

**COVERAGE, UPTAKE AND BARRIERS TO UTILIZATION OF PROVIDER
INITIATED HIV TESTING AND COUNSELLING AMONG WOMEN SEEKING
POST ABORTION CARE SERVICES AT KENYATTA NATIONAL HOSPITAL,
NAIROBI COUNTY**

Principal investigator:

Dr Mulunda Tapson Reg.H58/80651/2012

Department of Obstetrics and Gynecology,

University of Nairobi P.O Box 30197 00100, Nairobi

*A research dissertation submitted to the University of Nairobi,
Department of Obstetrics and Gynecology in fulfillment of the Award for the
degree of Master of Medicine in Obstetrics and Gynecology in the College of
Health Sciences, University of Nairobi.*

DECLARATION

This is to certify that this thesis entitled '**Coverage, uptake and barriers to utilization of provider initiated HIV testing and counseling among women seeking post abortion care services at Kenyatta National Hospital**' is my bona fide research work and it has not been presented for degree or any other award in any other university.

Dr Mulunda Tapson

Reg.H58/80651/2012

Signature

Department of Obstetrics and Gynecology,

University of Nairobi P.O Box 30197 00100, Nairobi

DECLARATION

Declaration and approval by supervisors

This is to certify that this thesis entitled ‘**Assessment of uptake and barriers to utilization of provider initiated HIV testing and counseling among women seeking post abortion care services at Kenyatta National Hospital**’ is a bona fide research work carried out independently by Dr Mulunda Tapson under our guidance and supervision and has been submitted to the University with our full approval as internal supervisors.

1. Prof James Machoki M’Imunya MBChB, MMed

Deputy Director, University of Nairobi Institute of Tropical
And Infectious Diseases, Associate Professor,
Department of Obstetrics and Gynecology, University of Nairobi

Signature..... Date.....

2. Dr John Kinuthia, MBChB, MMed, MPH(Eped)

Head of Research Programs, Kenyatta National Hospital and Honorary lecturer, Department
of Obstetrics and Gynecology, University of Nairobi.

Signature Date.....

3. Dr Sabina Wakasiaka, PhD, MPH (Eped). RN

Senior lecturer, School of Nursing, University of Nairobi.

Signature..... Date.....

CERTIFICATE OF AUTHENTICITY

This is to certify that this dissertation is the original work of Dr Tapson Mulunda,
Master of Medicine student in Department of obstetrics and Gynecology,
Registration number H58/80651/2012 University of Nairobi (2012-2016). The research was carried
out in the department of obstetrics and Gynecology, School of Medicine, College of Health
Sciences. It has not been presented in any other university for award of a degree.

Signature.....

Date.....

PROF. OMONDI OGUTU

Associate Professor of Obstetrics and Gynecology

Consultant Obstetrics and Gynecology,

Chairman,

Department of Obstetrics and Gynecology,

University of Nairobi

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DEDICATION

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LIST OF ABBREVIATIONS

AIDS	Acquired Immuno-Deficiency Syndrome
ART	Antiretroviral Therapy
CBT	Community Based Testing of HIV
CDC	Centers for Disease Control
DCT	Diagnostic Counseling and Testing
FGD	Focused Group Discussions
HCT	HIV Counseling and Testing
HCWs	Health Care Workers
HIV	Human Immunodeficiency Virus
HTC	HIV Testing and Counseling
IDI	In-depth Interviews
ICU	Intensive Care Unit
KAIS	Kenya AIDS Indicator Survey
KNH	Kenyatta National Hospital
MDG	Millennium development goals
MVA	Manual Vacuum Aspiration.
PAC	Post Abortion Care
PITC	Provider Initiated Testing and Counseling
PLHIV	People Living with HIV
PMTCT	Prevention of Mother to Child Transmission
SPSS	Statistical Package for Social Sciences
SRH	Sexual Reproductive Health
STI	Sexually Transmitted Infections
UNAIDS	United Nation Program on AIDS
UoN	University of Nairobi
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

OPERATIONAL DEFINITION OF TERMS

Uptake: The action of taking up or making use of something that is available, (Oxford advanced learners dictionary).

Assessment: The process of data-gathering strategies, analyses, and reporting processes that provide information that can be used to determine whether or not intended outcomes are being achieved. (*Principles of Instructional Design*)

Barrier: A problem, rule or situation that prevents, or that makes something impossible. (Oxford advanced learners dictionary).

Provider-Initiated HIV Testing & Counseling (PITC) refers to HIV testing and counseling which is routinely recommended by health care providers to persons attending health care facilities as a standard component of medical care (WHO).

Informed consent: Voluntary agreement given by a person for participation in a study, after being told of the purpose, methods, procedures, benefits, and risks. The essential criteria of informed consent are that the subject has both knowledge and comprehension, that consent is freely given without duress or undue influence, and that the right of withdrawal at any time is clearly communicated to the patient. (Medical dictionary).

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ABSTRACT

Introduction: Provider-initiated HIV testing and counseling (PITC) refers to HIV testing and counseling which is routinely recommended by health care providers to persons attending health care facilities as a standard component of medical care. It provides a critical opportunity to diagnose HIV infection, to begin chronic care, and to prevent mother to child transmission. In 2007, the World Health Organization (WHO) issued guidelines recommending that countries and organizations adopt PITC to increase HIV testing rates. These guidelines were developed because HIV testing rates globally remained low, despite increased access to HIV treatment, care, support and prevention services, and few people living with HIV were aware of their status. However, little is known about its uptake and barriers to its utilization among women seeking post abortion care services in the country and particularly in the present study area.

Objectives: To assess the uptake and barriers to utilization of provider initiated HIV testing and counseling among women seeking post abortion care services at Kenyatta National Hospital.

Methodology: Health institution based cross-sectional quantitative study complemented by a qualitative data was conducted at clinical areas of Kenyatta National Hospital offering post abortion care from August 22 to 06 October, 2015. A total of 188 women who had received post abortion care services were recruited on discharge using a census sampling technique. A structured questionnaire was used to collect quantitative data. Some of them participated in four focused group discussions for qualitative data. Three Key informant interviews and two focused group discussions among the HCWs were used to collect qualitative data. Quantitative data was entered in Microsoft excel and transported to SPSS version 17 for analysis. Qualitative data was recorded using a digital voice recorder. A code book was generated from the study guide and the study objectives into ATLAS.ti qualitative data analysis software. Using this software the word documents were then coded into themes.

Results: A total of 95 (50.5. %) clients were offered PITC before discharge while 93 (49.5%) were not offered PITC before discharge. 81.1 % out of those who were offered PITC accepted to be tested while 18.9% declined HIV testing. Age, occupation, marital status, number of children, number of miscarriages and type of partner did not have any association with uptake of PITC after bivariate and multivariate analyses. The main reasons given by the clients for not accepting the tests were was the knowledge of a partner being HIV negative (34.6%), followed up by not being ready for HIV test (23.6%), afraid of HIV-positive results (12.7%), use of condom consistently during sex (12.7%) and not being sure of the confidentiality of the test (9.1%).The main system/provider associated barriers to uptake of PITC were, a shortage of staff, a busy work environment, a lack of private rooms, and a lack of refresher training. HIV prevalence among those who accepted to be tested was 4%.

