

**FACTORS INFLUENCING COMMUNITY PARTICIPATION IN
FIELD BASED HIV TESTING AND COUNSELLING IN SUBA
SUB COUNTY, HOMA BAY COUNTY, KENYA**

BY

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DECLARATION

This research project report is my original work and has not been presented for the award of a degree in this or any other university.

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DEDICATION

This research project is dedicated to my dear family for giving me ample time for studies and providing resources for my studies. I also dedicate it to my only daughter, Favor and my siblings, Evelyn, Beryl, Dorothy and Maurine for their moral support. Indeed, they are the unsung heroes and heroines behind my success.

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ABBREVIATIONS AND ACRONYMS

ARV:	Ant retroViral medicine
CHCs:	Community Health Campaigns.
CLHC:	Community-Led Health Campaign
CPM:	College of Performance Management
FBHTC:	Field Based HIV Testing and Counselling
FSWs:	Female Sex Workers
MJAP:	Mulago-Mbarara Joint AIDS Program
MOH:	Ministry of Health
MSM:	Men who have Sex with Men
MU-UCSF:	Makerere University – University of California, San Francisco
NACC:	National AIDS Control Council
OVC:	Orphans and Vulnerable Children
PEPFAR:	President’s Emergency Plan for AIDS Relief
PHC:	Primary Health Care
PLHIV:	People living with HIV virus
SEARCH:	Sustainable East African Research in Community Health
SLPs:	State-Lead Partners
TW:	Trans Women
UNAIDS:	Joint United Nations Programme on HIV and AIDS
USAID:	United States Agency for International Development
VCT:	Voluntary Counseling and Testing
VMHC:	Voluntary Medical Male Circumcision
WHO:	World Health Organization

ABSTRACT

Community participation is vital in field based HIV testing and counseling all across the world. When a community is engaged fully in a health care program, there is harmony and success in the implementation. This is because the program is geared towards community development. However, this practice is always affected by hurdles which influence the community participation in the field HIV testing and counseling. This project is going to discuss factors influencing community participation in the field based HIV testing and counseling in Homa Bay County, Suba Sub County. The main objectives of this study include; how community perception influences participation in field based HIV testing and counseling. Community perception includes stigma, attitude and culture. Another objective will be socio-economic issues which will focus on are marital/relationship status religion and income levels. The third objective is how structural factors influences community participation where its main components focused on confidentiality, time taken during service provision and testing setting. The final objective is the mobilization factors where its main component will be source of information on field tests such as use of barazas, community health volunteers (door to door) and public address system. The study used a descriptive survey research design. The targeted number was 103,054 community members and 145 healthcare workers in Suba sub county, and used Krejcie and Morgan table to determine sample size of 457. Proportionate Stratified random sampling was employed using the administrative ward units as the strata to avoid biasness in the study. Data collection was conducted using questionnaires for the residents and interviews for the key health care workers to get the required information. The collected data was checked for completeness and analyzed using Statistical Package for Social Scientist (SPSS) technique version 21. The study found that community perception affected the level of respondents' participation in field based HIV test and counseling. There is a negative correlation between social economic factors and the community participation in field based HIV tests and counseling. The structural factors have a positive significant influence on community participation in field based HIV tests and counseling. There is a positive correlation between mobilization strategies and the community participation in field based HIV tests and counseling. The study recommends an integrated approach to Field based HIV testing and counseling through additional health services in order to ensure maximum community participation. Health care workers should be encouraged to maintain privacy and confidentiality of clients. All the stakeholders involved in health should mobilize the community to participate in field HIV testing and Counseling. The researcher suggested that similar studies can be done in other sub counties with high HIV prevalence. It also suggests further studies on factors influencing uptake of HIV counseling and testing among fishermen in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study.

Field based HIV testing and counseling is one of the outreach programs which encourage community participation. Globally, community involvement has been the key in health related projects (Donaldson, Christie & Mark, 2014). Apparently, strong community participation is a key element of the successful projects that lead to development of primary health care (PHC). The concept of community involvement is the way forward for equitable health care (National Research Council, 2011). In more detailed manner community involvement in project implementation process can be defined in two fairly contrasting lines. Firstly, it can be viewed a movement in which the government and or donors use community resources (i.e. land labor and money.) to meet the cost of providing health care. Secondly, it can also be viewed as a form of empowerment in which the community takes part in the decision making process.

The Joint United Nations Program on HIV/AIDS (UNAIDS) recognizes the integral parts of community participation globally: raising awareness, policy and legal changes, care and support. In achieving the target, there has to be partnership between national government international organization civil society and communities (Dlamini, Skinner and Dirwayi, 2004). Government leadership forms partnership with civil societies in harnessing the skills available within communities. Campaigns against the spread of HIV transmission has been radically improved globally for the last decade. This is after three decade since HIV/AIDS was discovered. WHO states that the disease has already killed approximately 35 million people

across the world. This may include homosexuals, commercial sex workers, sexually active people, reckless blood transfusions and use of infected injections. In some of these countries especially the low income countries, the political dynamics and legislation always makes it difficult to create full awareness and reach numerous infected and affected people. In 2007, world leaders pledged to end the AIDS epidemic by 2030 as a global mandate. Even though the campaigns have helped in alleviation of half a million deaths there is still a long way to go to end stigmatization (Booth, 2008).

In Sub Saharan Africa, alongside Kenya, Mozambique, and Uganda, Africa is adversely affected with HIV cases. By the end of 2012, USAID stated that 25 million people were already living with HIV. About 30-35% of the sub Saharan Africa population has never visited any health center or field test and counselling. To achieve universal HIV testing, WHO recommends Field-Based HIV Test and counselling to the heavily affected areas. In this policy, all patients presenting at health facilities in generalized HIV epidemics, regardless of signs and symptoms should be offered a free test basing it on their free will (Getnet and Kloos, 2013). This made it a standard component of medical care. In 2015, global funding for HIV was \$19.2 billion.

Kenya being one of the Sub Saharan countries has the fourth largest HIV epidemic in the world. Suba Sub County in Homa bay county is one of the highly populated area with HIV infections in Kenya. Community participation is heavily influenced by community perception, mobilization, and social economic. UN Statistics showed that 1.6 million people were infected by the year 2016 (Gyapong and Boatman, 2016). This kills 36000 people annually. When the first

case of HIV was detected in 1984, it was one of the major causes of mortality in the country. Since then health care systems were on demand to reduce the HIV prevalence case.

1.1.1 Community participation in field based HIV testing and Counselling.

Community at large is always affected either directly or indirectly if any of its member is infected. The way a community reacts to the disease is an important step toward developing prevention programs(Gokhale and Gormley, 2013). One of the key pillars of HIV management is home based care. This approach began as an initiative to take medication to patients who were too sick. This approach began as an initiative to take medication to patients who were too sick to visit the hospital. This program has grown over the years to a point where it includes counselling for the community members, creating awareness, social mobilization and distribution of condoms.

In Brazil WHO wanted to use its citizens' as trials in their new invented vaccine for HIV. The Brazilian authority decried the deal saying their people are more worth than experiments (Haacker and IMF 2004). This was a great community participation process. Brazilians knew what was best for them and they needed a standardized vaccine not a trial and error. In 1987, Uganda PLHIV formed a group where they would visit each other, give comfort, and deal with stigmatization. This togetherness and community involvement made the group grow and spread first. They even got external support on prevention and cure. It is now the biggest organization in Uganda called AIDs support organization.

In the affected areas, especially in Kenya, there is always the available support of the community volunteers. Community participation has played a role in fighting HIV since the onset of the epidemic. It has a positive effect on safer sex practices, social integration and identity. The community is always the sole key in solving its own problems. Field based HIV testing and counseling is geared towards achieving a HIV free community. According to PEPFAR reports findings, every week more than 36000 children and 25,000 adults die from HIV/AIDS (Juma, 2001). They indicate that Western parts of Kenya is one of the highly affected regions with a high number of infected personnel with a total of 64% of the 1.5 million infected population in Kenya.

Homa Bay County is the leading region in Kenya with highest number of infected people with over 19,200 children infected, where only 50% has been introduced to treatment. It has a population of 963,794 and an area of 3,154.7 km². HIV prevalence rate is over 26% of the population. Which was compared to the mean of 5.9% nationally. Out of 1.6 million of HIV infected persons nationally, 150,000 persons are from Homa bay which covers 10%. 140,000 indicates the number of adults and 19,200 represent the number of children(William, 2017). 20.5% of the infected people in Homa Bay County are from Suba Sub County.

Field based HIV testing and counselling projects were initiated to cater for the patients who are ignorant and also who do not have the information about HIV/AIDS prevention methods and their accessibility. In the region there is a high level of illiteracy which may tend to be the reason for inadequate information about the spread, prevention and coping with stigmatization

in the area (Barnes, 2013). Sometimes, people develop ignorance behavior towards the spread of HIV, thus they do not take voluntary testing and counselling seriously.

However, the community participation in this program has a high influence on its success during implementation. Some of the factors include social factors, community factors, environmental factors mobilization and technological factors.

1.2 Statement of the Problem.

Field based HIV test and counselling has been implemented in Suba County but there has been several community participation hindrances as discussed in this research. UNAIDS reports, indicates that field based HIV testing and counselling has resulted to almost 80% of population in receive testing and counseling(UNICEF, UNAIDS, and Danmark, 2015). Those found positive opt to have access to ARVs in Kenya. Almost 80% of those who have access to ARTs have suppressed the virus successfully. It has also indicated that field based HIV testing and counseling has reduced new infections through awareness by 10% of their ARVs coverage areas. In Homa bay, Suba sub county, the infections have been 20 times high due to people who use desterilized needles during drug injections, high number of sex workers, early marriages and lack of adequate information concerning the spread of HIV/AIDS and its prevention(UNICEF, UNAIDS, and Danmark.2015). Out of four adults, one of them is likely to have a new infection.

The community has the power to alleviate HIV/AIDS infections and stigma in their own region. The more the community participates in field based testing and counselling, the more

they get enlightened on the same (Juma, 2001). This program ensures people receive testing services in their most convenient places or at their respective homes. Some patients are bed ridden whereas others are infected but they are just ignorant to visit the voluntary counselling and testing (VCT) center. This study researched on factors influencing community participation in field based counselling and testing of HIV in Suba sub county, Homabay county Kenya.

1.3 Purpose of the study

The purpose of this study was to research on factors influencing community participation in field based counseling and testing of HIV in Suba sub county, Homa bay county Kenya.

1.4 Objectives of the study

This study was guided by the following objectives:

- i. To determine how community perception influences community participation on field based HIV testing and counseling in Suba Sub County, Homa Bay County
- ii. To establish socio- economic factors influencing community participation on field based HIV testing and counseling in Suba Sub County, Homa Bay County
- iii. To assess structural factors influencing community participation in field based HIV testing and counseling in Suba Sub County, Homa Bay County.
- iv. To determine mobilization strategies influencing community participation in field based HIV testing and counseling in Suba Sub County, Homa Bay County

1.5 Research questions

This study answered the following research questions:

- i. How do community perception influence community participation in field based HIV tests and counseling in Suba Sub County, in Homa Bay County?
- ii. How do socio-economic factors influence community participation in field based HIV tests and counseling in Suba Sub County in Homa Bay County?
- iii. How do Structural factors influence community participation in field based HIV tests and counseling in Suba Sub County in Homa Bay County?
- iv. How do mobilization strategies influence community participation in field based HIV test and counseling in Suba Sub County, Homa Bay County?

1.6 Significance of the study

This study would assist in determining the factors influencing the success of field based HIV test and counselling as far as community participation is concerned. It would bring deeper understanding of these factors and how they can be manipulated to bring about the successful project implementation required (Stolley & Glass, 2009). The information collected from this research would be of assistance to Suba Sub County in Homa Bay County, HIV researchers, NGOs and other stakeholders in planning for new HIV prevention strategies, care and treatment and develop the best model preferred by community members.

HIV/AIDS has been a major hindrance in the economy of Kenya. It was evidently found in Kenya probably in the late 1970s during the first president Jomo Kenyatta regime. Since then there has been measures to alleviate the spread and suppress the virus to those infected (Juma,

2001). International aid has been provided through multinational organizations for instance USAID, PEPFAR and also local based organizations to assist their fellow countrymen in fighting against the disease. Creating awareness and sensitization has been a process since in the past people did not know of such a disease (Getnet and Kloos, 2013). The death toll was high as compared to the present time.

This study on HIV Field test and counseling in community participation and the factors affecting its success will be a stepping stone in creating an Aids free generation. This study is believed to contribute to the wider body of knowledge in promoting field based HIV testing among community members and act as a case study to other programs facing the same problem in generating an AIDS free era

1.7 Basic assumptions of the study

The study assumed that community participation in field based HIV test and counseling is at stake. During project implementation, community participation is vital. Due to high level of HIV/AIDS infection cases, in the sub county, the study assumed there must be a loophole as far as maximum community participation is concerned. In addition the study assumed that it is assumed that the respondents answered all questions correctly and they were highly supportive.

1.8 Limitation of the study.

The limitation of this study is that the area of study has wide geographical coverage and therefore it was time consuming and tiring. The researcher had to walk for distances since

some of the areas in Suba Sub County are very remote and have hilly terrain. Sometimes the researcher was forced to use a motorbike to access some community members

Also, the researcher experienced that not all respondents gave genuine information. Some of the information they gave was not accurate because of fear of the unknown. They were not very confident in disclosing some of the information we needed. The researcher had to give them an assurance that their information was confidential and it cannot be used against them.

1.9 Delimitation of the study

The study was delimited only to cover the demographical and geographical area in Suba Sub County. The community's participation towards field based HIV tests and counseling was evaluated through their response to the questionnaires. The study was only in process at the specified time, and scope targeting the local community. We only gave questionnaires to the respondents who were willing and comfortable for the exercise. This was for retaining confidentiality. The project delimited on researching on the specified topic so as to be on the projects' budget.

1.10 Definition of significant terms used in research.

Community: A collection of households that share common interests, usually made up of at least 5000 people (or 100 households) living in the same geographical area;
And normally share similar culture, social practices, beliefs, norms and value Systems.

Community participation: this is when a community organizes itself and takes responsibility for managing its problems and taking part in a program geared towards their growth and development. Taking responsibility includes identifying the problems, developing actions, putting them into place, and following through.

Mobilization strategies- These are the strategies of bringing together as many stakeholders as possible to raise people's awareness of and demand for field based HIV test and counseling programme, to assist in the delivery of resources and services, and to strengthen community participation for sustainability and self-reliance. A lot can be achieved when people from different parts of the community share a common goal and actively participate in both identifying needs and being part of the solution.

Community factors: these are factors relating to the community that strongly influences their community participatory behavior. These factors vary from one community to another that results in a different culture and attitude, Stigma, myths and beliefs, which affects their response towards community involvement in a development project.

Field-based Counseling and Testing – It is the outdoor assessment where HIV testing and counseling services conducted by trained HTC service providers in someone's home or generally accepted venues within a community close to home. The main purpose of FBTC is to bring HTC services to households or community, overcoming some of the barriers of access to testing services and providing testing to persons who might not otherwise seek services in the clinical setup.

Social economic factors - is the social science that studies how economic activity affects community participation and is shaped by social processes. In general it analyzes how societies progress, stagnate, or regress because of their local economy and this eventually affects their community participation levels.

Structural factors- this are factors that received by the community, which are offered by the health centers which affect their community engagement levels. They include the privacy and confidentiality, time taken during the process and the field & health care settings.

1.11 Organization of the study.

This research project is organized into five chapters. Chapter one covers the introductory part of the study, background of the study, statement of the problem, introduction of the variables in the global, regional, and national perspective as in the research topic, purpose of the study, objectives of the study, the research questions, significance of the study, the study limitations, delimitations, and the assumptions of the study. Chapter Two covers literature on the study and its objectives. It gives reviews that have been done on community participation on field based HIV test and counselling across the globe. The chapter also comprises of the theoretical, conceptual and summary of literature review.

Chapter Three outlines the methodology and tools that are used to collect data in the study. It points out the research designs, target population, sample of the population, mode of sampling, procedures of sampling, data collection and analysis, validity and reliability of data collection

and operationalization of the variables. Chapter Four covers the research findings and discussions as per the objectives of the study. Under each objective, data was presented as follows: introduction, presentation of the results, highlights of the results and the interpretation of the discussed results. Chapter Five focused on the summary of the findings and practical implications of the results. It outlines the main findings of the study as drawn from chapter four as well as providing conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section contains information and reviews concerning community participation in field based HIV tests and counseling programs. It contains theoretical and empirical review, the conceptual framework as well as highlighting the research gap that existed.

2.2 Community participation

Strong community participation is a key element for a successful project that leads to growth and development of a certain region. Equitable health care is always achieved when community participation is put on the frontline (Plummer, et al, 2004). In this review community participation will describe the peoples 'contribution to prevent the spread of the HIV/AIDS virus and to improve the quality of life of those infected. This is by ensuring there is zero stigma and ease access to ARVs for the People living with HIV (PLHIV) (World Bank, 2012).

