sub County

The fourth objective of this study was to assess the influence of clients' privacy on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County. The analysis indicated that there was no relationship between clients' privacy and delivery of HIV Pre Exposure Prophylaxis in public health facilities. This means waiting time does not in any way affect delivery of PrEP to public health facilities in Thika Sub County.

5.3 Conclusion of research results

The finding of the study showed that, human behavior was found to be statistically significant in influencing the delivery of HIV PrEP to public health facilities in Thika Sub County. Both clients waiting time, providers' competence and clients' privacy were found not to be statistically significant in affecting delivery of HIV PrEP to public health facilities in Thika Sub County.

5.4 Recommendation of the study

In regards to the study findings the following recommendations would be key for future studies.

Trainings for providers who are to give the new service that is being introduced. This study most health providers reported to have moderate training from their colleagues who got an opportunity to receive the ideal training of HIV PrEP delivery.

The first objective of this study was to establish the influence of human behavior on delivery of HIV Pre Exposure Prophylaxis in public health facilities in Thika Sub County. The analysis indicated there was an established effect of human behavior on the delivery of HIV PrEP to health facilities in Thika Sub-County. There is need for providers to be done trainings on self-awareness before embarking on offering some sensitive. Counselors may be the best flag bearers of PrEP delivery.

The government should consider merging HIV PrEP delivery fund with other private funds and form one large Public Private Partnership that will even allow both private practioners and govern.

5.5 Suggestion for further studies

The researcher suggested different studies which can be done on the following

Providers' perception on delivery of HIV PrEP within the sites that offers the same services. The researcher feels it will be recommendable to learn whether health providers agrees with the concept of reduction of HIV acquisition through PrEP delivery.

Perception of clients taking PrEP on HIV self-testing at home. This is because clients have to attend clinic on monthly basis for a HIV test before they open any other bottle to eliminate the risk of being commenced on PrEP while one has acquired HIV.

The retention rate of clients who come for HIV PrEP in facilities offering the same services in other counties not necessary the area of this study catchment. This may enable the government, sponsors and funders to learn new strategies to be implemented.

REFERENCES

- Agrawal R, Srikant R. (2000) *Privacy-preserving data mining*. In: Proceedings ACM SIGMOD Conference on Management of Data; May 16–18, 2000; Dallas, Tex.
- AndrewMujugira(2011)http://journals.plos.org/plosone/article?id=10.1371/journal.pone.002 5828
- Baillie, L. and Black, S. (2014) Professional Values in Nursing. Taylor and Francis.
- Bandura A, Grusec J.E, Menlove F.L Observational learning as a function of symbolization and incentive set. Child Development. 1966;37:499–506.PubMed
- Bandura A, Huston A.C.(1961) Identification as a process of incidental learning. Journal of Abnormal and Social Psychology. ;63:311–318. PubMed Bandura A, Jeffrey R.W.(1973)
- Becker, H &Mustric, F. (2008) "Can I Have 5 Minutes of Your Time?" Morgan James Publishing
- Beevers, R. (2006) "Customer Service Excellence in the Public Sector", Northern Housing Consortium
- Busha, C. H. and Harter, S. P. (1980).*Research Methods in Librarianship: Techniques and Interpretation*. Orlando, FL: Academic Press, Inc.
- Butler, G & Hope, T. (2007) "Managing Your Mind: The Mental Fitness Guide" Oxford
- Christie, S. (209) "Effective time management for doctors" Developmedica
- Centre for disease control guideline http://www.treatmentactiongroup.org/users/hiv-prepprevention-trials
- Centre for Disease control and prevention https://www.cdc.gov/globalaids/global-hiv-aids-atcdc/default.html
- Centre for disease and control guideline http://www.treatmentactiongroup.org/users/hiv-prepprevention-trials
- Centre for sexually transmitted diseases https://www.cdc.gov/std/prevention/screeningreccs.htm
- laessens, J.C., Eerde, W. &Rutte, C.G. (2007) "A Review of the time management literature" *Personnel Review*, Vol. 36, pp. 255 276
- Felton, S & Sims, M. (2009) "Organising Your Day: Time Management Techniques That Will Work for You" RevellFoulkes ,M (2011) Social Context human subjects research. The America journal of Bio Ethics, vol11, no5 pp.35-36