Conclusion: A PITC represents a paradigm shift and is feasible and acceptable to patients receiving post abortion care services. Clear directives are nevertheless required to enhance uptake and coverage. When offered to these clients, PITC identifies large numbers of persons requiring HIV care and hence an entry point to PMTCT. Community sensitization, staff training, multitasking and access to HIV care can contribute to high rate of acceptance of HIV testing.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

According to World Health Organization there were approximately 35 million people worldwide living with HIV/AIDS by the year ending 2013 and out of this, 19 million did not know that they had the virus (1).

According to the Kenya Aids Indicator Survey 2012, 53 % of all Kenyans living with HIV are unaware of their positive status (1) And yet more than 60 % of those who had visited a health facility in 12 months preceding the survey had not been offered an HIV test, this basically means they continue engaging in risk sexual behaviors and not accessing HIV treatment, care and support services.

The ultimate aim of approaches to expand HIV testing and counseling is to improve access to prevention, care and treatment of services through early detection of HIV (2). The secondary prevention benefits of early detection and ART has been demonstrated by studies using the test and treat strategy aimed at reducing transmission as well as morbidity and mortality (3,4). Provider initiated HIV testing and counseling is an approach to expand HIV testing through integrating the routine offer of HIV testing and counseling into standard care in medical settings (2,5).

The result of low coverage and uptake of HIV testing and counseling and low levels of knowledge of HIV status is that majority of the people living with HIV access HIV testing and counseling only when they already have advanced clinical disease. (6). Therefore the main aim of this study was to assess uptake and barriers to the utilization of Provider initiated HIV testing and counseling among patients receiving post abortion care services.

CHAPTER TWO

LITERATURE REVIEW

2.1 The Burden of HIV

Globally, an estimated 35.3 million people were living with HIV by the end of 2013. (1). Sub-Saharan Africa is the region most affected by HIV, accounting for 25,000,000 people living with HIV, 1,600,000 estimated new HIV infections, and 1,200,000 estimated HIV deaths in 2012. Women represent half of all adults living with HIV worldwide. HIV is the leading cause of death among women of reproductive age. Gender inequalities, differential access to service, and sexual violence increase women's vulnerability to HIV, and women, especially younger women, are biologically more susceptible to HIV. (1). There were about 2.1 million new infections in 2013 or about 6,000 new infections per day. Most new infections are transmitted heterosexually, although risk factors vary. In 2012, national HIV prevalence was estimated to be 5.6% among Kenyans aged 15-64 years.(7).

2.2 HIV Counseling and Testing (HCT)

HIV testing and counseling (HCT) is a critical entry-point for engagement into treatment and care as well as for primary and secondary prevention efforts. Where antiretroviral therapy is available, maximum benefits in terms of reduced morbidity and mortality is obtained when HIV is diagnosed before end-stage immunodeficiency. Even in settings where ART is not yet available interventions such as co-trimoxazole prophylaxis and antiretroviral prophylaxis for the prevention of mother to child transmission offer significant potential health benefits to individuals and their children. Despite the importance of this step, most HIV infected patients globally, and particularly in resource –poor settings are unaware of their HIV status and uptake of Voluntary Counseling and Testing (VCT) services is relatively limited. (2,8). Further, data suggest that many patients receive their HIV diagnosis at a late stage in the

disease after multiple clinical visits and contacts with health care system, which likely represent missed opportunities for counseling and testing. (9,10) .Without effective approaches to routinely provide HIV counseling and testing, HIV infected patients are likely to be identified at advanced stages of immunosuppression, when therapeutic response may be sub-optimal. (11).

Globally, there has been an ongoing debate on the need to increase testing rates. (1) . A new report by the UNAIDS (2012) shows that 19 million of the 35 million people living with HIV globally do not know their HIV-positive status. By 2012 nearly half of all Kenyans living with HIV were unaware of their status. (7). This represents an unacceptably high number of persons who do not know their HIV status and calls for alternative approaches to the traditional Voluntary Counseling and Testing (VCT) to increase testing for HIV. Moreover, stigma levels still remain high and as a consequence many people continue to die without knowing their status and without accessing HIV/AIDS treatment. (10). Many discordant couples are not aware of partner's HIV status to enable them to make decision regarding when to have children or not to have children altogether and whether to use protection during sex or not.

Especially at risk are some of the women who receive Post Abortion Care services, due to their high risk behaviour of unprotected intercourse. Repeat abortions have been reported in these women in 48% of the women in the United States and 30-38% in Northern Europe In developing countries, there is paucity of data on repeat induced abortions studies due to its illegal status. However, a study done in Nigeria among adolescents with unintended pregnancy and induced abortions reported that up to 78.9% of these young women had a recurrent pregnancy and 41.8% had a repeat abortion. (12). Reaching out to women receiving PAC services with HCT services will therefore, result in increase in the number of women

who know their HIV status, enable early clinical care for those who are HIV infected and counselling risky behaviour modification for HIV negative women. Unprotected sex with different partners is also common. (13). These women are therefore, at substantial risk of both unwanted pregnancies and being infected with sexually transmitted diseases (STDs/HIV).

2.3 HIV Counseling and Testing modalities

The term HIV testing and counseling covers the range of options for ensuring that people know their HIV status. Voluntary counseling and testing refers to client-initiated testing and can also refer to free-standing clinics where people go for the purpose of accessing HIV tests and counseling. (14). At any facility that provides HIV testing. “Provider-initiated testing” refers to HIV testing and counseling “which is recommended by health care providers to persons attending health care facilities as a standard component of medical care”. (15).

2.3.1 Voluntary Counseling and Testing

Traditional VCT (also called client-initiated VCT) involves individuals actively seeking HIV testing and counseling at a facility that offers these services. (16). The approach has been the primary model for providing HIV testing and counseling in many Sub Saharan countries including Kenya and it remains the linchpin of HIV testing approaches, it rests on: (i) governments and other care providers making HIV counseling and testing services available; (ii) public awareness of that availability; (iii) an individual’s decision to seek out a facility providing VCT services; and (iv) the individual’s subsequent conscious choice to return to receive test results along with associated post-test counseling and referral. (17). It is conducted in a wide variety of settings, including health facilities, stand-alone facilities outside health institutions, through mobile services, in community-based settings, and even in people’s homes. (15).