The World Bank conducted a multi-study evaluation of community responses to HIV from 2010 to 2012 in order to provide robust evidence of community-level results. The study involved communities in research, engaged national researchers and AIDS authorities in demonstrating results, and worked closely with civil society to ensure that findings were relevant. The main finding from the study was that the community response is a cornerstone of

the response to HIV and that it creates substantial value relative to the initial investment (World Bank, 2012).

A study done by Joint United Nations Programme on HIV/AIDS (UNAIDS) globally, verified community participation components as raising awareness, support and care, prevention, alleviating the impact and coming up with policies and legal changes to favor the PLHIV (Haacker and IMF, 2004). Under all circumstances community members are affected either directly or indirectly by the implementation of a health care program in their area. The way a community reacts to a disease is a major step in coming up with a solution and developing a solution. Communities which have stigma problems, create a challenging environment for field tests and counselling and care. In less stigmatized communities there is ease in empowering community personnel and PLHIV (Hutton, 2008).

A study done in Nigeria to evaluate the feasibility of community participation and uptake of a community-led health campaign (CLHC) planned and implemented by village leaders and local clinic workers. Over five months in 2014, locally elected village leaders and Ministry of Health (MoH) clinic staff in a rural parish in Nigeria planned a census followed by a CLHC, after training by two SEARCH trial consultants and by leaders from a neighboring parish that had previously participated in a SEARCH health campaign. We defined feasibility as: (1) elected leaders' participation in training and implementation of pre-campaign census and mobilization activities; (2) implementation of all campaign activities by MoH-funded, local clinic staff; and (3) community participation in the campaign, including point-of-care screening for HIV, malaria, hypertension and diabetes, and same-day referral for male circumcision and

family planning (FP). Costing of all salaries and supplies was conducted. The findings of the study were that elected leaders from all eight villages in the parish participated in CLHC training. They and local clinic staff met monthly to select and plan CLHC services. Village leaders then leveraged existing volunteer health teams to perform a door-to-door census, enumerating 5,202 parish residents over 2 weeks. 2,753 (53%) residents participated in the 6-day CLHC. Of 1,584 adult participants, 1,474 (93%) tested for HIV: 105/1,474 (7.1%) tested HIV positive (WHO, 2015).

A study done in Western Uganda, The community health campaign was designed based on collaboration between Makerere University – University of California, San Francisco (MU-UCSF) investigators and the Mulago-Mbarara Joint AIDS Program (MJAP) in Uganda, with Ministry of Health (MOH) support. The campaign was implemented in Kakerere parish, Mbarara District, a rural community in southwestern Uganda and designed to deliver free, high-throughput (>1,000 residents/day), multi-disease services to all parish residents over five days in 2011. Staff members were hired locally for a two-week period: one week for training on campaign procedures (culminating in a one-day dress rehearsal of the campaign procedures), and one week for the campaign. All staff had prior training and work experience to match their role within the campaign. The pre- and post-test counselors had training and counseling experience from HIV clinics in Mbarara municipality. The laboratory workers were hired from local public and private clinical laboratories and were required to have, at a minimum, basic skills in finger-prick based diagnostics including rapid HIV-testing. Staff with interview questionnaire experience and computer literacy performed consent procedures and computer-based questionnaires, including symptom screening. All staff members were fluent

in the local language, Runyankole. Eleven local village administrative councilors from Kakerere Parish were engaged in planning the campaign to ensure that services addressed parish needs. They designed and executed community mobilization activities one month before the campaign, including church and mosque announcements, distribution of posters, and radio announcements. To maximize participation and reduce transport costs, campaign activities took place at three well-known locations across the Parish (Booth, 2008).

The high level of unknown HIV predominant cases in East Africa is the main hindrance for HIV Prevention, care and treatment. Community health campaigns (CHCs) offering HIV testing is the way forward to expanding HIV testing rates and identifying unrecognized HIV infected people. However, a greater understanding of population level uptake is needed to maximize effectiveness of this approach. A consolidated community is aware of HIV cases in their area and they take actions to reduce the vulnerability, mobilize resources, monitor and evaluate to enhance a healthy society. Nevertheless, the community seeks help and support externally when need arises. In Homabay county Suba Sub County a study was done on HIV/AIDS strategic plan in the county. Some of the community participation variables indicated were sexual attitudes and behaviors and Fisher folk and fishing industry networks. Sexual attitudes and behaviors involved: low perception of risk and multiple sexual partnerships, women were found to be weak to negotiate safe sex, men who have sex with men MSM, permissiveness in young male boy sexuality who are encouraged to have multiple girlfriends. In fisher-folk and fishing industry, the researcher found that engagement with female sex workers residing in the island of lake Victoria, who practices immorality with beach management unit, administration and security personnel (Ndati, 2011).

2.3 Field-based HIV testing and Counseling

A study was done in North America on Field based HIV testing and counseling (WHO, 2013). PubMed was searched on 4 March 2013, clinical trial registries were searched on 3 September 2012, and Embase and the World Health Organization Global Index Medicus were searched on 10 April 2012 for studies including community-based HTC (i.e., HTC outside of health facilities). Randomized controlled trials, and observational studies were eligible if they included a community-based testing approach and reported one or more of the following outcomes: uptake, proportion receiving their first HIV test, CD4 value at diagnosis, linkage to care, HIV positivity rate, HTC coverage, HIV incidence, or cost per person tested (outcomes are defined fully in the text). The following community-based HTC approaches were reviewed: (1) door-to-door testing (systematically offering HTC to homes in a catchment area), (2) mobile testing for the general population (offering HTC via a mobile HTC service), (3) index testing (offering HTC to household members of people with HIV and persons who may have been exposed to HIV), (4) mobile testing for men who have sex with men, (5) mobile testing for people who inject drugs, (6) mobile testing for female sex workers, (7) mobile testing for adolescents, (8) self-testing, (9) workplace HTC, (10) church-based HTC, and (11) school-based HTC. The Newcastle-Ottawa Quality Assessment Scale and the Cochrane Collaboration's "risk of bias" tool were used to assess the risk of bias in studies with a comparator arm included in pooled estimates. 117 studies, including 864,651 participants completing HTC, met the inclusion criteria. The percentage of people offered community-based HTC who accepted HTC was as follows: index testing, 88% of 12,052 participants; self-testing, 87% of 1,839 participants; mobile testing, 87% of 79,475 participants; door-to-door

testing, 80% of 555,267 participants; workplace testing, 67% of 62,406 participants; and school-based testing, 62% of 2,593 participants. Mobile HTC uptake among key populations (men who have sex with men, people who inject drugs, female sex workers, and adolescents) ranged from 9% to 100% (among 41,110 participants across studies), with heterogeneity related to how testing was offered. Community-based approaches increased HTC uptake (relative risk [RR] 10.65, 95% confidence interval [CI] 6.27–18.08), the proportion of first-time testers (RR 1.23, 95% CI 1.06–1.42), and the proportion of participants with CD4 counts above 350 cells/ μ l (RR 1.42, 95% CI 1.16–1.74), and obtained a lower positivity rate (RR 0.59, 95% CI 0.37–0.96), relative to facility-based approaches. 80% (95% CI 75%–85%) of 5,832 community-based HTC participants obtained a CD4 measurement following HIV diagnosis, and 73% (95% CI 61%–85%) of 527 community-based HTC participants initiated antiretroviral therapy following a CD4 measurement indicating eligibility. The data on linking participants without HIV to prevention services were limited. In low- and middle-income countries, the cost per person tested ranged from US\$2–US\$126. At the population level, community-based HTC increased HTC coverage (RR 7.07, 95% CI 3.52–14.22) and reduced HIV incidence (RR 0.86, 95% CI 0.73–1.02), although the incidence reduction lacked statistical significance (Plummer, et al, 2004). No studies reported any harm arising as a result of having been tested.

A study done in Tanzania on field based HIV testing and counseling indicated that, despite high awareness on VCT facilities, 65.8% male and 46.3% female of 15–24 years are not aware of their HIV status and unfortunately, this is where the HIV epidemic is concentrated. In Arusha, 69.8% male and 30.3% female of 15–24 years had never tested. Only 50% female and

39% male in secondary or higher education in Tanzania know their HIV status, giving an average of 45% VCT uptake among them (Simon, 2012). The low response to VCT among young people is said to be associated with different factors, ranging from fear of knowing their HIV status to the limiting factors towards the service and social issues influencing the attitudes and behaviors of the service providers. However, approximately 50% increase of HIV related deaths among adolescents between 2005 and 2012 was found to be contributed by inadequate friendly VCT services, poor prioritization of adolescent issues, inadequate treatment and lack of support to the young people. A cross sectional study that involved quantitative methods was conducted in Arusha City which is among the 7 councils in Arusha region, located in the northern part of Tanzania. The council has 3 divisions, 19 wards and 51 secondary schools of which 23 are public secondary schools and 28 are private secondary schools with a total of 28,000 students in all secondary schools. Among 400 students, 50.5% were male. The age of the respondents ranged between 13–24 years with a mean age of 16.4 (± 1.9) years. Participants were from Form I up to VI. Form I-II constituted 27.8%, Form III-IV, 61% and Form V-VI, 11.2%. Christians comprised 82.8%, Muslims 16.2% and other denominations 1%. 68% were in day schools and 32% in boarding schools. Meanwhile 46.5% were in Public schools, 28.5% in Private schools and 25% in Faith-based schools (Simon, 2012).

A study done in Kibera Kenya, 2008-2009 by Kenya Demographic and Health Survey indicated that, HIV prevalence among adults aged 15 to 49 is 6.3 percent. Knowledge of where to get tested for HIV is high—92 percent of women and men know where they can be tested. Despite this knowledge, only 42 percent of men and 58 percent of women have ever been tested for HIV (Kenya National Bureau of Statistics and ICF Macro 2010). The field-based

model is highly acceptable (Fylkesnes and Siziya 2004; Negin et al. 2009), and by reaching clients in their homes, home-based HTC removes many of the barriers often associated with facility-based or provider-initiated FTC in Kenya (Weinreb and Stecklov 2009). It also has the potential to reach many who do not consider themselves to be at risk for HIV and who would not seek out testing.

A study done in coastal Kenya, Participants were offered oral HIV testing kits (HST) at US\$1 per test. Within one week of buying a test, participants were contacted for post-test data collection and counseling. The primary outcome was test uptake, defined as the proportion of invited clients who bought tests. Views of participating pharmacy staff were solicited in feedback sessions during and after the study. Between November 2015 and April 2016, 463 clients were invited to participate; 174 (38%) were enrolled; and 161 (35% [95% Confidence Interval (CI) 31–39%]) bought a test. Uptake was higher among clients seeking HIV testing compared to those seeking other services (84% vs. 11%, adjusted risk ratio 6.9 [95% CI 4.9–9.8]). Only 4% of non-testers (11/302) stated inability to pay as the reason they did not take up the test. All but one tester reported the process was easy (29%) or very easy (70%). Demand for HST kits persisted after the study and participating service providers expressed interest in continuing to offer the service. Pharmacy HST is feasible in Kenya and may be in high demand. The uptake pattern observed suggests that a client-initiated approach is more feasible compared to pharmacy-initiated testing. Price is unlikely to be a barrier if set at about US\$1 per test (Bartels, 2015).

2.4 Community perception and implementation of Field-based HIV testing and counselling.

These are the factors that contribute to the locality wellbeing. Stigma is experienced when a community realizes someone is infected they tend to isolate themselves from such a person. The feeling of neglect can make the infected or the affected lack the need to participate in the community project. Fear is the dread or emotional distress felt by community member (s) due to the lack of understanding the sole purpose of the exercise. In most cases it is usually brought by the level of illiteracy or when someone is already infected (Stolley & Glass, 2009). A study conducted by Goffmans theorization in Kenya indicate that stigma has influenced social distancing and increases the fear of being judged which in turn affects community participation (Liamputtong, 2013).

A study conducted in China on how stigma affect their community participation on field based HIV testing and counseling. The study indicated there are an estimated 650 000 people living with HIV/AIDS (PLWHA) in China. HIV infection impacts not only PLHA but also their whole family. The study was conducted in Anhui province, a region in China with a high prevalence of HIV/AIDS. In 2005, it was estimated that there were between 10 000 and 49 999 HIV infected people living in this area. Over two-thirds of the existing HIV infections in Anhui were caused by paid plasma donation .As the spread of HIV through plasma donation primarily occurred in the early 1990s, many HIV-infected individuals in this province currently have children aged 6–18.Given the family-oriented structure of Chinese society, HIV can have a devastating effect on Chinese families. Many PLHA are parents and caregivers who are

supposed to attend to the needs of their child; they have to cope with their own physical health symptoms, complex medication regimens, stigma, and fear of AIDS-related death, and must also care for their families. The psychological burden and stress affect their overall mental health, and depression is common among parents and caregivers as they struggle with financial limitations. Many caregivers find that they can no longer work as the disease progresses and their health deteriorates, and unemployment leads to extreme economic hardships. The majority of the caregivers interviewed in the quantitative study were parents (84%), 80% were HIV-positive, and 58% were female. About 54% of the caregivers rated quality of life as poor and 85% reported frequent negative feelings. The annual income per person for HIV/AIDS affected families was much lower than the provincial average. HIV also impacted family relations and family economic situation. The impact of HIV on children was reflected in children's school performance. Children's nutrition and health were also compromised Taylor, 2006).

According to a study done on HIV vaccine and prevention study participation among Young Black MSM and Trans women in New York City indicated that Black men who have sex with men (MSM), and Trans women (TW) shoulder disproportionate burden of HIV. However, they are unrepresented in HIV vaccine trials. Men who have sex with men (MSM) and Transgender Women (TW) have been disproportionately affected by the HIV/AIDS epidemic. In 2014 MSM accounted for 83% of all HIV incidence in men and 67% of all HIV incidence in the U.S. Black MSM (BMSM) comprised the largest number of new diagnoses (CDC 2014). Despite an increase in new diagnoses among overall BMSM, young BMSM (aged 13–24) experienced only a slight decline of 2% in new diagnoses since 2010. TW have also shouldered

a large portion of the HIV burden in the U.S. In a meta-analysis, (Herbst et al.2010) found that approximately 27% of TW were HIV-infected at study initiation and 12% self-reported having HIV. Moreover, Black TW had higher rates of HIV infection, with 56% being newly diagnosed and 30% self-reporting being HIV-positive. In the study, the method of data collection was through Self-administered online questionnaires were administered to 18–29 years of NYC residents who identified as Black MSM and TW, assessing demographics, awareness and willingness to participate in HIV vaccine trials, barriers and facilitators associated with willingness, and sexual behaviors. Frequency summation was performed to determine barriers and facilitators, and logistic regression analysis was performed to determine factors association with expressed willingness. Black MSM and TW who reported engaging in risk behaviors had a 61% lower likelihood of participating in HIV vaccine trials when compared to those who did not report engaging in any risk behavior. Facilitators associated with trial participation were: cash compensation, confidentiality regarding participation, public transportation vouchers, gift cards, and food or grocery vouchers as potential facilitators for trial participation. Conversely, fear of side effects from the vaccine, concerns about testing positive on routine HIV testing due to an HIV vaccine, limited knowledge of research trials, and fear of being judged as HIV-positive were perceived as barriers(Richardson, 2013).

According to a research done from the Malawi Diffusion and Ideational Change Project, on attitudes and beliefs of community participation and field based HIV test and counselling conducted across the three regions of Malawi (Bignami-Van Assche et al. 2004). As part of the longitudinal data collection, respondents were interviewed and tested for HIV in 2004. After testing, respondents were offered randomly assigned monetary incentives to learn their HIV

results ranging from zero to three dollars. Two months later the HIV test results were available at mobile counseling centers that were randomly located within the study sites (Thornton 2008). In 2006, approximately two years after the HIV test results were available, respondents were re interviewed and asked questions about beliefs and sexual behavior. Several questions asked respondents to estimate the number of their relatives, friends, and acquaintances who may have died from AIDS. A limited number of questions on sexual behavior were asked including condom use with current and up to three past sexual partners or whether the respondent had multiple sexual partners. Our analytical sample consists of those who had an HIV test in 2004, were offered financial incentives to learn their HIV results, and were interviewed in 2006. Behavioral responses to learning about community level risk are likely to depend on HIV status. As more people in the village learned their HIV results and beliefs about overall AIDS risk decreases, behavior responds with a significant decrease in the likelihood of using condoms and no change in multiple partnerships. In other words, if 10 percent more community members learn their HIV results (approximately four people), individuals are 38 percentage points less likely to use a condom.

As access to HIV testing increases across Africa, more people are learning their HIV status and overwhelmingly, they are learning that they are HIV-negative. While HIV testing is important for enrolling individuals who are HIV-positive into treatment, both for themselves, and to protect their partner or unborn children, behavioral responses to information acquired by community-based testing is important to consider. Learning that more friends or neighbors may not be infected or may not have died from AIDS reduces perceptions of HIV risk within the pool of potential sexual partners. From a strictly individual welfare-maximizing perspective,

more accurate beliefs allows for optimal decisions, and in fact, for many whose risk of HIV is low, reduction of condom use may increase personal utility. However, given the negative externalities of HIV/AIDS, reductions in condom use could be a concern for social welfare(Alexander, 2003).