- George, D. and Mallery, P. (20034th ed). SPSS for Windows step by step: A simple guide and reference. Boston: Allyn and Bacon
- Greer R.D, Singer-Dudek J. (2008) The emergence of conditioned reinforcement from observation. *Journal of the Experimental Analysis of Behavior*. ;89:15–29. PMC free article Pub Med.
- Global data from UNAIDS, AIDS by the Numbers, Nov. 2016.HIV Globallyhttps://www.hiv.gov/hiv-basics/overview/data-and-trends/global-statistics.
- Government article https://www.ncbi.nlm.nih.gov/pmc/articles/,https://doi.org/10.1093/her/cyr001
- Greer R.D, Singer-Dudek J, Gautreaux G. (2006) *Observational learning. International Journal of Psychology.* ;41(6):486–499.
- Hochbaum, (1958) Rosenstock (1966), Becker, (1974) Sharma & Romas, (2012). discordant relationship outcome of sexual behaviour
- Huimin (2011) https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3243250/
- Emily k Effectiveness of theory-based risk reduction *HIV prevention program for rural Vietnamese adolescents. AIDS EducPrev*
- Inerela action Aid Action Faith based http://www.inerelakenya.org/blog/projects/ppa-reportkiambu-county-fgd-report/
- Inerela action Aid Action Faith based http://www.inerelakenya.org/blog/projects/ppa-reportkiambu-county-fgd-report/Feb 2016

Inerela action Aid Action Faith base

- Jesse White 2016 http://www.healthcarebusinesstech.com/reduce-patient-wait-times/
- Joppe, M. (2000) *The Research Process*. Retrieved February 25, 1998, from http://www.ryerson.ca/~mjoppe/rp.htm
- Kerzner, H. (2009) "Project Management: A Systems Approach to Planning, Scheduling, and Controlling" John Wiley & Sons
- Kristan, P. (2010) "Awakening in Time: *Practical Time Management for Those on a Spiritual Path*" Dog Ear Publishing
- MacNeil D, Pursey S.1999 *Disclosure control methods in the public release of microdata files of small business. Available* Jerome Reiter, AshishSanil, Alan F. Karr, and Shanti Gomatam.Data Utility.
- Marquis, B.L. & Huston, C.J. (2009) "Leadership roles and management functions in nursing: theory and application" Wolters Kluwer Health

Melanie R. Nicalhttps://www.ncbi.nlm.nih.gov/pmc/articles/PMC3882078/

- Mugenda, O. M. & Mugenda, A. G. (1999). *Research Methods: Quantitative and Qualitative Approaches*. Nairobi: Acts Press.
- Owens, D. (2002). School Resources, Social and Student Achievement. Nairobi. Longman Publishers.
- Prejean, J, Song R, Hernandez A, Ziebell R, Green T, Walker F, et al. Estimated HIV incidence in the United States, 2006–2009.Plos One. 2011;6(8):e17502
- PrEP watch https://www.prepwatch.org/prep-resources/national-policies-guidelines/
- Olpin, M. &Hesson, M. (2012) "Stress Management for Life: A Research Based Experiential Approach" Cengage Learning
- Ross D.E. (2008). Verbal behavior analysis: Inducing and expanding complex communication in children with severe language delays. Boston: Allyn& Bacon; 2008.

SRM paper Lynne ... http://www.amstat.org/sections/srms/proceedings/papers/1999_044.pdf. Accessed December 22, 2006.

- MedicineCentre(http://who.int/mediacentre/news/releases/2015/hiv-treatallrecommendation/en/https://doi.org/10.1371/ retrieved May 15 2017 Daily
- The National Institutes of Health (NIH) offers an online tutorial, "Human Participants Protections Education for Research Teams," at http://cme.nci.nih.gov.
- Research in organization psychology https://psyc450.wordpress.com/2011/12/08/ethics-respect-for-persons/

APPENDICES

Appendix 1: Letter of Transmittal of Data Collection instruments

Ongachi Snaidah Ayub

P.O. Box 114,

Ndalu.