Coverage of client-initiated HIV testing and counseling services is inadequate in both high-income and low-income settings. WHO and UNAIDS strongly support the continued scale up of client initiated HIV testing and counseling. In many settings where health systems are weak and resources limited, its availability is constrained by shortages of skilled service providers, inadequate material resources, poor infrastructure and inadequate procurement and supply management systems. (15). Individual attitudes and underestimation of personal risk for HIV also have a considerable effect on the uptake of VCT. (2). Stigma and fear of negative reactions to disclosure create further barriers to testing. (18). Gender inequalities contribute to delays in women learning their HIV status and increase the risk of discrimination and violence following disclosure of HIV-positive status. (19). Therefore, this approach in itself has proved to be inadequate in meeting the need of increased uptake of HIV testing. As a consequence, other approaches have been explored to scale up testing for HIV which includes integration of HIV testing and counseling services into regular clinical care, ante natal clinics and Post Abortion care clinics among others. World Health Organization recommends that all HIV-negative individuals with ongoing sexual behavior or unknown HIV status should be tested at least annually. (20).

2.3.2 Provider Initiated Testing and Counseling

This is routine offer of HIV counseling and testing refers to HIV testing and counseling which is recommended by healthcare providers to persons attending healthcare facilities as a standard component of medical care. (16,21). Health facilities represent a key point of contact with people with HIV who are in need of HIV prevention, treatment, care and support. However, evidence from both industrialized and resource-constrained settings suggests that many opportunities to diagnose and counsel individuals at health facilities are being missed. In Australia, a review of records at a Canberra sexual health centre showed that more than

half of HIV-positive patients with delayed diagnoses had earlier been in touch with health services, and almost all of those had at least one factor that should have prompted health care providers the need for HIV testing and counseling. (22). A study in Uganda showed that, among adults who were offered HIV testing at a hospital, 83% were unaware of their HIV status, even though 88 % had been to a health facility in the previous six months and about half of whom were subsequently found to be HIV-positive. (23).

While voluntary counseling and testing generally relies on the patient initiating attendance at a test site, the PITC, uses the care provider to make a clinical recommendation that the patient have a voluntary HIV test. This presents an opportunity to ensure that HIV is more systematically diagnosed in health care facilities in order to facilitate patient access to needed HIV prevention, treatment, and care support services. This is the approach that has been in cooperated to Post Abortion Care where all women who present at the clinic are offered an opportunity to test for HIV. Two models for integrating HIV testing into the reproductive health services have been studied. These two approaches include; the referral model and the testing model. For the ‘referral’ model, those patients with reproductive health issues expressing an interest in having an HIV test after the HIV counseling were referred by the service provider to a VCT clinic, either on-site (if available) or elsewhere, and given a referral voucher to take with them. The ‘testing’ model was implemented in facilities that did not have on-site testing available by building the capacity of the family planning providers and family planning unit in these facilities to provide HTC (using a rapid test) in accordance with national guidelines.

Studies from different countries report variable results of acceptability rates of HCT among women seeking PAC care. A study done in Tanzania reported acceptability rate of 58% among women attending a PAC clinic. (24). A similar acceptability rate of HIV testing of

57% was reported in a study done in central Kenya among women seeking reproductive health services. (25) . This acceptability rate is way below the national target of the Ministry of Health of testing 100% of women for HIV. It will therefore, be important to establish what the current acceptability rate is for HIV testing among women seeking post abortion care and the possible reasons for declining testing. This information may shed light into potential barriers for HIV testing among this high risk group and help in instituting measures geared towards increasing acceptability and uptake of HCT services.

In the industrialized world, a number of European countries have introduced provider-initiated counseling in the context of prenatal care. In light of evidence that people who are aware of their HIV status reduce risk behaviors. (26) , the United States Centers for Disease Control and prevention issued a revised guidelines in September 2006 recommending “HIV screening” for all persons aged 13-64 years attending health facilities in the United States. (5).

While PITC is meant to complement other testing strategies such as VCT and community based testing (CBT), critical differences remain which render PITC unique and limit extrapolation. Furthermore, routine PITC in general clinical settings poses several questions that have not been answered sufficiently such as 1) how will patients react to the routine offer of an HIV test? Will clinic attendance decline in order to avoid testing, and will providers accept the added burden of routine testing in their facilities? 2) Will routine PITC lead to a reduction in the number of ‘missed opportunities’ to identify HIV- infected patients and increase the number of those linked into care and treatment? 3) Is there ethical implications of PITC such as; how voluntary are HIV testing in these settings? Are there negative ramifications of routine PITC (i.e., intimate partner violence)? 4) What lessons learned from over 20 years of experience with VCT can assist policy makers and program managers in

routine PITC implementation and scale up? These largely unanswered questions require further research to refine future routine PITC programs.

There is limited data regarding patient perceptions of routine PITC offered in general medical facilities. Several studies have documented high patient acceptance, however it is unclear to what extent this is an accurate surrogate for favorable patient perception, since intentional and unintentional coercion, as well as other factors, may confound a patient's decision making at the point of testing. (25, 26). Mbarara and Mulago teaching hospitals in Mbarara and Kampala, Uganda, respectively, did a study by offering routine testing to inpatients and their family members in participating medical and surgical units. This study revealed a test acceptance rate of 98%, and 81% of those tested had not been tested previously. HIV prevalence in those accepting testing was 25%. Among couples tested, 19% had discordant testing results, which represents a significant opportunity for prevention, in addition to the opportunity to offer treatment to the HIV-infected member of the couple. (14).

A survey in Botswana conducted in 2006 sought to describe the knowledge and attitudes of the general population approximately 11 months after the institution of a country-wide national policy to offer routine PITC. A total of 81% of respondents reported being very much or extremely in favor of routine HIV testing in health facilities, and 89% believed that the policy would decrease barriers to testing and improve the link to antiretroviral-viral treatment. The concern that aggressive testing in health facilities will decrease care seeking in general has been voiced since the early days of PITC and remains largely unaddressed. Indeed, there is no data documenting health facility attendance after PITC roll out and very little documentation of actual patient and community perceptions of particular PITC programs, or their willingness to present for general medical care. Furthermore, there is only very limited data describing the perceptions of providers regarding the feasibility and

appropriateness of routine testing and counseling in their facilities and their willingness to participate in these programs.

The main justification for routine PITC is to increase the number of patients tested and thus the number of HIV-infected patients identified and linked to medical care and support services. In central Haiti, Partners in Health instituted PITC at a primary care center to reduce missed opportunities to identify HIV-infected persons. Subsequent to the institution of this program, a total of 85% of the HIV-infected patients were identified on their first visit, leading researchers to hypothesize that the majority of these patients would not have initially been diagnosed prior to PITC and that this program accelerated the pathway to care and support. (29). In 2004, Botswana was the first African nation to introduce PITC in a widespread and systematic fashion. Data from the first two and a half years of the program revealed a dramatic increase in testing. Testing rates in the population through this program were 40 per 1,000 persons, 93 per 1,000 persons, and 104 per 1,000 persons, per year respectively. (27). Similarly, in western Kenya, an emergency department-based routine PITC program demonstrated a 97% testing acceptance rate with 82% of HIV infected patients attending their first post-test follow up clinic visit. A 22.7% HIV prevalence rate was identified during the 5-month period of this study. (21).