2.5 Social- economic factors and implementation of Field Based HIV Testing and Counselling

According to a study from the Tsogolo la Thanzi (TLT), it was examined how relationship power shapes young people's decisions to test for HIV in rural Malawi, through field based tests and counseling, a high-HIV prevalence setting undergoing rapid expansions in testing services. The researcher used generalized estimating equations (GEE) to examine associations among five constructs of relationship power (socioeconomic inequalities, relationship dominance, relationship violence, relationship unity, and mistrust), perceived risk, and receiving an HIV test over a 16-month period. The results indicate that young Malawians are testing for HIV at relatively high rates, repeatedly, and not just during pregnancy. Over the study period, 47.3% of respondents received at least one HIV test outside of TLT (range: 0–4). The GEE analysis revealed that men and women with higher levels of relationship unity were less likely to test for HIV. For men, being a victim of sexual coercion was an additional barrier to testing. Women's testing decisions were more strongly influenced by perceptions of a partner's risk for HIV than their own, whereas men relied more on self-assessments. The results highlight that testing decisions are deeply embedded within the relationship context, which should be considered in future HIV testing interventions. Malawi has some of the

highest rates of HIV infection in sub-Saharan Africa; 11% of adults are HIV infected (MDHS, 2011). HIV prevalence is higher among women than men (13% and 8%, respectively) and is the highest in the southern region (15%), where this study was situated. HIV testing and counseling is offered through integrated health services, including antenatal care, and at stand-alone testing centers, clients' homes, and workplace sites. As of 2010, 73% of women and 53% of men had ever been tested for HIV, which reflects a dramatic increase from 2005, when only 17% of adults knew their HIV status.

The data from Tsologo la Thanzi (TLT; "healthy futures" in Chichewa), a population-based panel study on reproduction and AIDS among young adults. Study procedures for TLT have been described elsewhere. To summarize, a random sample of women aged 15 to 25 was selected from a household listing of the Balaka town in southern Malawi. Women were asked to recruit up to three male partners through the use of incentive-based tokens. Longitudinal survey data were collected at four-month intervals over a period of approximately three years (for a total of eight waves). In wave 3, respondents were asked to respond to a series of statements on relationship power if they reported a current serious sexual partner, including a spouse, live-in partner, or boyfriend/girlfriend. The relationship power questions were asked with regard to the most serious relationship. For married respondents, their spouse automatically served as the reference partner. This baseline set of heterosexual couples (466 couples or 932 individuals) was merged with their corresponding data from waves 4 to 7. This allowed us to evaluate whether relationship power measured at wave 3 had an effect on HIV testing uptake over each subsequent four-month period.

At the start of the study, the women and their partners were also assigned to three equal groups to assess how knowledge of HIV status influences sexual behavior. Group 1 received regular HIV testing at every wave. Group 2 received an HIV test at the end of the first year and then again at the end of the study. Group 3 received an HIV test only at the end of the study. We included all three groups in the analysis, because respondents who tested via TLT could also have tested outside of the study. Respondents were not told when they would be tested, and thus if they desired to learn their status, knowledge of the TLT testing schedule would have had little impact on decisions to test. It was hypothesized that if men dominated the relationship, women would be less likely to get tested for HIV through the division of power. To the contrary, the adjusted models showed that women in male-dominated relationships had 37% higher odds of testing as compared to women in egalitarian/female-dominated relationships, although it did not reach statistical significance. For men, it was hypothesized that male dominance would be negatively associated with men's uptake of testing. However, being in a male-dominated relationship was not significantly associated with HIV testing uptake for men in the crude or adjusted models (Claussen & Van Brandwijk, 2008).

Another study done in Dolpa district on how income level affect men participation on field based HIV testing and counselling. The study took place in 2009 in the Dolpa Health District and adopted a triangulation mixed methods design. The quantitative component relied on data collected through a structured survey on a representative sample of 1130 households. The qualitative component relied on 38 in-depth interviews, with men purposely selected to represent variation in testing decision, age, and place of residence. A two-part model was conducted, with two distinct outcome variables, i.e. "being offered an HIV test" and "having

done an HIV test”. The qualitative data analysis relied on inductive coding conducted by three independent analysts. Of the 937 men, 357 had been offered an HIV test and 97 had taken the test. Younger age, household wealth, living in a village under demographic surveillance, and knowing that HIV testing is available at primary health facilities were all positively associated with the probability of being offered an HIV test. Household wealth and literacy were found to be positively associated, and distance was found to be negatively associated with the probability of having taken an HIV test. Qualitative findings indicated that the limited uptake of HIV testing was linked to poor knowledge on service availability and to low risk perceptions. With only 10% of the total sample ever having tested for HIV, our study confirmed that male HIV testing remains unacceptably in developing countries. This results from a combination of health system factors, indicating general barriers to access, and motivational factors, such as one’s own knowledge of service availability and risk perceptions. Our findings suggested that using antenatal care and curative services as the exclusive entry points into HIV testing may not be sufficient to reach large portions of the male population. Thus, additional strategies are urgently needed to increase service uptake.(William, 2011).

Marital status/relationship marital status affects community participation because ones decision affects the other person’s decision. This may be a situation between husband and wife, family members, neighbors, in-laws. They tend to have the same/different point of view and this may affect their participation. Religion- religion affects the level of community participation according to what they believe in. in some religion there is support for community participation and on others they are against it. For instance, the Catholic Church will not recommend the community participation on supply of condoms in field based HIV tests and counseling.

Income affects the level of community participation according to the type of work that you do to earn the income. Sometimes, some community members are poor so they tend to work for long hours. Such may not be able to participate in any community project because they are tied up. Some may be jobless and this creates more time to participate on community programs (Sharma, 2006).

2.6 Structural factors and field based HIV test and counselling implementation

In the health facilities there are factors that can affect the community participation. The services offered by the specialists may hinder their level of involvement. This structural factors when handled positively influence community participation for its benefits. Some of the studies done initially involving the same include.

A study done in Ghana in 2016, on psychological trauma patients experience in their desire to access health care. The study on which this article is based was part of a larger project made up of two interrelated studies on the provision and use of VCT and ART in Ghana. The hospitals were purposively selected for the study because they were among the few health facilities in the Ashanti Region which benefited from the initial scale-up of VCT and ART in Ghana. The study was also conducted in the communities served by the two hospitals; its focus was on the social and cultural constructions of blame, shame and stigma.. The researchers were of the view that a health worker who satisfied these basic requirements could effectively answer questions on the core issues of the study. Over 100 clients participated in the study as the secondary target group. Similarly, selection of some clients for interview was also based on the following criteria: (i) health condition; and (ii) willingness to be interviewed. This requirement

for clients was motivated by the fact that those who looked very sick and traumatized by HIV-positive diagnosis would be unwilling to talk about the challenges they were going through.

Data were compiled using qualitative research methods including participant observation in the diverse counseling, testing and clinical settings where clients accessed care and treatment, informal conversations and in-depth interviews. These approaches were complemented with a review of hospital records and socio-demographic characteristics of clients. During field research, the lead author participated in daily activities in the clinic and observed interactions between health workers, clients and peer educators. For instance, he participated in testing and counseling sessions and consultations and observed interactions between counselors and clients. More than forty (40) health workers and over 100 clients in the VCT centers and ART clinics were observed. In all, 24 health workers who provided counseling, testing and treatment were selected and interviewed, including six nurses, five medical doctors, one pharmacist technologist, two laboratory technicians, one disease control officer, five counselors, one health assistant and two cleaners. Twenty-two clients were also interviewed, made up of twelve women and ten men. The data collection instrument was an interview. In the findings there were cases when some health workers were said to have revealed the status of clients to their own colleagues in other units of the hospitals in line with hospital administrative procedures. Both health workers and clients cited instances to support this point. This is not new; in the Ghanaian clinical encounter, the frequency of depersonalization of the patient with its attendant abuse of patient rights led to the introduction of the Patient's Charter by the Ghana Health Service in the mid—2000. This charter is a compendium of the rights and responsibilities of patients and the general moral principles and rules of behavior for all public health personnel.

In more specific terms, section (b) of the code of ethics for health personnel stipulates: All service personnel shall respect the right of patients/clients, colleagues and shall safeguard patients/clients' confidence. In affirmation of this, section (f) of the code states: All service personnel shall respect confidential information obtained in the course of their duties. They shall not disclose such information without the consent of patient or person(s) entitled to act on their behalf, except where the disclosure is required by law or is necessary in the public interest. It is therefore worth noting that such disclosures as observed in the present study can erode the trust clients have in health workers and keep clients away from the health centers (Ghana AIDS Commission, 2006).

Another study was done in Western Kenya (Homa Bay County) on provider's perspectives and implications on quality of HTC services. Two primary data collection methods supported by the Donabedian's model of healthcare were used to explain the challenges in the provision of HTC services and their implications on quality of HTC services. This study used two primary data collection methods during five months: semi-structured interviews with HTC service staff (nurses and lay counsellors) and a non-participant observation of the physical environment such as counsellors' offices, waiting rooms, HIV testing space and equipment. Using observations in addition of semi-structured interviews may allow having a better understanding of the phenomena under study and increasing the validity of the study. This consisted of semi-structured individual interviews with 6 nurses and 16 lay counselors and a non-participant observation of the physical environment for HTC by site. The study sites were the prevention and voluntary testing and counseling centre (PVTCC) of the six hospitals in Homa Bay County. The study reveals concerns about confidentiality and privacy during the counselling

sessions due to inadequate and limited space. An absence of consent, even verbal, was reported in one PVTCC. There is no specific accredited training curriculum that leads to a formal registration as a PVTCC staff, and some lay counsellors work without training. Lay counsellors carry the burden of HIV counselling, but the majority of them work for many years without remuneration and recognition. Another quality challenge is the high workload in the district hospitals' lab, which leads to long waiting times for HIV test results, thus contributing to failure to return for results. The findings of this study highlighted some issues such as lack of adequate space and equipment for HIV testing and counselling that hinder the quality of HTC services and should challenge the health authorities in Homa Bay County on the need to reorganize HTC services and create a national HIV quality assurance program(Akwara, 2010)

Privacy and confidentiality is achieved when the community member participation depends on confidence with the health centers concerning their own personal information and their HIV status. They do not want to share such confidential information because they have trust issue (Appadurai,2016).Time taken sometimes in community participation during field based HIV test and counselling exercise may take longer than expected. Either the process is slow or there are many people involved. Some people are impatient because of their own personal reasons. This may affect their participation level.

2.7 Mobilization strategies and implementation of Field based HIV test and counselling

A lot can be achieved when people from different parts of the community share a common goal and actively participate in both identifying needs and being part of the solution.

Community mobilization helps to empower communities and enable them to initiate and control their own development. Past studies were done before on mobilization strategies and implementation of field based HIV test and counselling as indicated below.

A study was done in India, in evaluating the Added Value of Community Mobilization on HIV field test and Prevention Outcomes among Female Sex Workers in India (Booth, 2008). It was laid out to bring the Understanding of how community mobilization may contribute to program success is complicated by several factors. First, there is no common definition of community mobilization interventions range from community education and sensitization to community-led structural interventions and effects of such a wide range of interventions are likely to vary just as widely. Further, few authors have laid out a conceptual model or program theory that explains how community participation and mobilization is expected to lead to specific outcomes: what is the mechanism of effect? Thus, we lack consensus on what intervention activities constitute a community mobilization intervention, what a “mobilized community” looks like, and how that mobilization is expected to result in the desired program outcomes. Evaluation is further hampered by the fact that community mobilization is an inherently complex and dynamic process that occurs over time, evolving in ways that may be heavily dependent on the community and the context in which it is undertaken(Kadushin, 2013).

Avahan, the India AIDS Initiative funded by the Bill and Melinda Gates Foundation, works with a number of high-risk groups in the six Indian states with the highest HIV prevalence. Avahan funds one or two state lead partners (SLPs) in each state who then fund and work with hundreds of local non-governmental organizations (NGOs) to implement the intervention.

Avahan's scale of reaching nearly 200,000 female sex workers (FSWs) in 83 districts across 6 states with a combined population of 300 million along with its work with a large range of high-risk groups (e.g., FSWs, male clients of sex workers, truck drivers) has been unparalleled in community mobilization and HIV field test and prevention (Paul, 2010). Thus, Avahan provides a unique opportunity to evaluate the potential added value of a community mobilization intervention on HIV prevention outcomes as well as to examine the impact of community mobilization on additional outcomes that would not be expected from more traditional, targeted intervention strategies.

The primary goal of Avahan is to reduce HIV infection by promoting risk reduction behaviors and supporting an enabling environment among high risk groups. Across Avahan, a common core of targeted intervention activities are implemented including drop-in centers, peer outreach, condom distribution, crisis response and services for sexually transmitted infections (STIs). The community mobilization component of Avahan consists of the work to engage sex workers in program activities, from encouraging participation in initial community mapping and outreach and membership in project committees, to facilitating their management of crisis response teams and their taking leadership roles in formal and informal community based organizations; the greater the participation, engagement and ownership of the intervention by the FSWs, the more "mobilized" the community (Flouch,2011). The goal of this community participation is to mobilize the community of sex workers so that they can increasingly make decisions, influence their environment, and shape their lives in ways that support their health and well-being, including prevention of HIV infection.

The evaluation focused on FSWs in the state of Andhra Pradesh within a district served by one of Avahan's implementing partners. Conducting the evaluation in areas where a single state lead implementing partner (SLP) was delivering the intervention helped minimize intervention variation due to implementation style of the SLP; it also minimized contextual effects that might arise from geographic and cultural differences across states in India (Germae, 2011).

To achieve adequate sample size, the researcher sampled 104 geographic clusters within the district and then measured strength of the treatment (i.e. level of community mobilization) at the cluster level. These clusters were small geographic units under the responsibility of one outreach worker (ORW) who served ~250 FSWs. This unit then became the area in which we measured "strength of community mobilization", as well as our primary sampling unit for the survey of sex workers. Although all 104 clusters implemented the same core program activities, we anticipated that the level of community mobilization, i.e. volunteer participation and engagement of FSWs in those activities, would vary (Honglei, 2012).

The study findings indicated that of the 1,986 FSWs who participated, over half were currently married (57 %) and most had children (81%) (Bassett, 2004). Despite most participants having a source of income in addition to their sex work (78%), a large majority were in debt (85 %). Over half worked in an urban environment (53%). With regards to stability of work environment, approximately two-thirds never traveled for work (61 %) and only conducted sex work in the district in which they were interviewed (71%). A large majority of participants also personally knew someone living with HIV (84%) (Stevens,2002).

Another study was done in Nigeria on the effect of mobilization strategies on community participation in HIV field test and counselling (Johnson, 2002). Community outreaches serves the dual function of improving access to service and outcome of care through early linkages and subsequent initiation of Anti-Retroviral Therapy (ART). Gender and socio-cultural factors affects uptake of screening services and ultimately early treatment. This study therefore assessed gender-related HIV counseling and testing uptake and linkage to care among those who were tested. A review of data from 423 community outreaches conducted between August 2012 to July 2015 by AHF Nigeria in which information on socio-demographic characteristics, HIV counseling and testing and time to accessing care was obtained. Means and proportions were used to document the results. With a monthly Mean of 2650 [male 68.8% female 38%] clients counselled, tested and received results, 2.6% (SD 0.7) were positive; male 33.5% (SD 10) female 60.8% (SD 9). An average of 64% of positive clients were linked to care; male 40% (SD 10) female 60% (SD 10) (Umbach, 2011). Male predominance in testing uptake with more female positive results and early linkage to care forms a persisting trend. The data used in this study was from community and facility based HTC program of AIDS Healthcare Foundation (AHF) conducted in Abuja, Nasarawa, Benue and Kogi States, North-central Nigeria. The HTC program implemented five different community-based HTC approaches namely; home based testing and counselling, evening hours testing, weekend testing, church services testing and testing during outreach services where other services such as health education were offered. A joint team of nurses and trained volunteers conducted community based HTC using similar HIV testing algorithm as used in health facility HTC. Home based testing and counselling was done through door-to-door home visits by the team twice in a month in the

target locations. Outreach services were conducted five days in a month and preceded by advocacy visits to community gatekeepers two days before the outreach events. The Community outreach and HIV testing services were organized by identifying strategic locations in the communities where testing posts were set up in very confidential locations(Burger, 2007). Volunteer canvassers went round the communities with public address system, entertainment to mobilize people for testing, while testing services were ongoing at the tents. Church services testing were conducted on Sundays within church compounds with the consent of the church leaders, specifically targeting the usually large congregations at the end of the church service (Hopkin, 2005).