Date: 10th Feb, 2018

To Whom It May Concern

RE: Assessing factors influencing HIV Pre Exposure Prophylaxis delivery a project in public health facilities, a case of Thika Sub County, Kiambu county-Kenya.

I am a postgraduate student at the University of Nairobi taking Master's degree in project

Planning and management. Currently, am carrying out a research project on assessing Influence of HIV Pre Exposure delivery a project in public health facilities, the case of Thika sub county, Kiambu county- Kenya.

It's with pleasure that am informing on your selection to take part in the study. I therefore

Ask you to fill data in the questionnaire provided. Kindly attempt to all questions. Information obtained will be confidential and be used for academic purpose

I appreciate your volunteerism to take part in the study.

Yours Faithful

Ongachi Snaidah.

Appendix II. Questionnaire for clients receiving HIV Prep in Thika Sub County.

This questionnaire is intended to gather general information on assessing factors influencing delivery of HIV Pre Exposure Prophylaxis project in public health facilities: the case of Thika Sub County, Kiambu county-Kenya. The questionnaire has four sections. Kindly respond to all questions to your best of your understanding. Your response will be kept strictly confidential. Please tick in the appropriate box you can seek clarification what for you are not getting clear.

S/n	Question/Statement	Choices
1.	Sex	Male
		Female
2.	Age	15-18
		21-24
		25-30
		31-34
		Others specify
3.	Educational level	No education,
		Primary
		Secondary
		University
		Others specify
4	Years of being on PrEP	Number of years
		1-2years
		2-3years
		4-5 years
		Others specify

A CLIENTS SOCIAL DEMOGRAPHIC QUESTIONNAIRE SECTION A

ngle
arried
ivorced
idowed
idower

B. Rate the following questions with respect to frequency (Circle the Correct Answer) human behavior information

s/n	Statement	Not at all	Slightly	Moderate	Considerably	Extensively
1	To what extend did you share sexual information with health provider					
2	To what					
	extend do you					
	think					
	providers was					
	not					
	judgmental					

3	To what			
	extend did			
	you have			
	confidence in			
	providers			
	service			
4	To what			
	extend did			
	you think			
	provider was			
	attentive to			
	his work			
5	To what			
	extend did			
	you like			
	providers			
	attitude			
	towards the			
	service			
6	To want			
	extend do you			

fe	eel you can			
te	ell provider			
У	/our			
c	challenges in			
li	ife			

	Statement	Strongly Agree	Agree	Strongly disagree	Disagree
1	Does time taken at the clinic affect your daily routine?				
2	Does time taken per procedure in the clinic affect your daily schedule				
3	Does provider take adequate time to address your concerns on clinic visit				
4	Does waiting bay time affect your decision to come for the next visit				

Influence of clients waiting time on delivery of HIV Prep in public facilities

Provider competence client on delivery of HIV Prep in Public health facilities

	Statement	Strongly Agree	Agree	Strongly	Disagree
				Disagree	
1	Did the provider give adequate information for PrEP				
2	Does provider orientation for PrEP influence your decision to take PrEP				
3	Does providers confidence influence your willingness to take PrEP				

4	Did provider's level of multitask influence your satisfaction of the service		
5	Do you like the service offered by the provider		
6	Does presentation of information by provider attract your participation in PrEP taking		

Influence of clients privacy on delivery of HIV PrEP in public health facilities

	Statements	Strongly agree	Agree	Strongly disagree	Disagree
1	Does location of the facility have influence on your privacy				
2	Does location of the room have influence on your privacy				
3	Does file identification have influence on your privacy				
4	Does waiting bay have influence on our privacy				
5	Does providers tone have influence on your privacy				
6	Does history taken by provider have influence on your privacy				

The following questionnaire is for health providers which can help us with information which can assist in learning knowledge in delivery of HIV PrEP.