Many authors have expressed concerns that routine opt-out approaches to HIV testing pose human rights challenges. (30–32). A critical ethical foundation to HIV testing, and indeed all medical interventions, is the ability of patients to provide informed consent. Informed consent stems from the concept of autonomy whereby patients have the right of self-determination, to act as agents for their own good, balancing their own individual costs and benefits regarding the decision to test. In the context of HIV/AIDS, where people living with HIV (PLHIV) face stigma and the threat of discrimination, social/familial rejection and even violence, these

principles are particularly important. Given the substantial social status that health providers hold in many societies, there is concern that patients are either intentionally or unintentionally coerced at the point of testing and cannot really opt-out of PITC. Indeed, it is difficult to interpret the success of opt-out programs where the vast majority of patients agree to be tested. Indeed, in the above survey regarding routine opt-out testing in Botswana, while the majority of respondents reported that routine testing was beneficial, 68% felt that they could not refuse a test offered by their provider. (21).

As important as the ability to consent, is the need for this consent to be informed. In order to make routine testing more feasible in health facilities, WHO has recommended a streamlined approach to pre-test counseling involving processes such as group pre-test counseling, recorded or posted HIV educational materials, and improved community sensitization and education regarding HIV testing in general. (10). This guideline, while essential to routine HIV testing in busy clinical settings, has sparked discussion that improved testing numbers are being used to justify an erosion in the quality of pre-test counseling. (30). Integrating such a streamlined approach to pre-test counseling into a rushed, busy, and overwhelmed clinical setting may cause some concern regarding the quality of pre-test counseling in these settings. This predicted decline in the quality of pretest counseling is also cited as a further threat to informed consent as patients are theoretically provided with less information, particularly regarding the potential negative consequences of testing. (30). Data in this regard are extremely limited and therefore care must be taken to safeguard and ensure adequate patient education and knowledge prior to the offer of testing.

HIV testing, and in particular disclosure, has been associated with multiple negative outcomes, including feelings of isolation and depression, the threat of ruptures of confidentiality, discrimination at home or in the workplace, and intimate partner and family

violence. (33). In a study in Botswana, only 1% of those polled (who had been previously tested) indicated that their test had resulted in violence, 2% reported discrimination, and 5% a breach of healthcare worker confidentiality. However, 10% of the general respondent pool stated that their reason for not being tested was fear of partner violence, 11% feared discrimination by healthcare providers, and 18% feared rupture of confidentiality. A further 14% believed that routine testing would increase violence against women. (34). It is hypothesized that as routine testing becomes more common, and as the availability of antiretroviral therapy increases, HIV stigma will decline and intimate partner violence and discrimination will also decrease. (33, 34).

Led by WHO and donors, efforts are underway to significantly expand PITC. In May 2007, WHO released its revised recommendations with regards to routine offer HIV testing in health facilities (10). These guidelines provide some recommendations in terms of providing routine testing in health facilities. However, little operational data and experience have been generated to assist in PITC programming and the operational difficulties discussed above, such as if patients will avoid clinics offering routine PITC and what could ameliorate this possibility.

While scale up of access to HIV testing is critical, an ambitious research agenda should accompany this effort in order to answer key questions and to test the effectiveness of various intervention models. In addition, while the general public appears to have a positive perception of routine testing initiatives, data is limited and large-scale surveys or focus group discussions with patients who have participated in routine PITC efforts have not been undertaken. There has been little discussion regarding potential means of addressing the perceived lack of voluntariness of testing and methods for limiting coercion. While it is claimed that expanded treatment and testing will reduce stigma, there is little evidence to

support this claim. Furthermore, there are many operational questions regarding implementation of PITC programs. How do PITC programs institute effective counseling and testing in busy and hurried clinical centers where time and privacy are often at a premium? When resources are limited and testing and counseling cannot be offered to all patients attending health facilities, how should testing be targeted? What patient information, symptomatology, and clinical signs are most predictive of HIV infection? While many approaches are in use, none have been validated or compared. Lastly, but importantly, how are patients identified via PITC programs best linked with treatment and support programs? These issues will be of central importance as new PITC programs are launched and existing one scale up.

2.4 Post Abortion Care and HIV testing and counseling

Post-abortion care (PAC) was introduced in public health systems around the world since the 1994 International Conference on Population and Development and was programmed to meet the need of abortion complications and at the same time be cost effective. The PAC concept was developed as a way to reduce maternal mortality and morbidity in settings where abortion laws are restrictive. The PAC Consortium updated the definition of PAC to include five elements namely, prompt treatment of women with complications of unsafe abortion using manual vacuum aspiration (MVA); contraceptive counseling and methods to help women achieve their reproductive intentions and avoid repeat unwanted pregnancies and abortions; other reproductive health services offered onsite, or through referral, as needed by women; general counseling to respond to the full range of women's emotional and physical needs.

Although there is paucity of data of HIV prevalence rates among women seeking PAC services, a study done in Nigeria reported a sero-positive prevalence rate of 7.5% among

women attending a PAC clinic. (35). In a study done in Tanzania reported a HIV prevalence rate of 19% among women seeking PAC care. A study done at KNH in 2009 on acceptability of HIV testing among women presenting with incomplete abortion reported a sero-positive rate of 31.8%.(36) Moreover, a recent report from the World Health Organization shows that more than fifty percent of those who are infected with HIV do not know their status. (1). Therefore, the percentage of women who are HIV positive seeking PAC services could be higher than reported in past literature given that the prevalence of HIV is on the rise partly due to increased survival of those already infected as a result of anti-retroviral treatment.

2.5 Integration of PITC of HIV and PAC services

Many of the behaviors that prevent HIV transmission also prevent sexually transmitted infections (STIs) and some prevent unintended pregnancies. Individuals who use sexual reproductive services (SRH) often benefit from HIV services, and vice versa, and so by integrating services, there is the potential to increase the coverage of both HIV and SRH services. By strengthening the linkages between PAC services and HCT services, integration is believed to improve the coverage of HIV testing and treatment, leading to earlier treatment for those who need it and an opportunity for HIV-positive pregnant mothers to receive prophylaxis so that transmission is prevented.

Post-abortion care is particularly important for young women as PAC services may be their first contact with a reproductive health service and an opportunity to receive comprehensive counseling on pregnancy and HIV/STI prevention. Research has shown that the provision of contraceptive counseling and services during the PAC visit is a critical factor in reducing repeat abortions and offers a cost-effective way to reach young women, who often have an unmet need for contraception. (37). Moreover, younger women differ from adult women in that they are more likely to delay seeking an abortion and are more likely to seek an unsafe

abortion, increasing their risk of complications. Therefore, by targeting these women seeking PAC services with HCT, a key at risk population will be reached which would otherwise not have been covered in the conventional Ante-natal clinics.