Clients' linkage into care and treatment was defined as then clients presented at the project facilities with a referral form and were documented in pre-ART register after CD4 count was done(Shelley,2007).Clients who were tracked and reported to be attending care at other health facilities were also considered linked into care after confirmation with the health facility. The study took place within the Northern-central part of Nigeria, including Abuja, Benue, Nasarawa and Kogi States, both in the rural and urban areas. The area is characterized by inadequate access to formal health, safe water, sanitation and other infrastructure; poor structural quality of housing, insecure residential status and poor health indicators. Lack of proper health services and facilities is a major problem in the slum caused by inadequate support by the government and other stakeholders(Wallerstein, 2008).The collective effects of inadequate health services, poverty, and difficult socio-environmental conditions increase slum dwellers' vulnerability to poor health outcomes .The study participants were children and adults of all ages who underwent testing through any of the two modalities during a three-year

period (2012- 2015). The study findings indicated that a total of 459,223 clients were tested for HIV during the period of study. Majority were tested through community based testing approaches 92.2% ($n = 423,551$) compared to those tested through facility-based testing approach 7.8% ($n = 35,672$). Most of the clients tested 89.5% ($n = 410,794$) aged above 14 years, of which majority were male (>14 years) 54.9% ($n = 252,117$) while female clients (>14 years) comprised 34.5% ($n = 158,677$) of the total (Wang, 2006).

In Uganda, a study was done to research on mobilization strategies effect on a high rate of mother-to-child transmission (MTCT) field based HIV tests and counseling (Williamson, 2010). Over 60% of births in Uganda occur outside of health care facilities, and because of this, Traditional Birth Attendants (TBAs) play a significant role in maternal and child health. It is important that TBAs be knowledgeable about HIV prevention. The purpose of this study was to determine the mobilization strategies effect and the impact of HIV testing and counseling (HTC) knowledge on the HIV prevention practices among TBAs in Uganda. Five hundred TBAs were surveyed. Chi-square and logistic regression were used to assess differences in HIV prevention practices between TBAs with and without HTC knowledge (Abercrombie & Longhurst, 2010). Focus groups were held by representatives from Prevention, Education, Treatment, Training and Research-Global Solutions (PeTR-GS) of Uganda, Delta State Primary Health, Delta State Action Committee on AIDS, University of Rochester School of Medicine, and University of Nevada School of Medicine. These focus groups were used to develop an assessment tool that allowed investigators to obtain demographic information, accessibility data, available antenatal care services, knowledge of HIV testing and counseling, clinical practices, waste disposal, blood safety measures, occupational safety and community

systems(UNICEF, 2010). The study finding indicated that a total, 500 TBAs were interviewed. TBAs with HTC knowledge were more likely ($p < 0.01$) to have some formal medical training, although the percentage was low at 17.8%. They were also more likely to be registered with the government and deliver more babies ($p < 0.01$) than TBAs without HTC knowledge (UNAIDS, 2010).

2.8 Theoretical framework

2.8.1 Arnstein's ladder of participation.

Theoretical work on community participation was developed by Sherry Arnstein in 1969. He argued that there are different levels of participation which include: manipulation of citizens, through consultation, and genuine participation (Gershman, 2013).

This model represents eight types of ladder patterns. The bottom part represents non-participation. Their objective is not to really participate but to act as the power holders who educate the participants. Rung 3 and 4 (informing and consultation) progress to level of tokenism. It allows the have not's to have a voice, especially the low level. When they are guided by the non-participants they become productive. Rung 5(placation) is a higher level than the token because they are given the mandate to advise but not to make decisions (Schroth, 2009).As one goes up the ladder the power increase is directly proportional. This model applies in community participation programs and there is always the ones who take lead and others follow.

The limitation of this community/citizen participation model is that it very obvious. Each step represent broad categories, within which there could be who lot of other information that can be captured from different stages (Gershman,2013). Levels of participation should represent a complex continuum than a simple ladder series. It also implies that use of control is always advisable in community transforming approaches. Sometimes, increased control without the needed support may lead in non-fulfillment of the main goal of project success

This theory is applied by different researchers that involves public/community participation and its effectiveness. For instance, in examining the relationship between policy-makers and citizens in the city of Portland, Oregon throughout the development of the Portland Plan, a broad visioning document that is designed to provide development guidance until the year 2035. Based on the core principles of prosperity, education, health, and equity, this roadmap for the future establishes specific policy goals and initiatives developed through best practice research and extensive citizen involvement from Portlanders. Using public participation literature, this theory analyzed and evaluated the public participation techniques used by policy-makers in Portland to develop the Portland Plan(Berman, 2017).

Arnstein's article offers a vivid and concise introduction to the importance of considering the form of citizen participation when making claims about the power that citizens/community have in a public process. By putting a wide range of processes on the axis of citizen power, she cuts straight through the complexities of organizing practices to the critical values at hand. This theory by Arnstein is a foundational work that has continued to inspire major threads of work and thought on citizen participation. Many people would modify or disagree with Arnstein's

model or her focus on citizen power, but they still have to react to the questions on trying to analyze community participation.

In this study on factors influencing community participation in field based counseling and testing of HIV, the concept can deeply relate to the theory of Arnstein's ladder of public participation. The theory can assist this study in analyzing and evaluating the levels of community participation and how it can be improved to increase the effectiveness community engagement in field based HIV Counseling and testing.

2.9 Conceptual framework

This conceptual framework shows the independent and dependent variables in this study. Mwituria (2012), suggests that the independent variables affect the dependent variable under study and is included in the research so that its effects can be determined.

Figure 2.1 below, give the researcher's conceptualization on community participation and implementation of field based counselling and testing of HIV in Suba sub county, Homa bay county Kenya. The dependent variables is community participation in field based counselling and testing of HIV. The independent variables include community perception, social economic factors, structural factors and mobilization strategies factors.

Conceptual framework of the study

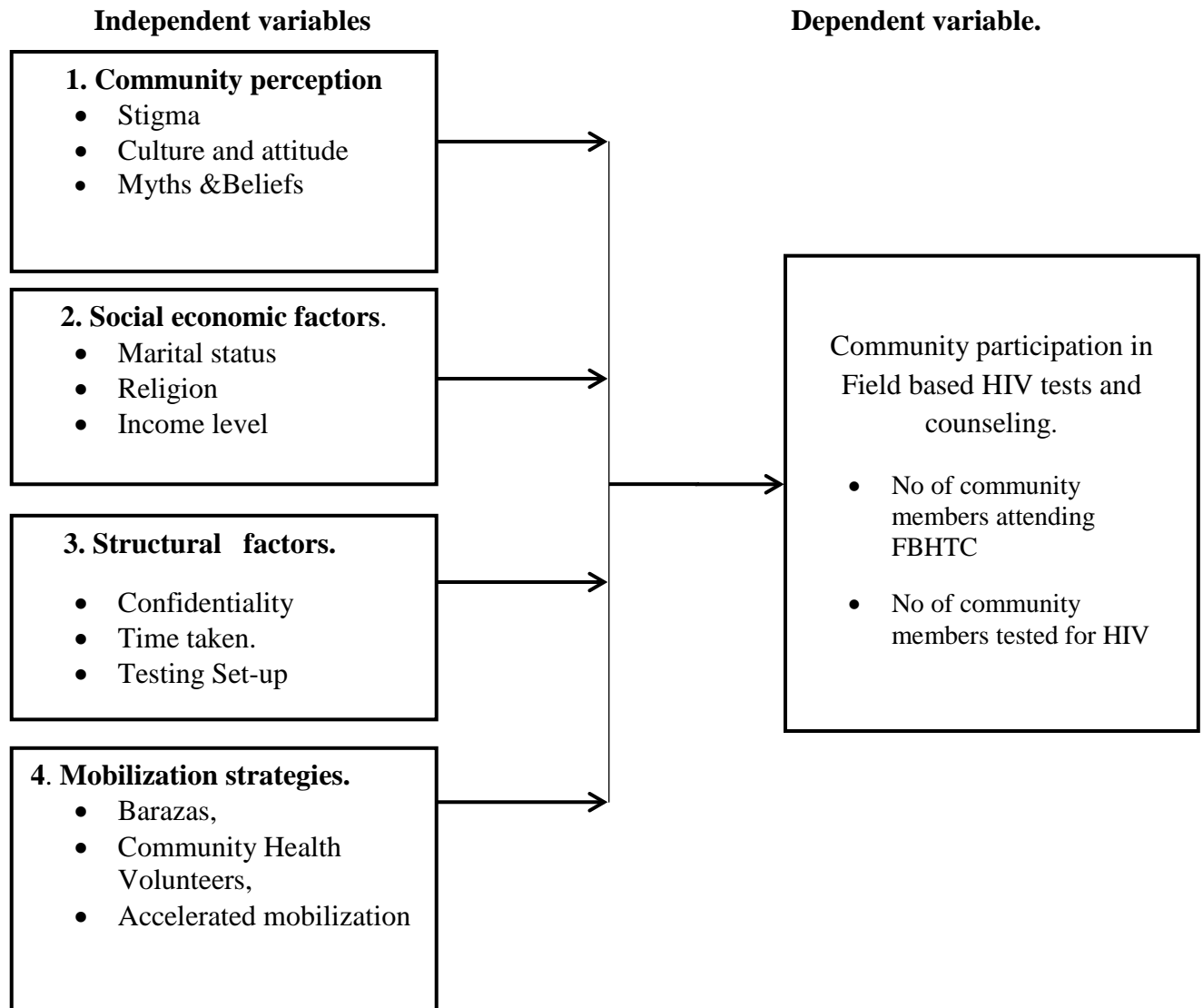


Figure 2.1: Conceptual Framework of the study

Orodho (2002) argued that independent variable attempts to indicate the total influence in the study. It is hypothesized that the independent variable with its components community perception, social economic factors, structural factors, mobilization strategies, directly

influence the dependent variable which is Community participation in Field based HIV tests and counseling.

2.11 Research gap

This study sought to fill the research gap on the factors influencing community participation in field based counselling and testing of HIV in Suba sub county, Homa bay county Kenya. While communities have played a large role in the HIV/AIDS response, their contributions and innovative approaches to HIV prevention, treatment, care and support have not always been the focus of systematic and rigorous evaluations. To address this gap, another research should be conducted to determine the evaluation of the impact of the community response to HIV/AIDSs.

Gender disparity is a factor in the community participation and implementation of field based counselling and testing of HIV in Homa Bay County. The research gap should be on gender disparity in community participation and field based counselling and testing of HIV in Suba Sub County, Homa Bay County. This will determine factors affecting each genders level of community participation in the implementation of field based counselling and testing of HIV.

2.10 Summary of Literature Review

According to the research survey that was done in 2014 on Field tests and counselling and how community participation influence its performance indicated that community perception, social economic, structural factors and mobilization are some of its variables. It was found that demographic factors that influence community participation include Age, gender and educational level (Donaldson, Christie & Mark,2014). This can lead to lack of awareness and

also increased rates of HIV spreads. Community perception also had an impact on community participation, people may lack to participate due to Stigma, beliefs and fear of being judged. Social economic factors influence the level of community engagement. Some of the factors considered involve the marital/relationships, religion and also the level of income. Structural factors including, privacy and confidentiality, testing setup, time taken from the exercise showed they had an influence on the level of community engagement. Finally on the factors we had mobilization factors which involved creation of awareness, the use of provincial administration and CHVs in campaigns. Studies showed that these factors when adopted positively they can bring the community together in the development health care programs they are subjected to. A research done in Sub Sahara proved that gender disparity in community participation is one of the key to low performance in field HIV test and counselling (Getnet and Kloos,2013). A study done showed that Men prefer to take their tests in a more confidential way, this may be at home, through mobile clinics. On the contrary it is very hard to find them in a health center taking a test. Another reason women have high chances of being tested is during pregnancy. The other factors including stigmatization has the same effect on men too more than women. The effect of the social economic factors in the community participation have described the income levels, religion and their relationships and their cause and effect in field based HIV test and counselling.

Table 2.1: Summary of literature review

Variables	Indicators	Author and Year	Title of the study	Findings	Knowledge gap
Community participation	<ul style="list-style-type: none"> The study looked how community participation affected the performance of field test and counselling 	(Plummer, et al, 2004). (Haacker& IMF, 2004). (Knodel& United Nations, 2009)	Field HIV tests in Kenya. Community participation in the field tests and counselling globally. 1.	Community participation components such as raising awareness, support and care and prevention help in coming up with legal policies to favor PLHIV Factors that hinder its success include social economic factors, community factors	The study does not cover on what should be done after finding out the factors hindering the performance of Field based HIV test and counselling. The study does not give remedies on what should be done on the negative factors influencing community participation.

<p>Community perception</p>	<ul style="list-style-type: none"> The factors that involves the community factors include Stigma, attitude and beliefs 	<p>(Liamputton g, 2013). (Alexander, 2003).</p>	<p>How stigmatization affects community participation</p> <p>How attitudes and beliefs/culture affect community participation</p>	<p>In Tanzania, it Liamputtong, created an awareness that the social distancing and evasion has really affected community participation from the individual level.</p> <p>The belief and attitude that when one attends or participate in such tests most probably they are affected tends to be a reason for less turn out in community participation</p>	<p>The research did not indicate the methods needed to alleviate stigma and negative beliefs and attitudes towards HIV infected people.</p>
<p>Social cultural factors</p>	<ul style="list-style-type: none"> Some of this factors discussed in this research are Marital/relationships status, Income levels and religion. 	<p>(Claussen& VanBrandwijk, 2008) (William, 2017). (Sharma, 2006).</p>	<p>How marital/relationships affect the level of community participation.</p> <p>How religion affects the level of community participation</p> <p>How income levels affect the level of community</p>	<p>(William 2017)When it comes to relationships/marital status family members, relatives, spouse's beliefs and stands usually affects ones decision on community participation.</p> <p>Religion has affected community participation especially when it comes</p>	<p>(Claussen& VanBrandwijk, 2008) indicates that the catholic faith as a religion has an effect on community participation on prevention of HIV/AIDS and consequently, it does not provide an alternative for those who are non-believers.</p>

			<p>participation</p>	<p>to prevention. A study by (C(Claussen& VanBrandwijk, 2008)</p> <p>Indicated that catholic church as a religion is always against the use of condoms arguing that people should always abstain.</p> <p>The income level is always proportional on the free time one has during the day to participate in the community initiative.</p>	
Structural factors	<ul style="list-style-type: none"> Some of the factors includes. confidentiality, time , and testing setting 	<p>(Li, 2012). (Appadurai, 2016)</p>	<p>How do privacy and confidentiality affect community participation</p> <p>How do time taken in the test and counselling affects community participation</p> <p>How do adds on the health care's services affect</p>	<p>The study indicated that when community member has no confidence on health centre facilities and attendants they tend to drop out of the community participation because their privacy concerning their information is not guaranteed.</p> <p>Also community</p>	<p>The research does not provide the maximum time limit on when the community participation should last. It does not also indicate the best method to use to improve confidentiality levels.</p>

			community participation	participation depends on the services the health centre attendants are providing concerning their schedule and time allocated for the exercise.	
Mobilization strategy	This study covered the essence of barazas, community health volunteers and the use of public address systems	(Edwards, 2008).	How barazas community health volunteers affect the level of community engagement and involvement. How public address systems affect community engagement and participation	The use of barazas, community health volunteers and the use of public address in improving the response among the community members in field based programs and their implementation	The study assumes that the community members do respond to community mobilization strategies by attending. But it does not measure the degree of mobilization needed and its effectiveness

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the methodology that was used to conduct the study. This includes the research design, target population, sample size and sampling techniques, instruments, data collection procedure and data analysis techniques, ethical considerations and operationalization of the variables.

3.2 Research design

This study adopted a descriptive survey research design. This is the design used to determine reasons or causes for the current status of the phenomenon under study (Creswell, 2014). As a result of the cause-and-effect relationships, this research design does not permit manipulation of the variables. The design was adopted in this study because the independent variables (social economic, structural, community factors and mobilization) studied had an effect on the dependent variable (community participation in field-based HIV test and counselling). The researcher then proceed to study the independent variable in retrospect for its possible relationship to, and effects on, the dependent variable.

3.3 Target Population

The target population should have some observable characteristics to which the research intends to generalize the results of the study (Mugenda&Mugenda 2003). The target area of study is Suba sub county, which is part of the Homa-Bay County, the largest in the greater Southern Nyanza which is potential and versatile in facilities which could rack in millions of shillings in terms of revenue collection if such resources could be properly developed. Its

potential source of revenue include tourism, fishing and fish trades, hidden minerals, pre-historic sites and its proximity to the cross border trades across Lake Victoria and the neighboring states of Tanzania and Uganda. It has a population 103,054 with 51.2% being women and 48.8% are men and covers an approximate area of 420.80²Sq. Km (National Bureau of Statistics, 2010).

For this study, the target population is 103,054 residents of Suba sub county distributed in 4 administrative wards namely Kaksingri East-ruma, kaksingri West, Gwassi North and Gwassi Central(KNPHC, 2009) and 145 health care providers (CHS 2015) which makes a total population of 103,199

Table 3.1: Target population

No	Wards in Suba Sub County	Population
1	Kaksingri West	26,021
2	Kaksingri East-Ruma	11,872
3	Gwassi North	30,598
4	Gwassi Central	34,563
5	Health care workers	145
	Total	103,199

SOURCE: Kenya National Population and Housing Census (2009) and CHS (2015)

3.4 Sample size and sampling procedure.

Sampling is the process of selection of appropriate number of subjects from a defined population (Kothari 2004). The purpose of sampling was to ensure a representative group

which enables the study to gain information about the whole population. The procedure for sampling should ensure that all the members of the population are given an equal chance to participate in the study while the sample size should be statistically representative of the entire population where the research is conducted.