/n	Question/Statement	Choices	Responses
1.	Sex	Male	Male ()
		Female	Female()
2.	Age		18-21()
			22-25()
			26-29 ()
			30-33()
			Other specify()
3.	Educational level	None	1. ()
		Primary school	2. ()
		Secondary school	3. ()
		University	4. ()
		Others specify	5. ()

Providers' social Demographic section

4	Years of experience in this job	Number of years	
	(RCH)		
5	Profession/cadre/title		
6	Marital status	Single	1. ()
		Married	2 ()
			2. ()
		Divorced	3. ()
		Widowed	4 ()
		Widowed	
		Widower	5. ()

Influence of human behavior on delivery of HIV PrEP in public health facilities

B. Rate the following	g questions with	respect to best	knowledge of u	nderstanding
-----------------------	------------------	-----------------	----------------	--------------

s/n	Statement	Strongly	Disagree	I don't	Agree	Strongly agree
		disagree		know		
1	Does your personal					
	values have influence					
	on patient decision					
	шактид					

2Does Patients characteristics affect your professionalism	S t	
3 Does your Communication with patients throughout the procedure have influence on delivery of PrEP service		
4 Do you get judgmental while attending patients		
5 Do you get furious with the information given by patient as to why they are to get PrEP		
6Do you do PrEP orientation to new clients flu easily without problem difficulty.	> 7 1	
7 Have you been trained on new clinical guidelines for offering Prep		

C. Influence of time on Delivery of HIV PrEP in public health facilities

s/n	Statement	Strongly	Agree	Strongly	Disagree
		agree		disagree	
1	How would you describe				
	the workload you have				
	and time allocate				
2	How does your				
	perception of the				
	workload affect your	•			
	performance in general				
	based on time allocated				
	for your duty				
3	How can you describe the				
	average number of	•			
	patients you seen per day	r			
	and time spend				

Rate the following questions with respect to frequency (Circle the correct answer)

B) Rate the following questions with respect to frequency (Circle the correct answer)

s/n	Statement	None of the	A little of	Some of the	Most of	All of the
		time	the time	time	the time	time
					often	
					times	
4	How often do you find yourself not working as carefully as you should based on time given	1	2	3	4	5

If you were to judge your own performance, how would you rate yourself on the scale from

1 to 5, 1 being the poorest performance and 5 being the best performance?

Very poor	Poor	Neutral	High	Very high
1	2	3	4	5

If I had to ask your supervisor would she/he rate your performance on the scale from 1 to 5, 1 being the poorest performance and5being the best performance this on time management.

Very poor	Poor	neutral	High	Very high
1	2	3	4	5

D) Providers competence.

Rate the following questions with respect to frequency (Circle the correct answer)

Statement	Very bad	Bad	Moderate	Good	Very good
1 How would you describe your level of training in relation to service you offer					
2 How would you describe your orientation for patients who come for PrEP?					
3 How would you describe your understanding for NASCOP guidelines for PrEP?					
4 How do you describe knowledge you have for PrEP information					
5 How do you describe your level of screening patient for HIV PrEP alone based on NASCOP tool for assessment					
6 What is the level of feedback do you give to patient concerning PrEP?					

	Statement	Not at all	Strongly	Agree	Strongly	Disagree
			agree		Disagree	
1	Does noise affect your work					
2	Does your working					
	environment affect clients					
	privacy					
3	Does clients express					
	themselves freely based on					
	location of room					
4	Does location of facility					
	have influence on clients					
	privacy					

APPENDIX IV: DAILY ACTIVITIES SCHEDULE MONTH OF MARCH –JUN 2018

	APRIL	JUN 2018 -	AUG	SEP 2018	OCTOBER
	2018-MAY 2018.	JULY 2018.	2018		2018
Developing					
and writing a					
proposal					
Data					
collection					
Data analysis					
and					
presentation					
Writing the					
research					
report					
Project					
preparation					
and					
presentation.					

APPENDIX V. NACOSTI RESEARCH AUTHORIZATION PERMIT