2.6. The role of PITC in PMTCT

The most significant source of HIV infection in children and infants are transmission of HIV from mother to child. Without interventions, the risk of transmission varies and ranging from 5–10 % during pregnancy, 10–20 % during labor/delivery and 10–20 % through mixed infant feeding.(38,39)

To address HIV/AIDS epidemics, prevention of mother to child transmission (PMTCT) of HIV becomes a priority for many developing country governments and agencies. PMTCT is a commonly used intervention designed to reduce the risk of mother to child transmission of HIV (MTCT). Among these, provider initiated HIV testing and counseling (PITC) is a critical component and gate way for all pregnant mothers to learn whether they are infected, helped to understand the implications of their HIV status and make informed choices for the future to reduce morbidity, mortality and HIV transmission.(40,41)

2.6. Problem statement

Late diagnosis and hence late initiation of antiretroviral therapy increases the morbidity and mortality caused by HIV/AIDS because patients present very late with advanced disease. This late diagnosis and late initiation of antiretroviral therapy propagates the transmission of HIV from the mother to the child because timely PMTCT services are not provided to the affected. Studies have shown that only 5-8% of those living with HIV/AIDS are aware of their HIV status, living a huge number being unaware of their status hence continued involvement in risky behaviors and late access to care and support. This study will try to

assess the uptake and factors that hinders the utilization of PITC among patients seeking post abortion care services at Kenyatta National Hospital.

2.7. Conceptual framework

Narrative

Lay interpretations of being at a low or at a high risk of HIV infection may affects uptake of HIV testing. Personal perception of being at high risk of infection like poor health or death of sexual partner or a child, experience of sexually transmitted infection, multiple sexual partners and perceived partner unfaithfulness may create a sense of vulnerability and hence uptake of HIV testing. A client may perceive herself at a low risk of infection if she abstains from sex or she lacks a sexual partner, trusting their sexual partner and lack of physical symptoms or deteriorating of health hence deters her from uptake HIV testing.

The roll out of diverse HIV testing initiatives may contribute towards increased uptake of HIV testing, for instance PITC in antenatal care, in patients with tuberculosis and in PAC as an integral part of care.

Fear of stigma, because HIV transmission is predominantly heterosexual across Sub Saharan Africa, being seen at a testing Centre is synonymous with sexual promiscuity and assumed as being HIV positive. Again fear of losing social support, sexual partner and fear of straining marital relationships including possibilities of abandonment, divorce or even violence may inhibit uptake of HIV testing.

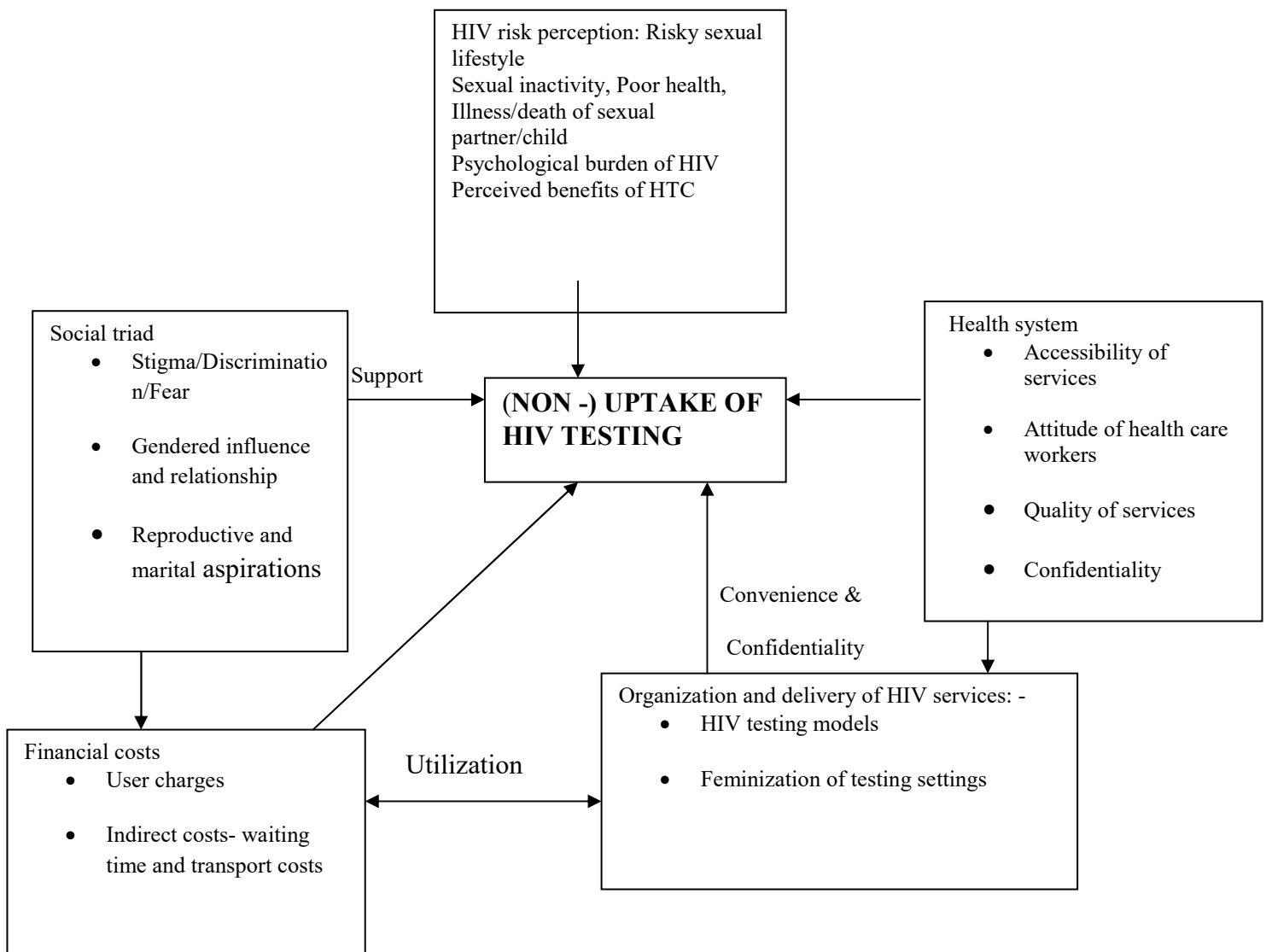
Individual perceptions of and experience with the health care system may undermine uptake of HIV. Perceived lack of confidentiality by the health staff, lack of confidence in the competence of health personnel and perceived poor attitude of health staff may discourage HIV testing uptake. Similarly at health facilities, poor location of testing facilities and unreliability of testing may undermines uptake of HIV testing.

In the context of fragile live hoods the direct and indirect financial costs of accessing testing services inhibits uptake of the testing.

The motivation to test may depend on a person's perceived ability to manage HIV. Even with availability of life prolonging treatment, in many settings of Sub Saharan Africa, a positive HIV test still is associated with death and marital distress is anticipated with an HIV positive testing. This may be perceived as hastening physical deterioration.