3.4.1 Sample size

The researcher ensured high degree of correspondence between a sampling frame and the sample population as the accuracy of the sample depends on the sampling frame. Further, (Krejcie and Morgan, 1970) argues that the sample size depends on what one wants to know, the purpose of the inquiry, what is at stake, what was useful, what had credibility and what could be done with available time and resource. An objectively selected sample between 30-50 % (0.3 to 0.5) of a large population is considered adequate for generalization of the findings. The researcher used stratified random sampling to avoid biasness in selection of community members and 50% of the total number of health care workers.

Table 3.2: Sample Size

Respondent	Target Population	Sample size
Community members	103,054	384
Healthcare workers	145	73
Total	103,199	457

3.4.2 Sampling procedure

The study used stratified random sampling to select the respondents in sampled wards since the sample size depends on what one wants to know, what is at stake and recommends 10-30% as an appropriate sample in a case study. The strata used in the study were 4 wards that constitute Suba sub County where field based HIV testing is being conducted. In order to ensure inclusivity, respondents were randomly selected from each strata (wards) using proportionate stratified random sampling formula by Mugenda&Mugenda (2003) as:

The formula is; $nh = (Nh / N) * n$

Where **nh** is the sample size for stratum ,**Nh** is the population size for stratum h, **N** is total population size, and “**n**” is total sample size.

The researcher then used purposive sampling to identify healthcare workers since this method ensures selected respondents have required and reliable information concerning community participation in field-based HIV testing and counseling.

Table 3.3: Sample Distribution via Proportionate stratified random sampling ($nh = (Nh / N) * n$)

Wards (Stratum)	Population census (2009)	Sample per ward
Kakingri West	26,021	97
Kakingri East-Ruma	11,872	44
Gwassi North	30,598	114
Gwassi Central	34,563	129
Total	103,054	384

Source: Kenya National Population and Housing Census (2009)

3.5 Data Collection Instruments.

The main research instruments to be used in the study was questionnaires and interviews. In developing the questionnaire items, the fixed choice and open-ended formats of the item will be used. The questionnaires were directed to the targeted residents infected and non-infected. They were distributed randomly and evenly and were collected instantly the respondent is done filling on the spot. Interview schedules were used to solicit for more in-depth information that might not be captured by the questionnaire. The interviews were directed to health care attendants as key informants and they were conducted by the researcher and recorded as fast as the respondents is willing.

3.5.1 Pilot testing for the instruments.

According to (Mugenda, 2003) a small sample of 10% of the data is piloted to ensure the respondents really understood the question and their attitude towards the general study. A sample was randomly sampled in the neighboring Mbita sub county on community members, and health workers. A total of 37 community members were given questionnaires and 10 health care workers were requested for interviews on their HIV status and what affects their community participation as far as field based HIV tests and counseling is concerned.

After piloting, corrections was made regarding wording and framing of the questions. This made the research instruments better.

3.5.2 Validity of the instruments

According to (Appa & Mathirajan, 2006) validity is quality attributed to proposition or measures to the degree to which they conform to establish knowledge or truth. An attitude

scale is considered valid, for example, to the degree to which its results conform to other measures of possession of the attitude. Validity therefore refers to the extent to which an instrument can measure what it ought to measure. It therefore refers to the extent to which an instrument asks the right questions in terms of accuracy. (Mugenda & Mugenda, 2003) validity is the accuracy and meaningfulness of inferences, which are based on research results.

The content validity of the instruments was determined in two ways. First, the researcher will discuss the items in the instrument with the supervisors and lecturers from the department. These people were expected to indicate by tick or cross for every item in the questionnaire if it measures what it was supposed to measure or not (Creswell, 2014). Advice given by these people helped the researcher to determine the validity of the research instruments. The advice may include suggestions, clarifications and other inputs in order. These suggestions were used in making necessary changes.

Secondly, content validity of the instrument was determined through piloting, where the responses of the subjects will be checked against the research objectives. This gave a reason as to why the content was used (Yin, 2013). For a research instrument to be considered valid, the content selected and included in the questionnaire must be relevant to the variable being investigated

3.5.3 Reliability of the instrument.

According to (Mugenda and Mugenda, 2003), the reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. In order to test the reliability of the instrument to be used in the study, the test- retest

method was used. The questionnaire was administered twice within an interval of two weeks. This established the extent to which the questionnaire elicits the same responses every time it was administered. The results obtained from the pilot study assisted the researcher in revising the questionnaire to make sure it covers the objectives of the study

3.6 Data collection procedure

The researcher obtained an introductory letter from the university which is key in data collection. The researcher had the permission to collect data from the health centers in Suba sub county and also non-governmental organizations fighting the spread of HIV in Kenya for instance PEPFAR funded projects in Suba sub county. The researcher visited the places personally with the help of other three research assistants so as to keep the credibility of the study.

When distributing the instruments the researcher explained to respondents on the reason for the study and the benefits to be part of it. It was out of their voluntary will. This gave the respondents a free will. It also brought a friendly environment between the respondent and the researcher.

3.7 Data analysis technique.

The questionnaires was checked for completeness and consistency of information at the end of every field data collection day and before storage. The data from the completed questionnaires was cleaned, re-coded and entered into the computer using SPSS (Statistical package for Social Scientist) software for analysis to produce frequency tables, graphs, and the necessary measures of variances for interpretation. Descriptive statistics (that is

frequency analysis) was computed for presenting and analyzing the data. Descriptive statistics enables the researcher to describe the aggregation of raw data in numerical term (Mugenda and Mugenda, 2009). The descriptive statistics that was used involved the use of univariate, bivariate and multivariate analyses. Regression analysis is a technique that was used to quantify the associations between dependent and independent variables. These methods involved the use of frequency distributions and percentage tables. Qualitative data analysis involved processes such as coding, categorizing and making sense of the essential meanings of the objectives presented. Data was presented in the form of frequency distribution tables that facilitated description and explanation of the study findings.

3.8 Ethical considerations

There was proper considerations to enhance privacy of the participants. The researcher did not attempt to know or reveal personal information relating to the participants as a measure to prevent possible discrimination or abuse resulting from their contribution to the study. The participants also voluntarily took part in the research, and they were requested not to openly reveal their names and contact(s) or such information relating to their privacy.

3.9 Operationalization of the variables

The measurement of the various variables in this study was undertaken as shown in Table 3.4

Objective	Type of Variable	Indicators	Scale:	Type of Data.	Tool of Analysis
To evaluate how community perception influence community participation on FBHTC	Independent: Community perception Dependent: Community participation in FBHTC	Stigma Culture and attitude Myths and beliefs	Ordinal	Quantitative & inferential	Mean, Standard Deviation and Regression
To establish how socio-economic factors influence community participation on FBHTC	Independent: Socioeconomic factors Dependent: Community participation in FBHTC	Income Level Marital status Religion	Ordinal	Qualitative & quantitative	Mean, Standard Deviation and Regression
To assess how structural factors influence community participation on FBHTC	Independent: Structural factors Dependent: Community participation in FBHTC	Confidentiality Time taken Testing setting	Ordinal	Quantitative	Mean, Standard Deviation and Regression
To examine how mobilization strategies used influence community participation in FBHTC	Independent: Mobilization strategies Dependent: Community participation in FBHTC	Use of barazas Use of CHVs Use of accelerated mobilization	Ordinal	Quantitative	Mean, Standard Deviation and Regression

Table 3.4: Operationalization of variables

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents data analysis; presentation and interpretation of the study findings. The subtitles in the chapter are arranged according to the objectives of this study. The study findings have been presented in frequency distribution tables, mean values, percentages and explanations of the findings in between the frequency tables for further elaboration as well as the interpretation of the study results which have been given alongside the findings.

The subheadings in this chapter were arranged according to research questions: To establish how community perception influenced community participation on field based HIV testing and counseling in Suba Sub County; to find out how socio- economic factors influenced community participation on field based HIV testing and counseling in Suba Sub County. To determine how structural factors influenced community participation in field based HIV testing and counseling in Suba Sub County; to examine how mobilization strategies influenced community participation in field based HIV testing and counseling in Suba Sub County, Kenya.

4.2 Questionnaire Return Rate

The field responses were 345 community members and 55 health care workers living and working at Suba Sub County out of the 384 community members and 73 health care workers living and working at Suba Sub County. Thus the return rate was 87.5 percent for the respondents. This high response rate can be attributed to the fact that the researcher with her research assistants personally administered the research instrument as well as immediate collection of research tools after completion

4.2 Demographic Information of the Respondents

The study sought to determine the demographic characteristics of the respondents as they are considered as categorical variables which give some basic insight about the respondents. The characteristics considered in the study were; range of ages of the respondents; gender; highest level of education attained by them; type of job and frequency of medical checkups.

4.2.1 Gender of Respondents

The researcher wanted to establish the gender of respondents and the respondents were asked to indicate their gender and the results are as shown in table 4.1.

Table 4.1: Gender of Respondents

	Frequency	Percent
Female	220	55.0
Male	180	45.0
Total	400	100.0

Table 4.1 shows that 220 (55%) were female respondents followed by 180 (45%) who were male. This implies that there are more female participating in field based HIV testing and counseling than male.

4.2.2 Age of Respondents

The researcher wanted to establish the age of respondents and the respondents were asked to indicate their age bracket and the results are as shown in table 4.2.

Table 4.2: Age of Respondents

Age	Frequency	Percent
20 or below	5	1.3
21-30	79	19.8
31-40	125	31.3
41-50	176	44.0
51+	15	3.8
Total	400	100.0

Table 4.2 shows that 176 (44%) were aged 41-50 years followed by 125 (31.3%) who were aged 31 -40 years. In addition, 79 (19.8%) were aged 21-30 years, followed by 15 (3.8%) who were aged 51 years and above and 5 (1.3%) who were aged 20 years and below. This implies that majority of those living Suba sub county were in the in middle age hence sexually active.

4.2.3 Highest education of Respondents

The researcher wanted to establish the highest education of respondents and the respondents were asked to indicate their education level and the results are as shown in table 4.3.

Table 4.3: Highest education of Respondents

	Frequency	Percent
Primary	350	87.5
Secondary	30	7.5
Diploma	18	4.5
University	2	0.5
Total	400	100.0

Table 4.3 shows that 350 (87.5%) had reached primary, followed by 30 (7.5%) who had reached secondary. In addition, 18 (4.5%) had a diploma and 2(0.5%) had reached university. This implies that majority of the respondents had attained basic primary education which can lead to

low knowledge on the importance of field based HIV testing and counseling hence impacting on non- participation in field based HIV testing and counseling.

4.2.4 Marital status of Respondents

The researcher wanted to establish the marital status of respondents and the respondents were asked to indicate their marital status and the results are as shown in table 4.4.

Table 4.4: Marital status of Respondents

	Frequency	Percent
Single	130	32.5
Married	160	40.0
Divorced/separated	68	17.0
Widowed	42	10.5
Total	400	100.0

Table 4.4 shows that 160 (40.0%) were married, followed by 130 (32.5%) who were single. In addition, 68 (17.0%) were divorced/separated followed by 42 (10.5%) who were widowed, which forms high target for HIV testing. This implies that there is high expectation of attending field based HIV testing since they are at risk of contracting HIV .

4.2.5 Type of work of the respondents

The researcher wanted to establish what the respondents did for a living and the respondents were asked to indicate their type of work and the results are as shown in table 4.5.

Table 4.5: Type of work of the respondents

	Frequency	Percent
Businessman/woman	58	14.5
Farmer	85	21.3
Fisher-folk	257	64.3
Total	400	100.0

Table 4.5 shows that 257 (64.3%) were fisher folk, followed by 85 (21.3%) who were farmers and 58 (14.5%) were business people. This is a clear indication that most people living in Suba sub county depends on the lake to make a living hence spending most of their time in lake either fishing or engaged in fish trading putting at risk acquiring HIV.

4.2.6 Frequency of medical checkups

The researcher wanted to find out the medical check ups frequency and the respondents were asked to indicate how long the respondents took to go for medical check ups and the results are as shown in table 4.6.

Table 4.6: Frequency of medical checkups

	Frequency	Percent
Above 2 years	140	35
after 1 year	53	13.3
After 6 months	36	9
Only when feeling sick	171	42.8
Total	400	100.0

Table 4.6 shows that 171 (42.8%) went for medical checkups only when sick, followed by 140 (35.0%) who went for medical checkups after 2 years and above. In addition, 53 (13.3%) went

for medical checkups after 1 year, followed by 36 (9.0%) who went for medical checkups after 6 months. This implies that there is poor health seeking behavior among community members

4.2.7 HIV status awareness

The researcher wanted to establish if the respondents were aware of their HIV status and the respondents were asked to indicate their HIV status awareness and the results are as shown in table 4.7.

Table 4.7: Awareness of HIV status

	Frequency	Percent
Yes	370	92.5
No	30	7.5
Total	400	100.0

Table 4.7 shows that 370 (92.5%) were aware of their HIV status while 30 (7.5%) were not aware of their HIV status. This implies that the respondents were aware of their HIV status which indicated.

4.2.8 Model of testing HIV

The researcher wanted to establish the model of testing used to know their HIV status in the area and the respondents were asked to indicate the the model of testing used to test HIV in the area and the results are as shown in table 4.8.

Table 4.8: Model of testing HIV

	Frequency	Percent
Field-based Testing	280	70
Facility-based testing	120	30
Self testing	00	00
Total	400	100.0

Table 4.8 shows that 280 (70%) indicated that they used Field-based Testing and 120 (30%) indicated that they used Facility-based testing while no respondent reported use of self testing model. This implies that most of the respondents had knowledge about field based HIV testing and counseling and prefer to be tested at the convenient places within their reach.

4.3 Community Perception and Community Participation in Field Based HIV Test and Counselling

The first objective was to determine the extent to which community perception influenced community participation in field based HIV testing and counselling in Suba Sub County, Kenya.

To achieve this objective, the respondents were asked to give their opinions on whether community perception affected the level of respondents' participation in field based HIV testing and counseling. The results are provided in table 4.9.

Table 4.9: Community perception and participation in field based HIV test and counselling

	Frequency	Percent
Yes	300	75.0
No	100	25.0
Total	400	100.0

Table 4.9 shows how community perception affected the level of respondents' participation in field based HIV test and counseling. 300 (75.0%) said yes while 100 (25.0%) said no. This

implies that community perception affected the level of respondents' participation in field based HIV test and counseling.

The respondents were asked to give their opinions on the level of agreement or disagreement with the statements provided in a likert scale of 1-5 where 1=Not at all, 2= little extent, 3= moderate extent, 4= great extent, and 5= very great extent. The results are provided in table 4.10.

Table 4.10: Community perception indicators and community participation of field HIV tests and counseling

Statements	Not at all		little extent		Moderate extent		Great extent		Very great extent		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Stigma	3	0.8	14	3.5	35	8.8	43	10.8	305	76.3	4.59	0.5
Culture	4	1	8	2	61	15.3	47	11.8	280	70	4.48	0.4
Attitude	2	0.5	6	1.5	21	5.25	182	45.5	189	47.25	4.38	0.4
Myths & Beliefs	56	14	57	14.3	200	50	58	14.5	29	7.3	2.87	0.1
Total											16.32	1.2
Composite											4.08	0.3

On stigmatization effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 3 (0.8%) said not at all, 14 (3.5%) said to a little extent, 35 (8.8%) said to a moderate extent, 43 (10.8%) said to a great extent and 305 (76.3%) said to a very great extent. This was backed by a mean of 4.59 and standard deviation of 0.5. This is greater than the composite mean and standard deviation which implies that stigmatization affected community participation of field HIV tests and counseling.

On culture effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 4 (1%) said not at all, 8 (2%) said to a little extent, 61 (15.3%) said to a moderate extent, 47 (11.8%) said to a great extent and 280 (70%) said to a very

great extent. This was backed by a mean of 4.48 and standard deviation of 0.4. This is greater than the composite mean and standard deviation which implies that culture affected community participation of field HIV tests and counseling.

On attitude effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 2 (0.5%) said not at all, 6 (1.5%) said to a little extent, 21 (5.25%) said to a moderate extent, 182 (45.5%) said to a great extent and 189 (47.25%) said to a very great extent. This was backed by a mean of 4.38 and standard deviation of 0.4. This is greater than the composite mean and standard deviation which implies that attitude affected community participation of field HIV tests and counseling.

On myths and beliefs effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 56 (14%) said not at all, 57 (14.3%) said to a little extent, 200 (50%) said to a moderate extent, 58 (14.5%) said to a great extent and 29 (7.3%) said to a very great extent. This was backed by a mean of 2.87 and standard deviation of 0.1. This is lower than the composite mean and standard deviation which implies that myths and beliefs did not affect community participation of field HIV tests and counseling.

4.3.1 Regression analysis

In this study, a multiple regression analysis was conducted to test the influence among community perception indicators. The research used statistical package for social sciences (SPSS Version 21) to code, enter and compute the measurements of the multiple regressions.

Table 4.11: Multiple Regression Between Community Perception and Community Participation in Field Based HIV Tests and Counseling (dependent variable) in Suba Sub County

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804	.646	.618	.1016

a. Predictors: (Constant), stigma, culture and attitude, myths & beliefs.