Individual's marital and reproductive health aspirations: - Marriage and parenthood represent social duties, expectations and individual aspirations and a connection with one's community. Both men and women may seek an HIV test as preparations for marriage or achieving reproductive health aspirations. Those that have never had a test may claim willingness to seek HIV testing when it comes to time to get married. On the other hand both men and women may decline HIV testing for fear of straining marital relationship or undermining chances of finding a marriage partner.

Figure 1: Schematic Conceptual framework representation



2.8. Justification and significance of the study

Health facilities represent a key point of contact with people with HIV who are in need of HIV prevention, treatment, care and support. However, evidence from both industrialized and resource-constrained settings suggests that many opportunities to diagnose and counsel individuals at health facilities are being missed. In fact more than 60% of our patients are leaving our health facilities without being offered an HIV test. This is unacceptably high number and it is contributing to the 19million people globally and 53 % of all Kenyans who are leaving with HIV/AIDS unknowingly.

Sexual transmission of HIV accounts for 93%, and because the users of PAC services are sexually active, in their reproductive years some of them involve in risk behavior of unprotected intercourse evidenced by having gotten pregnant, constitute a key population for new HIV infection. HTC of these patients may enable behavioral modification and pre-conception care. Furthermore treatment is initiated early hence reduction in transmission of mother to child of HIV for those who will wish to get pregnant again by linking them early enough to prevention of mother to child transmission of HIV services and to those who wishes not to conceive they are linked to family planning services. Many of them, this may be their only interaction with health care system hence should be offered an opportunity to know their HIV status if they so wish.

This study will try to find out why, despite the official recommendation of PITC ten years ago and the call for its expansion, it is still being underutilized. The results will help the policy makers, program implementers and service providers to improve the uptake of PITC hence many people knowing their HIV status and more being linked to HIV prevention, treatment and support services.

2.9. Research question

What is the uptake and barriers to utilization of PITC among patients seeking post abortion care at KNH?.

2.10. Objectives

2.10.1 Broad objective

To assess the uptake and barriers to utilization of provider initiated HIV testing and counseling among women seeking post abortion care services at KNH.

2.10.2 Specific Objectives

1. To assess the uptake of PITC of HIV among patients seeking PAC at KNH.
2. To determine client factors associated with uptake of PITC among patients seeking post abortion care services at KNH.
3. To determine system and provider associated barriers to provision of PITC among patients seeking post abortion care services at KNH.
4. To determine the prevalence of HIV infection among patients seeking post abortion care services at KNH.

CHAPTER THREE

METHODOLOGY

3.1. Study design and period

An institution-based, cross-sectional quantitative study complemented with a qualitative study was conducted at Kenyatta National Hospital, from August 22 to October 6, 2015.

3.2. Study site and setting

The study was conducted at three clinical areas where PAC services are offered these were: - specialized reproductive health services clinic, at the casualty department where patients seeking reproductive health services are first seen and acute gynecology ward of Kenyatta National Hospital. KNH is currently the largest national referral hospital in Kenya with 50 wards, 22 outpatient clinics, 24 theatres, accident and emergency department and a bed capacity of 1,800. It is the teaching hospital for the college of health sciences, University of Nairobi and the Kenya Medical Training Centre. Patients seeking post abortion care are first seen at a special room at casualty department where the decision to discharge after treatment, manage as a day care or admit is made. Those needing day care are managed either in specialized reproductive health services clinic or acute gynecology ward and those for admission are admitted to acute gynecology ward. Acute gynecology ward has a bed capacity of forty five (45) beds. Every day average of 10 patients are admitted to the ward and out of these 5 are managed for abortion related complications like hemorrhagic/septic shock, severe anemia, acute kidney injury, perforations of the viscous etc. and the rest are managed for ectopic pregnancy, bartholin's abscess, acute pelvic inflammatory disease etc. Every month an average of 120 to 180 patients are managed for abortion related complications either as inpatients or as day care cases. These patients mainly come from Nairobi County especially from slum areas and its environs as referrals. Post abortion care services offered include:

emergency treatment (fluid resuscitation, blood transfusion, administration of intravenous antibiotics , hemolysis, Manual Vacuum aspiration), counseling which includes: providing information on contraception, potential post abortion complications and other sexual and reproductive health needs such as HIV, sexually transmitted infection (STI) services etc. A resident Obstetrician and Gynecologist is the first person to come into contact with patient, but these services are offered by a team consisting of consultant gynecologist, Medical officer intern, clinical officer interns, nurses and PITC counselor. Other disciplines are also involved when need be, for example the renal team, the surgeons, the ICU team, and hematologists.

3.3. Study population

3.3.1 Quantitative Data

The study population from which this information was collected were women seeking post abortion care as inpatient or day cases provided they made inclusion criteria. They were recruited after discharge and all had an equal chance to participate in the study.

3.3.2 Qualitative data

This data was collected through key informants, women seeking post abortion care services and health care providers involved in provision of post abortion care services. The key informants included the ward in charge, the VCT head of department and his deputy, VCT coordinator based in acute gynecology ward and the PITC program officer.

3.4 Eligibility criteria

3.4.1 Inclusion criteria (Those seeking PAC)

1. Women of all the age groups seeking for post abortion care
2. Diagnosed with incomplete, inevitable, complete or missed abortion
3. Having been discharged

3.4.2 Exclusion criteria (Those seeking PAC)

1. Women unwilling or not capable to provide an informed written consent because of their clinical condition.
2. Women who knew their HIV positive status prior to receiving post abortion care.

The main inclusion criteria for key informants and health care providers were a verbal consent and having worked for Kenyatta National Hospital for at least a year.

The exclusion criteria for health care workers were those giving treatment to acutely ill patients at the time of the interview.

3.5 Sampling size and sampling procedures

The sample size was determined using a single proportion formula, and with the following assumptions: the proportion (P) of OPD clients who accepted the test was 44.3% the confidence level was set at 95%; a 5% margin of error was used; and a 10% nonresponsive rate was considered.(42).

$$n = z^2 p (100-p)$$

$$E^2$$

Where n = Sample size

$$z = 1.96 \text{ (95\% Confidence interval)}$$

$$p = \text{PITC offer rate (44.3\%)}$$

$$E = \text{Margin of error (5\%)}$$

$$n = \frac{1.96^2 \times 44.3 (100-44.3)}{5^2}$$

$$n = \frac{3.8416 (2467.51)}{25}$$

$$n = 379$$

Since the target population was less than 10,000 then the final estimate was calculated using the following formula:

$$n_f = \frac{n}{1 + n/N}$$

where n_f = desired sample size where population < 10,000

N = Total study population was estimated to be 375 admissions during the two and half month of the study.

$$n_f = \frac{379}{1 + 379/375}$$

$$=188 \text{ Participants}$$

Thus, the final sample size was 188 clients from the acute gynecology ward, specialized reproductive clinics and acute gynecology wing of the casualty wing. The study participants were recruited from the selected three areas offering PAC using a census sampling technique. For the quantitative part of the study, structured questionnaires were prepared in English based on information from the available literature, and the questionnaires were translated into Kiswahili, and then back to English, to check for their consistency; they were pretested for clarity and cultural acceptability. Participants were interviewed in either English or Kiswahili by trained research assistants and the principal investigator. Each interview was performed face to face.