The data in Table 4.11 indicated that R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R², also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent indicators of community perception. 64.6% of the Community participation in Field based HIV tests and counseling in Suba sub county. Variables could be attributed to the combined effect of the community perception indicators.

Table 4.12: ANOVA Results of the Regression Analysis Between Community Participation in Field Based HIV Tests and Counselling and Community Perception Indicators

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.672	8	2.176	3.056	.05
	Residual	94.682	392	.782		
	Total	107.354	400			

a. Predictors: stigma, culture and attitude, myths & beliefs.

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.672	8	2.176	3.056	.05
	Residual	94.682	392	.782		
	Total	107.354	400			

a. Predictors: stigma, culture and attitude, myths & beliefs.

b. Dependent Variable: Community Participation in Field Based HIV Tests and Counseling in Suba Sub County.

The data in Table 4.12 indicated that the probability value of 0.05 indicates that the regression relationship was highly significant in predicting how stigma, culture, attitude, myths & beliefs influenced Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. The F critical at 5% level of significance was 3.056 since F calculated is greater than the F critical (value = 2.830), this shows that the overall model was significant.

Table 4.13: Regression Coefficients of the Relationship Between Community Participation in Field Based HIV Tests and Counseling and the Community Perception Indicators

Model	Unstandardized Coefficients			Standardized Coefficients	
	B	Std. Error	Beta	T	Sig.
1 (Constant)	1.403	0.356		3.674	0
Stigma	-0.659	0.146	0.608	0.245	0.05
Culture	-0.573	0.189	0.527	0.169	0.04
Attitude	-0.894	0.254	0.461	0.382	0.001
Myths & beliefs	-569	0.418	0.328	0.352	0.01

a. Dependent Variable: Community Participation in Field Based HIV Tests and Counseling

As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$) becomes:

$$Y = 1.4038 - 0.894X_1 - 0.659 X_2 - 0.573 X_3 - 0.569 X_4$$

The regression equation in Table 4.13 has established that taking all factors into account (stigma, culture and attitude, myths & beliefs) constant at zero Community Participation in Field Based HIV Tests and Counseling will be 1.403. The findings presented also show that taking all other independent variables at zero, a unit increase in attitude would lead to a 0.894 decrease in the Community Participation in Field Based HIV Tests and Counseling.

Further, the findings shows that a unit increase in stigma would lead to a 0.659 decrease in Community Participation in Field Based HIV Tests and Counseling. In addition, the findings show that a unit increase in culture would lead to a 0.573 decrease in Community Participation in Field Based HIV Tests and Counseling. A unit increase in myths & beliefs would lead to a 0.569 decrease in Community Participation in Field Based HIV Tests and Counseling. Overall, myths & beliefs had the least effect on Community Participation in Field Based HIV Tests and Counseling and attitude had the highest effect.

Attitude calculated p-value was found to be 0.001 which is statistically significant ($p < 0.05$) which is level of confidence. The level of attitude has a negative significant influence on Community Participation in Field Based HIV Tests and Counseling. Stigma calculated P-value was found to be 0.05 which is statistically significant since $P < 0.05$. There is a negative correlation between stigma and the Community Participation in Field Based HIV Tests and Counseling. Culture calculated P-value was found to be 0.04 which statistically $P < 0.05$ hence significant. There is a negative correlation between culture and the Community Participation in Field Based HIV Tests and Counseling. Myths & beliefs calculated P-value was found to be 0.01 which statistically $P < 0.05$ hence significant. There is a negative correlation between culture and the Community Participation in Field Based HIV Tests and Counseling.

4.4 Socio-Economic Factors and Community Participation in Field Based HIV test and Counselling

The second objective that the study wanted to achieve was to determine the extent to which socio-economic factors influenced community participation in field based HIV testing and counseling Suba Sub County, Kenya.

To achieve this objective, the respondents were asked to give their opinions on whether community perception affected the level of respondents' participation in field based HIV test and counseling. The results are provided in table 4.14.

Table 4.14: Relationship between social economic factors and level of community participation

	Frequency	Percent
Yes	380	95.0
No	20	5.0
Total	400	100.0

On whether social economic factors affected the level of respondents' participation in field based HIV test and counseling, out of 400 respondents who participated in the study, 380 (95.0%) said yes while 20 (5.0%) said no. This implies that social economic factors had effect on community participation of field HIV tests and counseling.

The respondents were asked to give their opinions on the level of agreement or disagreement with the statements provided in a likert scale of 1-5 where 1=Not at all, 2= little extent, 3= moderate extent, 4= great extent, and 5= very great extent. The results are provided in table 4.15.

Table 4.15: Social economic factors indicators and community participation of field HIV tests and counseling

	Not at all		little extent		Moderate extent		Great extent		Very great extent		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Marital status	5	1.25	9	2.25	64	16	222	55.5	100	25	4.01	0.4
Religion	70	17.5	97	24.25	170	42.5	38	9.5	25	6.25	2.63	0.1
Income level	4	1	10	2.5	70	17.5	196	49	120	30	4.05	0.3
Total											10.68	0.8
Composite											3.56	0.27

On marital status effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 5 (1.25%) said not at all, 9 (2.25%) said to a little extent, 64 (16%) said to a moderate extent, 222 (55.5%) said to a great extent and 100 (25%) said to a very great extent. This was backed by a mean of 4.01 and standard deviation of 0.4. This is greater than the composite mean and standard deviation which implies that marital status affected on community participation of field HIV tests and counseling.

On religion effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 70 (17.5%) said not at all, 97 (24.25%) said to a little extent, 170 (42.5%) said to a moderate extent, 38 (9.5%) said to a great extent and 25 (6.25%) said to a very great extent. This was backed by a mean of 2.63 and standard deviation of 0.1. This is lower than the composite mean and standard deviation which implies that religion did not affect on community participation of field HIV tests and counseling.

On income level effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 4 (1%) said not at all, 10 (2.5%) said to a little extent, 70 (17.5%) said to a moderate extent, 196 (49%) said to a great extent and 120 (30%) said to a

very great extent. This was backed by a mean of 4.05 and standard deviation of 0.3. This is greater than the composite mean and standard deviation which implies that income level affected on community participation of field HIV tests and counseling.

The respondents were asked the frequency of participation together with respondents spouse or sexual partner. The results are provided in table 4.16.

Table 4. 16: Frequency of participation together with respondents spouse or sexual partner

	Frequency	Percent
Never	102	25.5
rarely	290	72.5
all times	8	2.0
Total	400	100.0

On frequency of participation together with respondents spouse or sexual partner, out of 400 respondents who participated in the study, 290 (72.5%) said rarely, 102 (25.5%) said never and 8 (2.0%) said all times. This is an indication that there is low couple testing

The respondents were asked their nature of job. The results are provided in table 4.17.

Table 4.17: Nature of job

	Frequency	Percent
Full time	110	27.5
I work part time	50	12.5
indefinite job	240	60.0
Total	400	100.0

On the nature of job the respondents did, out of 400 respondents who participated in the study, 240 (60.0%) had indefinite job, 110 (27.5%) worked full time and 50 (12.5%) worked part time.

4.4.1 Regression analysis

In this study, a multiple regression analysis was conducted to test the influence among social economic factors indicators. The research used statistical package for social sciences (SPSS Version 21) to code, enter and compute the measurements of the multiple regressions.

Table 4.18: Multiple Regression Between Social Economic Factors and Community participation in Field based HIV tests and counselling (dependent variable)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.784	.615	.596	.1042

a. Predictors: (Constant), marital status, religion, income level.

The data in Table 4.18 indicated that R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R², also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent indicators of social economic factors. 61.5% of the Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. Variables could be attributed to the combined effect of social economic factors indicators.

Table 4.19: ANOVA Results of the Regression Analysis Between Community Participation in Field Based HIV Tests and Counseling and Partnership for Managing M&E Indicators

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.486	5	2.578	3.276	.03
	Residual	87.408	395	.436		
	Total	97.894	400			

a. Predictors: marital status, religion, income level.

b. Dependent Variable: Community Participation in Field Based HIV Tests and Counseling in Suba Sub County.

The data in Table 4.19 indicated that the probability value of 0.03 indicates that the regression relationship was highly significant in predicting how marital status, religion, income level influenced Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. The F critical at 5% level of significance was 3.276 since F calculated is greater than the F critical (value = 2.830), this shows that the overall model was significant.

Table 4.20: Regression Coefficients of the Relationship Between Community Participation in Field Based HIV Tests and Counseling and the Partnership for Managing M&E Indicators

Model		Unstandardized Coefficients			Standardized Coefficients	
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.608	0.281		3.275	0.0001
	Marital status	0.768	0.275	0.426	0.165	0.001
	Religion	0.497	0.194	0.517	0.192	0.02
	Income level	-0.593	0.256	0.489	0.207	0.04

a. Dependent Variable: Community Participation in Field Based HIV Tests and Counseling

As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$) becomes:

$$Y = 1.608 + 0.432X_1 + 0.526 X_2 + 0.502 X_3$$

The regression equation in Table 4.20 has established that taking all factors into account (marital status, religion, income level) constant at zero Community Participation in Field Based HIV Tests and Counseling will be 1.608. The findings presented also show that taking all other independent variables at zero, a unit increase in marital status would lead to a 0.768 increase in the Community Participation in Field Based HIV Tests and Counseling.

Further, the findings shows that a unit increases in income level would lead to a 0.593 decrease in Community Participation in Field Based HIV Tests and Counseling. In addition, the findings show that a unit increase in religion would lead to a 0.497 increase in Community Participation in Field Based HIV Tests and Counseling. Overall, religion had the least effect on Community Participation in Field Based HIV Tests and Counseling and marital status had the highest effect.

Marital status calculated p-value was found to be 0.001 which is statistically significant ($p < 0.05$) which is level of confidence. The marital status has a positive significant influence on Community Participation in Field Based HIV Tests and Counseling. Income level calculated P-value was found to be 0.02 which is statistically significant since $P < 0.05$. There is a negative correlation between income level and the Community Participation in Field Based HIV Tests and Counseling. Religion involved calculated P-value was found to be 0.04 which statistically $P < 0.05$ hence significant. There is a positive correlation between religion and the Community Participation in Field Based HIV Tests and Counseling.

4.5 Structural Factors and Community Participation in Field Based HIV test and Counselling

The third objective that the study wanted to achieve was to determine the extent to which structural factors influenced community participation in field based HIV test and counselling in Suba Sub County, Kenya.

To achieve this objective, the respondents were asked to give their opinions on whether structural factors affected the level of respondents' participation in field based HIV test and counseling. The results are provided in table 4.21.

Table 4.21: Effect of structural factors on community participation

	Frequency	Percent
Yes	370	92.5
No	30	7.5
Total	400	100.0

On whether structural factors affected the level of respondents' participation in field based HIV test and counseling, out of 400 respondents who participated in the study, 370 (92.5%) said yes while 30 (7.5%) said no. This implies that structural factors affected the level of respondents' participation in field based HIV test and counseling.

The respondents were asked to give their opinions on health center attendant's attitude towards the Suba sub county patients. The results are provided in table 4.22.

Table 4.22: Health center attendant's attitude towards the Suba Sub county patients

	Frequency	Percent
Neutral	35	8.8
Positive	360	90.0
Negative	5	1.3
Total	400	100.0

On health center attendant's attitude towards the Suba sub county patients, out of 400 respondents who participated in the study, 360 (90.0%) said the health center attendant's attitude was positive, 35 (8.8%) said the health center attendant's attitude was neutral and 5 (1.3%) said the health center attendant's attitude was negative. This implies that the health center attendants were well trained on HIV test and counseling.

The respondents were asked to give their opinions on the level of agreement or disagreement with the statements provided in a likert scale of 1-5 where 1=Not at all, 2= little extent, 3= moderate extent, 4= great extent, and 5= very great extent. The results are provided in table 4.23.

Table 4.23: Structural factors and level of community participation

Statements	Not at all		little extent		Moderate extent		Great extent		Very great extent		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Level of confidence with health centres	2	0.5	10	2.5	19	4.8	338	84.5	31	7.8	3.97	0.6
Time taken during the session	2											
Testing setting	5	6.3	34	8.5	39	9.8	242	60.5	60	15	3.70	0.4
	3											
	6	9	297	74.3	48	12	12	3	7	1.8	2.15	0.1
Total											9.81	1.1
Composite											3.27	0.37

On level of confidence with healthcare workers' effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 2 (0.5%) said not at

all, 10 (2.5%) said to a little extent, 19 (4.8%) said to a moderate extent, 338 (84.5%) said to a great extent and 31 (7.8%) said to a very great extent. This was backed by a mean of 3.97 and standard deviation of 0.6. This is greater than the composite mean and standard deviation which implies that level of confidence with health workers affected on community participation of field HIV tests and counseling.

On time taken during the session effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 25 (6.3%) said not at all, 34 (8.5%) said to a little extent, 39 (9.8%) said to a moderate extent, 242 (60.5%) said to a great extent and 60 (15%) said to a very great extent. This was backed by a mean of 3.70 and standard deviation of 0.4. This is greater than the composite mean and standard deviation which implies that time taken during the session affected on community participation of field HIV tests and counseling.

On testing setting effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 36 (9%) said not at all, 297 (74.3%) said to a little extent, 48 (12%) said to a moderate extent, 12 (3%) said to a great extent and 7 (1.8%) said to a very great extent. This was backed by a mean of 2.15 and standard deviation of 0.1. This is lower than the composite mean and standard deviation which implies that testing setting did not affect on community participation of field HIV tests and counseling.

4.5.1 Regression analysis

In this study, a multiple regression analysis was conducted to test the influence among structural factors indicators. The research used statistical package for social sciences (SPSS Version 21) to code, enter and compute the measurements of the multiple regressions.

Table 4.24: Multiple Regression Between Structural Factors and Community participation in Field based HIV tests and counseling (dependent variable)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.874	.764	.709	.1009

a. Predictors: (Constant), confidentiality, time taken, testing set-up.

The data in Table 4.24 indicated that R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R², also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent indicators of structural factors. 76.4% of the Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. Variables could be attributed to the combined effect of the structural factors indicators.

Table 4.25: ANOVA Results of the Regression Analysis Between Community Participation in Field Based HIV Tests and Counselling and Structural Factors Indicators

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.654	9	2.279	3.176	.003
	Residual	82.673	391	.187		
	Total	96.327	400			

a. Predictors: confidentiality, time taken, testing set-up.

b. Dependent Variable: Community Participation in Field Based HIV Testing and Counseling in Suba Sub County.

The data in Table 4.25 indicated that the probability value of 0.003 indicates that the regression relationship was highly significant in predicting how confidentiality, time taken, testing set-up influenced Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. The F critical at 5% level of significance was 3.176 since F calculated is greater than the F critical (value = 2.830), this shows that the overall model was significant.

Table 4.26: Regression Coefficients of the Relationship Between Community Participation in Field Based HIV Tests and Counseling and the Structural factors Indicators

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.503	0.346		3.186	0.01
	Confidentiality	0.769	0.283	0.738	0.186	0.002
	Time taken	0.526	0.209	0.496	0.256	0.001
	Testing set-up	0.708	0.197	0.473	0.248	0.07

a. Dependent Variable: Community Participation in Field Based HIV Tests and Counseling

As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$) becomes:

$$Y = 1.503 + 0.769X_1 + 0.708X_2 + 0.502X_3$$

The regression equation in Table 4.26 has established that taking all factors into account (confidentiality, time taken, testing set-up) constant at zero Community Participation in Field Based HIV Tests and Counseling will be 1.503. The findings presented also show that taking all other independent variables at zero, a unit increase in confidentiality would lead to a 0.769 increase in the Community Participation in Field Based HIV Tests and Counseling.

Further, the findings shows that a unit increases in testing set-up would lead to a 0.502 increase in Community Participation in Field Based HIV Tests and Counseling. In addition, the findings show that a unit increase in time taken would lead to a 0.432 increase in Community Participation in Field Based HIV Tests and Counseling. Overall, time taken had the least effect on Community Participation in Field Based HIV Tests and Counseling and confidentiality had the highest effect.

Confidentiality calculated p-value was found to be 0.001 which is statistically significant ($p < 0.05$) which is level of confidence. Confidentiality has a positive significant influence on Community Participation in Field Based HIV Tests and Counseling. Testing set-up calculated P-value was found to be 0.02 which is statistically significant since $P < 0.05$. There is a positive correlation between testing set-up and the Community Participation in Field Based HIV Tests and Counseling. Time taken calculated P-value was found to be 0.04 which statistically $P < 0.05$ hence significant. There is a positive correlation between time taken and the Community Participation in Field Based HIV Tests and Counseling.

4.6 Mobilization Factors and Community Participation in Field Based HIV test and Counselling

The fourth objective that the study wanted to achieve was to determine the extent to which mobilization factors influenced community participation in field based HIV test and counselling in Suba Sub County, Kenya.

To achieve this objective, the respondents were asked to give their opinions on whether mobilization strategies affected the level of respondents' participation in field based HIV test and counseling. The results are provided in table 4.27.