For the qualitative part of the study, HCWs and key informants were recruited to participate in the study through focused group discussions. Since the HCWs in acute gynecology ward were the key providers of PAC and easy to access, they were conveniently sampled out into the FGDs. Each one of them was approached, the purpose, the risks and benefits of the study was explained to them and a verbal consent obtained and the principal investigator proceeded to have an FGD with those recruited.

The key informants were those stakeholders in provision of HIV testing in the whole KNH. One of the key informant was purposefully sampled out and the subsequent ones were being suggested by the previous key informant.

Five focus group discussions (FGDs) were conducted and four key informant interviews. The rationality of conducting FGD was to get further information regarding uptake of PITC, and to find out if there are additional opinions or questions that remain unanswered. Each group was composed of six to eight participants. A total of three FGDs were conducted for the participants who had received PAC, based on their availability and acceptability to participate. Two FGDs were also conducted for the HCWs comprising of five to eight nurses. The rationale for the number of the FGDs was that we reached a saturation point where the responses were similar and the information we wanted readily available from the five FGDs. All discussions were recorded for later transcription and notes were taken. The principal investigator moderated the FGDs and carried out the key informant interviews.

3.6 Study procedures

3.6.1. Recruitment and consenting

The study participants were recruited by the principal investigator and trained research assistants. The research assistants were four qualified clinical officers and two qualified nurses who will be trained for two days on study instruments. For Inpatients, medical records were checked to confirm that the patient had been discharged before she was recruited and invited to a secure and confidential room for the interviews. The interviewer introduced herself/himself to her and then the purpose for the study was communicated. Consenting to participate in the study was by signing consent form for participation. Patients, who had received PAC as day care cases, were referred by the clinician who had attended to them to the investigator to be recruited in the study if they fulfilled the inclusion criteria. The

quantitative data was obtained through administering a structured questionnaire containing sections on socio -demographic data, prior HIV testing history and uptake of PITC services of clients who had received PAC and were discharged. Those clients who were not tested and were willing to consent for HIV testing were offered the test by the VCT counselor who was part of the research team. HIV testing information and the test results were verified from the medical records of the respective respondents. Key informants were approached and requested by the principal investigator for an appointment for the interviews either in their respective offices or any other appropriate location within KNH. A verbal consent was obtained before the interviews.

Those participants who had received PAC were recruited into focused group discussions after being discharged by giving a verbal consent. They were first approached by the principal investigator, the purpose, the risks, benefits; ethical issues for the study were communicated to each of the participants. Each of them gave a verbal consent before coming together for a group discussion.

The same recruitment and consenting procedure was used for HCWs who participated in FGDs as that for participants who had received PAC.

3.7 Data Variables

3.7.1 Dependent Variable

The primary outcome of interest was the uptake of PITC among patients seeking PAC services at KNH measured by those who were offered PITC and the actual proportion of clients who accepted to be tested through PITC model.

3.7.2 Independent Variables

This included socio-demographic characteristics, such as age, education level, employment status and number of children and number of miscarriages at the time of the interviews. Other independent variables of interest were system, provider and client associated barriers to utilization of PITC.

3.8 Data collection and Management

Data collection was done between 22nd of July to 6th of October 2015 at Kenyatta National Hospital. A structured questionnaire was administered by trained research assistants and the principal investigator to all eligible participants who had received PAC and had been discharged. It took around 10-15 minutes to complete the interviews. The questionnaire addressed socio-demographic information, prior history of HIV testing, acceptability of PITC, reasons uptake and non-uptake of PITC. While a key informant interview guide and focused group discussions were used to collect qualitative data. Focused group discussions were done for both HCWs offering PAC and the clients seeking PAC on discharge or at the end of patients' consultations with their primary care providers. Two FGDs each comprising of 6 nurses was done; this was the maximum number of nurses at any given shift and we reached a saturation point at two FGDs. Three FGDs for clients seeking PAC was done. We recruited 6-8 per FGDs and again we could not get more than 8 at any given time. All the FGDs and key informant interviews were tape recorded and later transcribed by a social scientist conversant with qualitative data analysis and management.

A structured questionnaire was Pre tested on 19 of the study population (10%) by the trained research assistants to check for ambiguity and amendments made before the actual data collection. The results from the pre-test were analyzed and feedback obtained was used to inform the modification that was needed to be addressed before a final draft was made. The

principal investigator supervised the data collection procedure closely for completeness, clarity and consistency immediately the questionnaire is filled. Double recruitment for inpatient participants was minimized by marking on their files just in case she is discharged and does not leave home on the same day of discharge because of one reason or the other. In cases of double recruitment the questionnaire was withdrawn and discarded.

3.9 Data Entry and analysis

After the completion of data collection, cleaning, editing, and coding were performed; then, the data were entered using Microsoft excel and exported to SPSS version 17.0 for analysis. Descriptive statistics were used to compute the means and standard deviations of the continuous variables and the frequency of categorical variables. Bivariate and multivariate logistic regressions were used to assess the association of the independent variables on the outcome variable, while simultaneously controlling for other potential confounding factors. A p-value of 0.05 was taken as statistically significant. For the qualitative, the interviews were recorded using a digital voice recorder and verbatimly transcribed to word documents. A code book was generated from the study guide and the study objectives into ATLAS.ti qualitative data analysis software. Using this software the word documents were then coded into themes. The themes were then used for comparative analysis to compliment the quantitative data findings.

3.10 Research Ethics

The study protocol was approved by the Institutional KNH/UoN Ethics and Research Committee. Participants were informed about the objective, risks and benefits, voluntary participation, information sharing of the study and they were assured that the confidentiality

of the data would be maintained. A signed informed consent or a verbal consent was obtained from all participants prior to data collection.

3.11 Limitations and strength of the Study

Our study had some potential limitations. The study is limited by being facility based and therefore eliminating women who did not patronize the PAC services at Kenyatta National Hospital. We used a select group therefore the findings preclude generalization to all women seeking post abortion services elsewhere, indicating a need for further studies of the uptake of provider initiated HIV counseling and testing using a more representative sample of women seeking PAC services in the country. We attempted to reduce social desirability bias by presenting study aims to the respondents in general terms but it might have been introduced because of self-reporting of prior history of HIV testing.