Table 4.27: Mobilization factors and the level of community participation

	Frequency	Percent
Yes	340	85.0
No	60	15.0
Total	400	100.0

On whether mobilization factors affected the level of respondents' participation in field based HIV test and counseling, out of 400 respondents who participated in the study, 340 (85.0%) said yes while 60 (15.0%) said no. This implies that mobilization factors affected the level of respondents' participation in field based HIV test and counseling.

The respondents were asked to give their opinions on the level of agreement or disagreement with the statements provided in a likert scale of 1-5 where 1=Not at all, 2= little extent, 3= moderate extent, 4= great extent, and 5= very great extent. The results are provided in table 4.28.

Table 4.28: Mobilization factors indicators and level of community participation

Statements	Not at all		Little extent		Moderate extent		Great extent		Very great extent		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
Attendance of Barazas	32	8	49	12.3	48	12	217	54.3	54	13.5	3.53	0.2
Community health volunteers	2	0.5	7	1.8	19	4.8	342	85.5	30	7.5	3.98	0.6
Accelerated mobilization	5	1.3	18	4.5	24	6	324	81	29	7.3	3.89	0.5
Total											11.4	1.3
Composite											3.80	0.4

On attendance of Barazas effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 32 (8%) said not at all, 49 (12.3%) said to a little extent, 48 (12%) said to a moderate extent, 217 (54.3%) said to a great extent and 54 (13.5%) said to a very great extent. This was backed by a mean of 3.53 and standard deviation of 0.2. This is lower than the composite mean and standard deviation which implies that attendance of Barazas did not affect community participation of field HIV tests and counseling.

On community health volunteers effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 2 (0.5%) said not at all, 7 (1.8%) said to a little extent, 19 (4.8%) said to a moderate extent, 342 (85.5%) said to a great extent and 30 (7.5%) said to a very great extent. This was backed by a mean of 3.98 and standard deviation of 0.6. This is greater than the composite mean and standard deviation which implies that community health volunteers affected on community participation of field HIV tests and counseling.

On accelerated mobilization effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 5 (1.3%) said not at all, 18 (4.5%) said to a

little extent, 24 (6%) said to a moderate extent, 324 (81%) said to a great extent and 29 (7.3%) said to a very great extent. This was backed by a mean of 3.89 and standard deviation of 0.5. This is greater than the composite mean and standard deviation which implies that accelerated mobilization affected community participation of field HIV tests and counseling.

The respondents were asked to give source of information about field based testing and counseling. The results are provided in table 4.29.

Table 4.29: Source of information on field based testing and counseling

	Frequency	Percent
Baraza	12	3.0
CHV	38	9.5
Accelerated mobilization	350	87.5
Total	400	100.0

On respondents' knowledge on field based testing and counseling, out of 400 respondents who participated in the study, 350 (87.5%) knew about FBHTC through accelerated mobilization, 38 (9.5%) got it through CHV, while 12 (3.0%) had knowledge through Baraza.

The respondents were asked to give their opinions on community response to mobilization strategies used to participate on field based testing and counseling. The results are provided in table 4.30.

Table 4.30: Community response to mobilization strategies used to participate

	Frequency	Percent
Neutral	72	18.0
Positive	320	80.0
Negative	8	2.0
Total	400	100.0

On community response to mobilization strategies used to participate on field based testing and counseling, out of 400 respondents who participated in the study, 320 (80.0%) indicated that community response used was positive, 72 (18.0%) indicated that community response used was neutral and 8 (2.0%) indicated that community response used was negative.

4.6.1 Regression analysis

In this study, a multiple regression analysis was conducted to test the influence among mobilization strategies indicators. The research used statistical package for social sciences (SPSS Version 21) to code, enter and compute the measurements of the multiple regressions.

Table 4.31: Multiple Regression Between Mobilization Strategies and Community participation in Field based HIV tests and counseling (dependent variable)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.765	.585	.504	.1027

a. Predictors: (Constant), barazas, community health volunteers, accelerated mobilization.

The data in Table 4.31 indicated that R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R², also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent indicators of mobilization strategies. 58.5% of the Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. Variables could be attributed to the combined effect of the mobilization strategies indicators.

Table 4.32: ANOVA Results of the Regression Analysis Between Community Participation in Field Based HIV Tests and Counseling and Mobilization Strategies Indicators

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.458	5	2.458	3.285	.001
	Residual	85.106	395	.239		
	Total	97.564	400			

a. Predictors: barazas, community health volunteers, accelerated mobilization.

b. Dependent Variable: Community Participation in Field Based HIV Tests and Counseling in Suba Sub County.

The data in Table 4.32 indicated that the probability value of 0.001 indicates that the regression relationship was highly significant in predicting how barazas, community health volunteers, accelerated mobilization influenced Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. The F critical at 5% level of significance was 3.285 since F calculated is greater than the F critical (value = 2.830), this shows that the overall model was significant.

Table 4.33: Regression Coefficients of the Relationship Between Community Participation in Field Based HIV Tests and Counseling and the Mobilization strategies Indicators

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.618	0.346		3.186	0.001
	Barazas	0.594	0.209	0.496	0.256	0.02
	Community health volunteers	0.684	0.283	0.738	0.186	0.004
	Accelerated mobilization	0.709	0.184	0.371	0.185	0.0001

a. Dependent Variable: Community Participation in Field Based HIV Testing and Counseling

As per the SPSS generated in table 4.33, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \epsilon$) becomes:

$$Y = 1.618 + 0.684X_1 + 0.594 X_2$$

The regression equation in Table 4.33 has established that taking all factors into account (barazas, community health volunteers, accelerated mobilization) constant at zero Community Participation in Field Based HIV Tests and Counseling will be 1.618. The findings presented also show that taking all other independent variables at zero, a unit increase in accelerated mobilization would lead to a 0.709 increase in the Community Participation in Field Based HIV Tests and Counseling.

Further, the findings shows that a unit increases in community health volunteers would lead to a 0.684 increase in Community Participation in Field Based HIV Tests and Counseling. A unit increases in barazas would lead to a 0.594 increase in Community Participation in Field Based HIV Tests and Counseling. Overall, barazas had the least effect on Community Participation in Field Based HIV Tests and Counseling and accelerated mobilization had the highest effect.

Accelerated mobilization calculated p-value was found to be 0.0001 which is statistically significant ($p < 0.05$) which is level of confidence. The accelerated mobilization has a positive significant influence on Community Participation in Field Based HIV Tests and Counseling. Community health volunteers calculated P-value was found to be 0.004 which is statistically significant since $P < 0.05$. There is a positive correlation between community health volunteers and the Community Participation in Field Based HIV Tests and Counseling. Barazas calculated P-value was found to be 0.002 which is statistically significant since $P < 0.05$. There is a positive correlation between barazas and the Community Participation in Field Based HIV Tests and Counseling.

4.7 Regression analysis

In this study, a multiple regression analysis was conducted to test the influence among predictor variables. The research used statistical package for social sciences (SPSS Version 21) to code, enter and compute the measurements of the multiple regressions.

Table 4.34: Multiple Regression Between Factors Influencing Community Participation and Community Participation in Field Based HIV Tests and Counselling (dependent variable)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.896	.803	.794	.1037

a. Predictors: (Constant), community perception, social economic factors, structural factors, mobilization strategies.

The data in Table 4.34 indicated that R-Square (coefficient of determination) is a commonly used statistic to evaluate model fit. R-square is 1 minus the ratio of residual variability. The adjusted R^2 , also called the coefficient of multiple determinations, is the percent of the variance in the dependent explained uniquely or jointly by the independent variables. 80.3% of the Community Participation in Field Based HIV Tests and Counseling in Suba Sub County. Variables could be attributed to the combined effect of the predictor variables.

Table 4.35: ANOVA Results of the Regression Analysis Between Community Participation in Field Based HIV Tests and Counseling and Predictor Variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.223	4	3.112	3.264	.0001
	Residual	92.876	396	.641		
	Total	115.099	400			

a. Predictors: community perception, social economic factors, structural factors, mobilization strategies.

b. Dependent Variable: Community Participation in Field Based HIV Tests and Counselling in Suba Sub County.

The data in Table 4.35 indicated that the probability value of 0.0001 indicates that the regression relationship was highly significant in predicting how community perception, social economic factors, structural factors, mobilization strategies in Suba Sub County. The F critical at 5% level of significance was 3.264 since F calculated is greater than the F critical (value = 2.830), this shows that the overall model was significant.

Table 4.36: Regression Coefficients of the Relationship Between Community Participation in Field Based HIV Tests and Counseling and the Predictive Variables

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.607	0.422		3.472	0
	Community perception	-0.564	0.093	0.597	0.143	0.03
	Social economic factors	-0.437	0.085	0.472	0.135	0.02
	Structural factors	0.862	0.087	0.902	0.349	0.003
	Mobilization strategies	0.735	0.084	0.826	0.257	0.001

a. Dependent Variable: Community Participation in Field Based HIV Tests and Counseling

As per the SPSS generated in table 4.36, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$) becomes:

$$Y = 1.607 + 0.564X_1 + 0.437 X_2 + 0.862 X_3 + 0.735 X_4$$

The regression equation in Table 4.36 has established that taking all factors into account (community perception, social economic factors, structural factors, and mobilization strategies) constant at zero community participation in field based HIV tests and counselling will be 1.607. The findings presented also show that taking all other independent variables at zero, a unit increase in structural factors would lead to a 0.862 increase in the community participation in field based HIV tests and counselling.

Further, the findings shows that a unit increases in mobilization strategies would lead to a 0.735 increase in community participation in field based HIV tests and counselling. In addition, the findings show that a unit increase in community perception would lead to a 0.564 decrease in community participation in field based HIV tests and counselling. Also, the findings show that a unit increase in social economic factors would lead to a 0.437 decrease in community participation in field based HIV tests and counselling. Overall, social economic factors had the least effect on community participation in field based HIV tests and counselling and structural factors had the highest effect.

Structural factors calculated p-value was found to be 0.003 which is statistically significant ($p < 0.05$) which is level of confidence. The structural factors have a positive significant influence on community participation in field based HIV tests and counseling. Mobilization strategies calculated P-value was found to be 0.001 which is statistically significant since $P < 0.05$. There is a positive correlation between mobilization strategies and the community participation in field

based HIV tests and counseling. Community perception calculated P-value was found to be 0.03 which statistically $P < 0.05$ hence significant. There is a negative correlation between community perception and the community participation in field based HIV tests and counseling. Social economic factors calculated P-value was found to be 0.02 which statistically $P < 0.05$ hence significant. There is a negative correlation between social economic factors and the community participation in field based HIV tests and counseling.

CHAPTER FIVE
SUMMARY OF FINDINGS, DISCUSSIONS, CONCLUSIONS AND
RECOMMENDATIONS

5.1 Introduction

This chapter is organized into the following subheadings: summary of the study, discussions of the findings, conclusions of the study, recommendations of the study and suggestions for further study.

5.2 Summary of Findings

The study was to research on factors influencing community participation in field based HIV testing and counseling in Suba sub county, Homa Bay county Kenya. The objectives of the study were: to evaluate how community perception influenced community participation in field based HIV testing and counseling in Suba Sub County; to establish socio- economic factors influencing community participation on field based HIV testing and counseling in Suba Sub County; to assess structural factors influencing community participation in field based HIV testing and counseling in Suba Sub County; and to evaluate mobilization strategies influencing community participation in field based HIV testing and counseling in Suba Sub County.

The study adopted a descriptive survey research design. Research instruments used included one questionnaire for the community members and interview guide for the key informants. Data from the field was collected by the researcher and analyzed for basic descriptive statistics. The main findings of the study are:

5.2.1 Community Perception and Community Participation in Field Based HIV Test and Counselling

The first objective was to evaluate how community perception influenced community participation on field based HIV testing and counseling in Suba Sub County, Homa Bay County

The study found that community perception affected the level of respondents' participation in field based HIV test and counseling, 300 (75.0%) said yes. On stigmatization effect on community participation of field HIV tests and counseling, out of 400 respondents who participated in the study, 305 (76.3%) said to a very great extent. This was backed by a mean of 4.59 and standard deviation of 0.5. On culture effect on community participation of field HIV tests and counseling, 280 (70%) said to a very great extent. This was backed by a mean of 4.48 and standard deviation of 0.4. On attitude effect on community participation of field HIV tests and counseling, 189 (47.25%) said to a very great extent. This was backed by a mean of 4.38 and standard deviation of 0.4. On myths and beliefs effect on community participation of field HIV tests and counseling, 200 (50%) said to a moderate extent. This was backed by a mean of 2.87 and standard deviation of 0.1. A unit increase in stigma would lead to a 0.659 decrease in Community Participation in Field Based HIV Tests and Counselling. In addition, the findings show that a unit increase in culture would lead to a 0.573 decrease in Community Participation in Field Based HIV Tests and Counselling. A unit increase in myths & beliefs would lead to a 0.569 decrease in Community Participation in Field Based HIV Tests and Counselling.

5.2.2 Socio-Economic Factors and Community Participation in Field Based HIV test and Counselling

The second objective was to establish socio- economic factors influencing community participation on field based HIV testing and counseling in Suba Sub County, Homa Bay County. On whether social economic factors affected the level of respondents' participation in field based HIV test and counseling, 380 (95.0%) said yes. On marital status effect on community participation of field HIV tests and counseling, 222 (55.5%) said to a great extent. This was backed by a mean of 4.01 and standard deviation of 0.4. On religion effect on community participation of field HIV tests and counseling, 170 (42.5%) said to a moderate extent. This was backed by a mean of 2.63 and standard deviation of 0.1. On income level effect on community participation of field HIV tests and counseling, 196 (49%) said to a great extent. This was backed by a mean of 4.05 and standard deviation of 0.3. On frequency of participation together with respondents spouse or sexual partner, 290 (72.5%) said rarely. On the nature of job the respondents did, 240 (60.0%) had indefinite job. A unit increases in income level would lead to a 0.593 decrease in Community Participation in Field Based HIV Tests and Counselling. In addition, the findings show that a unit increase in religion would lead to a 0.497 increase in Community Participation in Field Based HIV Tests and Counselling.

5.2.3 Structural Factors and Community Participation in Field Based HIV test and Counselling

The third objective was to assess structural factors influencing community participation in field based HIV testing and counseling in Suba Sub County. On whether structural factors affected the level of respondents' participation in field based HIV test and counseling, 370 (92.5%) said yes. On health center attendant's attitude towards the Suba sub county patients, 360 (90.0%) said the

health center attendant's attitude was positive. On level of confidence with health centres effect on community participation of field HIV tests and counseling, 338 (84.5%) said to a great extent. This was backed by a mean of 3.97 and standard deviation of 0.6. On time taken during the session effect on community participation of field HIV tests and counseling, 242 (60.5%) said to a great extent. On testing setting effect on community participation of field HIV tests and counseling, 297 (74.3%) said to a little extent. a unit increases in testing set-up would lead to a 0.502 increase in Community Participation in Field Based HIV Tests and Counselling. In addition, the findings show that a unit increase in time taken would lead to a 0.432 increase in Community Participation in Field Based HIV Tests and Counselling.

5.2.4 Mobilization Factors and Community Participation in Field Based HIV test and Counselling

The fourth objective was to evaluate mobilization strategies influencing community participation in Field based HIV testing and Counselling. On whether mobilization factors affected the level of respondents' participation in field based HIV test and counseling, 340 (85.0%) said yes. On attendance of Barazas effect on community participation of field HIV tests and counseling, 217 (54.3%) said to a great extent. This was backed by a mean of 3.53 and standard deviation of 0.2. On community health volunteers effect on community participation of field HIV tests and counseling, 342 (85.5%) said to a great extent. This was backed by a mean of 3.98 and standard deviation of 0.6. On accelerated mobilization effect on community participation of field HIV tests and counseling, 324 (81%) said to a great extent. This was backed by a mean of 3.89 and standard deviation of 0.5. On respondents' knowledge on field based testing and counseling, out of 400 respondents who participated in the study, 350 (87.5%) had knowledge on accelerated

mobilization. On community response to mobilization strategies used to participate on field based testing and counseling, 320 (80.0%) indicated that community response used was positive.

5.3 Conclusions of the study

5.3.1 Community Perception and Community Participation in Field Based HIV Test and Counselling

The study concluded that stigmatization affected community participation of field HIV tests and counseling. Culture and attitude affected community participation of field HIV tests and counseling. Myths and beliefs did not affect community participation of field HIV tests and counseling. Overall, myths & beliefs had the least effect on Community Participation in Field Based HIV Tests and Counseling and attitude had the highest effect. The level of attitude has a negative significant influence on Community Participation in Field Based HIV Tests and Counseling. There is a negative correlation between stigma and the Community Participation in Field Based HIV Tests and Counseling. There is a negative correlation between culture and the Community Participation in Field Based HIV Tests and Counseling. There is a negative correlation between culture and the Community Participation in Field Based HIV Tests and Counseling. Community perception calculated P-value was found to be 0.03 which statistically $P < 0.05$ hence significant. There is a negative correlation between community perception and the community participation in field based HIV tests and counseling.

5.3.2 Socio-Economic Factors and Community Participation in Field Based HIV test and Counselling

Social economic factors had effect on community participation of field HIV tests and counseling. Marital status affected on community participation of field HIV tests and counseling. Religion

did not affect on community participation of field HIV tests and counseling. Income level affected on community participation of field HIV tests and counseling. Overall, religion had the least effect on Community Participation in Field Based HIV Tests and Counseling and marital status had the highest effect. The marital status has a positive significant influence on Community Participation in Field Based HIV Tests and Counseling. There is a negative correlation between income level and the Community Participation in Field Based HIV Tests and Counseling. There is a positive correlation between religion and the Community Participation in Field Based HIV Testing and Counseling. Social economic factors calculated P-value was found to be 0.02 which statistically $P < 0.05$ hence significant. There is a negative correlation between social economic factors and the community participation in field based HIV tests and counseling.

5.3.3 Structural Factors and Community Participation in Field Based HIV test and Counselling

Structural factors affected the level of respondents' participation in field based HIV test and counseling. The health center attendants were well trained on HIV test and counseling. Level of confidence with health centres affected on community participation of field HIV tests and counseling. Time taken during the session affected on community participation of field HIV tests and counseling. Testing setting did not affect on community participation of field HIV tests and counseling. Overall, time taken had the least effect on Community Participation in Field Based HIV Tests and Counseling and confidentiality had the highest effect. Confidentiality has a positive significant influence on Community Participation in Field Based HIV Tests and Counseling. There is a positive correlation between testing set-up and the Community Participation in Field Based HIV Tests and Counseling. There is a positive correlation between time taken and the Community Participation in Field Based HIV Tests and Counseling.

Structural factors calculated p-value was found to be 0.003 which is statistically significant ($p < 0.05$) which is level of confidence. The structural factors have a positive significant influence on community participation in field based HIV tests and counseling.

5.3.4 Mobilization Factors and Community Participation in Field Based HIV test and Counselling

Mobilization factors affected the level of respondents' participation in field based HIV test and counseling. Attendance of Barazas did not affect community participation of field HIV tests and counseling. Community health volunteers affected on community participation of field HIV tests and counseling. Accelerated mobilization affected community participation of field HIV tests and counseling. Overall, barazas had the least effect on Community Participation in Field Based HIV Tests and Counseling and accelerated mobilization had the highest effect. The accelerated mobilization has a positive significant influence on Community Participation in Field Based HIV Tests and Counseling. There is a positive correlation between community health volunteers and the Community Participation in Field Based HIV Tests and Counseling. There is a positive correlation between barazas and the Community Participation in Field Based HIV Tests and Counseling. Mobilization strategies calculated P-value was found to be 0.001 which is statistically significant since $P < 0.05$. There is a positive correlation between mobilization strategies and the community participation in field based HIV tests and counseling.

5.4 Recommendations of the study

Based on the study literature review and findings after the data analysis, the following recommendations were made:

The study recommends an integrated approach to Field based HIV testing and counseling in order for community members to participate fully. The stakeholders dealing with health related issues should provide additional health services that are unrelated to HIV to motivate community to participate in field based HIV testing and counselling.

Moreover, the community should be encouraged to participate in field HIV tests and counselling as couple or sexual partners. This will help to reduce disclosure issues among sexual partners within the community. The government should come up with a programme to support couple counseling and testing.

Health center attendants should be encouraged to maintain high level of privacy and confidentiality use the right language and have good attitude towards their clients. This will help to create confidence among the clients thus encourage them to participate in field HIV tests and counselling. The health attendants should be trained to use the shortest time possible during field HIV tests and counselling. Testing setting should be set in a way that the community feel confident.

The stakeholders involved in health should mobilize the community to participate in field HIV tests and counselling. The strategies used to mobilize the community should be friendly and inclusive. There is a need of promotion of VCT through sound and viable information and counseling interventions by involving mass media, social places, mass organizations and parents. Health institutions should provide voluntary HIV counseling and testing services during extra working days and hours. Community friendly VCT services have to be expanded and the existing facilities need to be strengthened to address the need of community. There is also a need

for an interactive system integrating people in the normal VCT service provision together with continuous education of operators.

5.5 Suggestions for further study

The researcher suggested similar studies to be carried out in other sub counties with high HIV and AIDS prevalence and poor health facilities to determine the specific requirements to necessitate development of an all inclusive policy guideline that enables clear participation of the government on where and how to channel resources as well as how to cooperate with partner organizations.

Further studies on the establish the factors influencing HIV/AIDS counselling and testing uptake among fishermen in Kenya.

5.7 Contribution to the body of Knowledge

Objectives	Contribution to knowledge
Community perception	<p>How community perception influence community participation in field based HIV tests and counseling.</p> <p>How stigma has influenced community participation in field based HIV tests and counseling</p>
Socio- economic factors	<p>How marital status has influenced community participation in field based HIV tests and counseling.</p> <p>How income level has influenced community participation in field based HIV tests and counseling</p>
Structural factors	<p>How testing setup has influenced community participation in field based HIV tests and counseling</p> <p>How confidentiality has influenced community participation in field based HIV tests and counseling</p>
Mobilization strategies	<p>How accelerated mobilization has influenced community participation in field based HIV tests and counseling</p> <p>How community health volunteers has influenced community participation in field based HIV tests and counseling</p>

REFERENCE

- Alexander, J. C. (2003). *The Meanings of Social Life: A Cultural Sociology*. New York: Oxford University Press.
- Appa, L. S., & Mathirajan, M. (2006). *Management research methodology: Integration of principles, methods and techniques*. New Delhi: Pearson Education.
- Appadurai, A. (2016). *The social life of things: Commodities in cultural perspective*.
- Aregu, L., & International Livestock Research Institute. (2009). *Gender and HIV/AIDS mainstreaming in a market-oriented agricultural development context: Training manual for frontline staff*. Addis Ababa: ILRI.
- Asian Development Bank,. (2009). *Intersections, gender, HIV, and infrastructure operations: Lessons from selected ADB-financed transport projects*
- Awange, J. L., & Obiero, O. O. (2006). *Lake Victoria: Ecology, resources, environment*. Berlin: Springer
- Barnes, H. (2013). *Applied drama and theatre as an interdisciplinary field in the context of HIV/AIDS in Africa*. Amsterdam: Rodopi.
- Bartels, K. P. R. (2015). *Communicative capacity: Public encounters in participatory theory and practice*
- Baxen, J., & Breidlid, A. (2009). *HIV/AIDS in Sub-Saharan Africa: Understanding the implications of culture & context*. Cape Town, South Africa: UCT Press
- Berman, T. A. L. (2017). *Public participation as a tool for integrating local knowledge into spatial planning*. Place of publication not identified: SPRINGER INTERNATIONAL PU.
- Beyrer, C., & World Bank. (2011). *the global HIV epidemics among men who have sex with men*. Washington, D.C: World Bank.
- Billows, D. (2002). *Managing healthcare projects*. Denver, Colo: Hampton Group, Inc

- Booth, K. M. (2008). *Local women, global science: Fighting AIDS in Kenya*. Bloomington [u.a.: Indiana Univ. Press.
- Claussen, J., & Van Brandwijk, C. (2008). *The Catholic faith handbook for youth*. Winona, MN: Saint Mary's Press
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, California: SAGE Publications
- Dlamini, P. K., Skinner, D., Zungu-Dirwayi, N(2004). *Projects funded by the WK Kellogg Foundation on HIV/AIDS in southern Africa: Report of the colloquium, 26-27 November 2003*. Cape Town, South Africa: HSRC Publishers.
- Drèze, J., & Sen, A. K. (2002). *India: Development and participation*. Oxford [u.a.: Oxford University Press.
- Fayos, S. E. & Jafari, J (2012). *Knowledge management in tourism: Policy and governance applications*. Bingley, U.K: Emerald
- Flint, A. (2011). *HIV/AIDS in Sub-Saharan Africa: Politics, aid and globalization*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan
- Gershman, S. D. (2013). *An evaluation of public participation techniques using Arnstein's Ladder: The Portland Plan*. Gainesville, Fla.: University of Florida Yin, R. K. (2013). *Case study research: Design and methods*.
- Getnet, T., & Kloos, H. (2013). *Vulnerabilities, impacts, and responses to HIV/AIDS in Sub-Saharan Africa*
- Gokhale, S. B., & Gormley, T. C. (2013). *Construction management of healthcare projects*. New York: McGraw Hill Professional
- Ghana AIDS Commission. (2006). *The national monitoring and evaluation plan for HIV/AIDS in Ghana, 2006-2010*. Accra, Ghana: Ghana AIDS Commission.
- Haacker, M., & IMF. (2004). *The macroeconomics of HIV/AIDS*. Washington, D.C: International Monetary Fund

- Hutton, J. P. (2008). *Global health: Joint u.n.programme on hiv/aids unaids needs to strengthen country-level*. Place of publication not identified: Diane Pub Co
- In Gyapong, J., & In Boatin, B. (2016). *Neglected tropical diseases -- Sub-Saharan Africa*.
- In Lee, D. R. (2013). *Public Choice, Past and Present: The Legacy of James M. Buchanan and Gordon Tullock..*
- Juma, M. N. (2001). *Coping with HIV/AIDS in education: Case studies of Kenya and Tanzania*. London: Commonwealth Secretariat Publ
- Knodel, J. E., & United Nations. (2009). *Older-age parents and the AIDS epidemic in Thailand: Changing impacts in the era of antiretroviral therapy*. Bangkok, Thailand: Social Development Division, Economic and Social Commission for Asia and the Pacific
- Li, H. (2012). *Virtual community participation and motivation: Cross-disciplinary theories*. Hershey,PA: Information Science Reference.
- Liamputtong, P. (2013). *Stigma, discrimination and living with HIV/AIDS: A cross-cultural perspective*. Dordrecht: Springe
- McKenzie, J. F., &Pinger, R. R. (2015). *An introduction to community and public health*
- Mugenda, O. M., &Mugenda, A. G. (2008). *Research methods: Quantitative and qualitative approaches*. Nariobi, Kenya: African Centre for Technology Studies
- Ndati, N. (2011). *HIV & AIDS, communication, and secondary education in Kenya*.Eldoret, Kenya: Zapf Chancery
- Nigeria. (1992). *Primary health care projects: Standard equipment list for comprehensive health care*. Nigeria: Federal Ministry of Health.
- Olson, J. (2014). *Moral error theory: History, critique, defense*
- Plummer, J., Taylor, J. G., Great Britain.,& GHK Consulting. (2004). *Community participation in China: Issues and processes for capacity building*. London: Earthscan

- Reisman, D. A. (2000). *Theories of collective action: Downs, Olson, and Hirsch*. Houndmills, Basingstoke, Hampshire: Macmillan
- Rowley, C. K., & Schneider, F. (2004). *The encyclopedia of public choice*. Dordrecht [etc.]: Kluwer Academic Publishers
- Sayinzoga, K., & World Bank. (2010). *budgeting for effectiveness in Rwanda: From reconstruction to reform*. Washington, D.C: World Bank.
- Schroth, O. G. (2009). *From Information zu Participation: Interactive Landscape Visualization as a Tool for Collaborative Planning*. Zürich: vdfHochschulvlg
- Sharma, M. (2006). *Aids awareness through community participation: An action research*. Delhi: Kalpaz
- Sommers, M. (2012). *Stuck: Rwandan youth and the struggle for adulthood*. Athens: University of Georgia Press
- Stolley, K. S., & Glass, J. E. (2009). *HIV/AIDS*. Santa Barbara, Calif: Greenwood Press
- UNICEF, UNAIDS, &Danmark. (2015). *Young people and HIV/AIDS: Opportunity in crisis*. Geneva: UNICEF
- Wambui, H. K. (2006). *The politics of HIV/AIDS and implications for democracy in Kenya*. Lewiston, N.Y: Edwin Mellen Press.
- Williams, A. (2017). *The social life of books: Reading together in the eighteenth-century home*. Yale University Press
- Wu, Z. (2017). *HIV/AIDS in China: Beyond the Numbers*. Singapore: Springer

APPENDICES

APPENDIX I: LETTER OF TRANSMITTAL

UNIVERSITY OF NAIROBI

P. O. BOX 3947-40100

KISUMU.

05/10/2017

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT ACADEMIC RESEARCH

I am Irene Achieng Odongo, a Student at University Of Nairobi conducting a research study entitled “**Factors influencing Community Participation in Field Based HIV Testing and Counselling in Suba Sub County, Homa Bay County Kenya**”.

The purpose of this letter is to request you to kindly fill in the questionnaire with precision and accuracy. The questionnaire is supposed to assist in answering specific objectives of the research which is being undertaken as part of the university requirement. Any information given herein was treated with utmost confidentiality and only be used for the purpose of research. So kindly feel free to fill the questionnaire.

Thank you.

Yours faithfully,

APPENDIX II: RESEARCH QUESTIONNAIRE

This questionnaire requires the respondents (residents of Suba sub county and informants from the health centers) to provide information on the topic “**Factors influencing Community Participation in HIV Field Based Counselling and Testing in Suba Sub County, Homa Bay County Kenya**”.

The Information is purposely intended for academic use only and will not be divulged to any other person. Kindly complete all the sections hereunder. Note that all the Questions herein are interrelated and are equally important for the study.

PART A: Demographic Information of respondents

1. What is your gender?

Female () Male ()

2. What is your age bracket

20 or below () 21-30 () 31-40 ()
41-50 () 51+ ()

3. State your highest education

Primary () Secondary ()
Diploma () University ()

4. Marital status

Single () Married() Divorced/separated () Widowed()

5. Do you have any kid(s).

Yes () No ()

6. What do you do for a living

Businessman/woman () Farmer () Fisher-folk() Other (specify).....

7. After how long do you go for medical checkups?

Above 2 years () after 1 year ()

After 6 months () Only when feeling sick ()

None of the above ()

8. a. Are you aware of your HIV status?

Yes () No ()

b. If yes, what was the model of testing?

Field-based Testing () Facility-based testing () Self-Testing ()

PART B: Community perception influence community participation in field based HIV test and counselling?

a) Does community perception affect the level of your participation in field based HIV test and counselling?

Yes () No ()

b).In your own view, how do attitudes and beliefs about field HIV tests and counselling affect community participation? Scale of 1-5

Not at all – 1, little extent – 2, Moderate extent –3, Great extent – 4, Very great extent– 5.

Statements	1	2	3	4	5
Stigmatization					
Culture and Attitudes					
Myths & beliefs					

PART E: Socio-economic factors influence community participation in field based HIV test and counselling?

i) Do social economic factors affect your level of community participation in field based HIV test and counselling?

Yes () No ()

If yes how do relationship/ marital status influence your participation?

Negative () Positive ()

ii) How often do you participate together with your close one (spouse, sexual partner)

Never () rarely () all times ()

iii) What's the perception of your religion concerning, HIV testing, prevention methods and counselling?

Positive () Negative () Neutral ()

iv) What is the nature of your job?

Full time () I work part time () indefinite job ()

How do your income level/job situation affects your community participation in field-based test and counseling?

Positive () Negative () Neutral ()

PART E: Structural Factors influencing community participation

a) Do structural factors affect the level of your community participation in field based HIV test and counselling?

Yes () No ()

b) How are the health center attendant's attitude towards the Suba Sub county patients?

Neutral () Positive () Negative ()

c)To what extent do structural factors affect the level of community participation? Scale of 1 -5

Not at all – 1, little extent – 2,Moderate extent – 3, Great extent – 4,Very great extent – 5.

Statements	1	2	3	4	5
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Level of confidence with health centres					
Time taken during the session					
Testing setting					

PART F: Mobilization Factors

- a) Are you aware of the Field-based HIV testing and counseling in your community?
Yes () No ()
- b) How did you get to know about field based testing and counseling? *(Tick all that apply)*
Baraza () CHV () Accelerated mobilization () Facility Staff () Other ()
- c) Do mobilization strategies used affect your level of your community participation in field based HIV test and counselling?
Yes () No ()

b) How do the community respond to mobilization strategies used to participate in a field based HIV test and counselling?

Neutral () Positive () Negative ()

- a) To what extent do mobilization strategies affect the level of community participation?
Scale of 1-5

Not at all –1, little extent–2, Moderate extent – 3, Great extent –4, Very great extent– 5.

Statements	1	2	3	4	5
Attendance of Barazas					
Response to Community health volunteers					
The use of public address systems					

APPENDIX II: INTERVIEW GUIDE FOR KEY INFORMANTS

1. How has community participation affected the performance of field based HIV tests and counseling in Suba Sub- county?

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2. To what extent do you think community perceptions such as (Stigmatizations, cultures, attitudes and beliefs)influence their participation in the field based HIV tests and counseling in Suba sub county?

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3. How does Social economic factor as a component of the community influence their participation in the field based HIV tests and counseling in Suba sub-county? (Marital/relationship, income and religion)

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4. How does structural factor as a component of the community influence their participation in the field based HIV tests and counselling in Suba sub-county? (Confidentiality, time-taken, and testing setting)

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5. How does mobilization strategies as a component of the community participation influence their participation in the field based HIV tests and counseling in Suba Sub County?(Barazas, Community health volunteers & use of public address systems)

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6. What do you think can be done to improve community participation in field-based testing and counseling?

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APPENDIX IV: Krejcie and Morgan Table for Determining Sample Size from a Given Population

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

Note: N is Population Size S is sample Size