The main strength of this study is that having used a mixed method, the qualitative data gave us more understanding on why the uptake of PITC was not at 100%. This implies that uptake of PITC is influenced by an interplay of several factors and not only dependent on client's factors. Despite the limitations mentioned, the study provides useful information that will inform the implementation of PITC among women receiving or seeking post abortion care services

CHAPTER FOUR

STUDY RESULTS

Table 1: Socio-demographic characteristics of women receiving post abortion care services at Kenyatta National Hospital

Variable	N=188 n (%)
Age in years Mean (SD) Min-Max	27.5 (5.7) 15-42
Age group <=20 yrs 21-25 yrs 26-30 yrs 31-35 yrs >35 yrs	25 (13.3) 48 (25.5) 60 (32) 35 (18.6) 20(10.6)
Number of miscarriages Median (IQR) Min-Max	1.0 (1.0-2.0) 0-3
Number of living children Median (IQR) Min-Max	1.0 (0.0-2.0) 0-4
Education level Primary Secondary Post-secondary None	49 (26) 63 (34) 66 (35) 10 (5)
Marital Status Married Single Separated/Divorced/widowed	120 (64) 45 (24) 19(12)
Occupation Formal employment Self-employment Not Employed	41 (22) 63 (33) 84 (45)
Type of partner None Spouse Casual Partner	18 (10) 120 (64) 50 (26)

4.1 Social demographic data

Quantitative Data

Table 1 summarizes socio-demographic characteristics of the respondents. The mean age was 27.5 years and majority (76.1%) of the respondents was aged between 21-35 years old, followed by those aged below 20 years old (13.3%). Those respondents aged above 35 years old comprised 10.6% of the total study population. The distribution of the respondent's age shows a concentration in the age category 21-35 years followed by those below 20 years. This means that the underlying population structure in the study area was dominated by the youth. The study sample was further split into two categories, those aged below 35 years (89.4%) and those above 35 years (10.6%).

Most participants 50 (35.2%) did not have any living child, 42 (29.6%) had one living child. 35.2% of the participants had at least 2 living children and above.

Majority 123(65%) of the respondents had at least one miscarriage before the current one that brought her to the hospital, 65 (35%) had 2 miscarriages and above.

Majority 66 (35%) had post-secondary education followed by secondary education 65 (34%) and the least had attained primary level education 49 (26%). Only 10(5%) of the respondents had no education at all. Most of the respondents (69%) had attained high level formal education (secondary education and above) while only 26% had low level formal education (primary).

The participants who had a spouse as their type of partner were 120 (64%), while 50 (26%) had a casual partner and only 18 (10%) had no one to call a partner.

Table 2: Uptake of PITC services among women receiving post abortion care services at Kenyatta National Hospital

Variable	N=188 n(%)
Were provided with PITC before discharge by the HCW	95 (50.5)
Were not provided with PITC before discharge by the HCW	93 (49.5)
Accepted HIV testing.	77 (81.1)
Did not accept HIV testing	18 (18.9)
Reasons for accepting HIV test (n=77)	
Self-interest due to high risk perception.	16 (20.8)
Initiated by HCW	14 (18.2)
To know my Status	45 (58.4)
Not at Risk	1 (1.3)
None	1 (1.3)
Received test Results (n=77)	
HIV positive	4 (5.2)
HIV negative	73 (94.8)
Reasons for declining to test (n=18)	
Not ready for an HIV test	4 (24)
Lack of confidentiality	2 (9)
My partner is HIV negative	7(38)
I use condom consistently	2(12)
Fear of positive results	2(12)
None	1(5)
In support PITC program	
Partly support	25 (13)
Strongly support	136 (73)
Don't support	27 (14)
Concerns about of PITC	
Not Voluntary	20 (11)
Don't trust HCW on confidentiality	16 (8)
Not Convenient	19 (10)
None	133(71)

4.2 Uptake of PITC services among women receiving PAC services at Kenyatta National Hospital.

The total number of respondents whom the HCW provided PITC services before discharge and the interview were 95 (50.5%). The acceptance rate of PITC among these respondents, who had an opportunity to receive PITC before the interviews, was 81.1% while 18.9% declined the testing. Nearly half of the respondents did not receive or were not offered provider initiated HIV and testing.

The most frequent reasons given for uptake of provider-initiated HIV testing and counseling was to know one's HIV status 58.4%, perception of being at a high risk of HIV infection 20.8%, the fact that that it was a health care provider that initiated the test 18.2% and perception of being at a lower risk of HIV infection was at 1.3%.

The major barriers for uptake of provider-initiated HIV testing and counseling was the knowledge of a partner being HIV negative 38%, followed up by not being ready for HIV test (24%), afraid of HIV-positive results 12%, use of condom consistently during sex 12% and not being sure of the confidentiality of the test 9%.

Majority of the respondents 73% strongly supported the PITC program, followed by those who partly supported 13% and 14% of the respondents did not support the program at all. For those who partly supported or did not support at all, felt that PITC is not voluntary 11%, followed by those who felt the testing is not convenient 10% and 8% of them felt that they don't trust health care workers in terms of confidentiality in case of HIV positive results. Most of the respondents (71%) did have any reservation about PITC program.

Figure 2: A flow chart showing uptake of PITC services among women receiving post abortion care services at Kenyatta National Hospital.

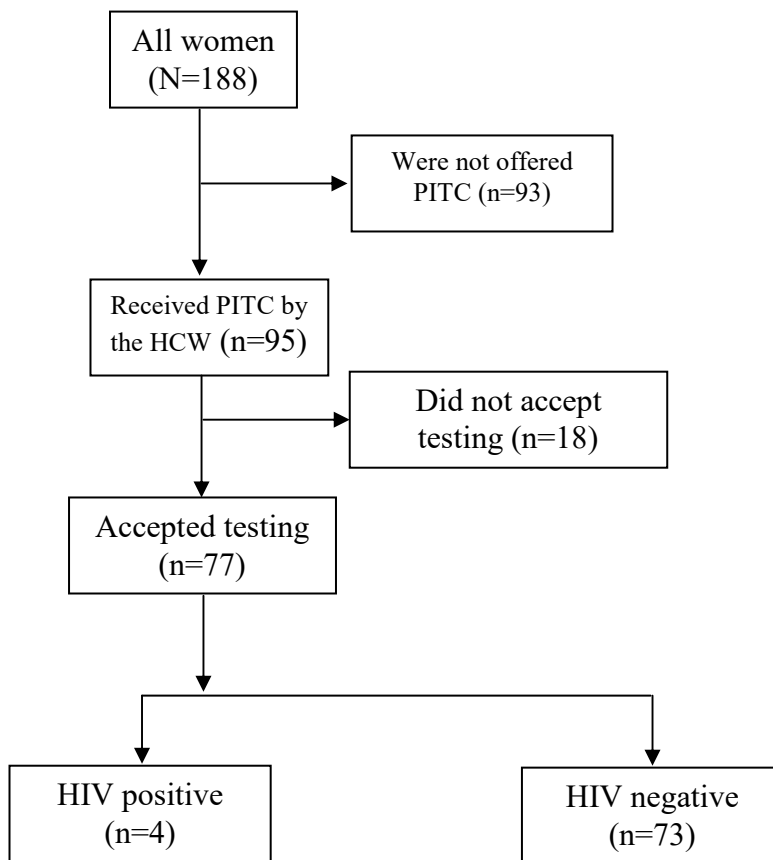


Figure 3: A bar graph showing the PITC program support by women receiving post abortion care services at Kenyatta National Hospital

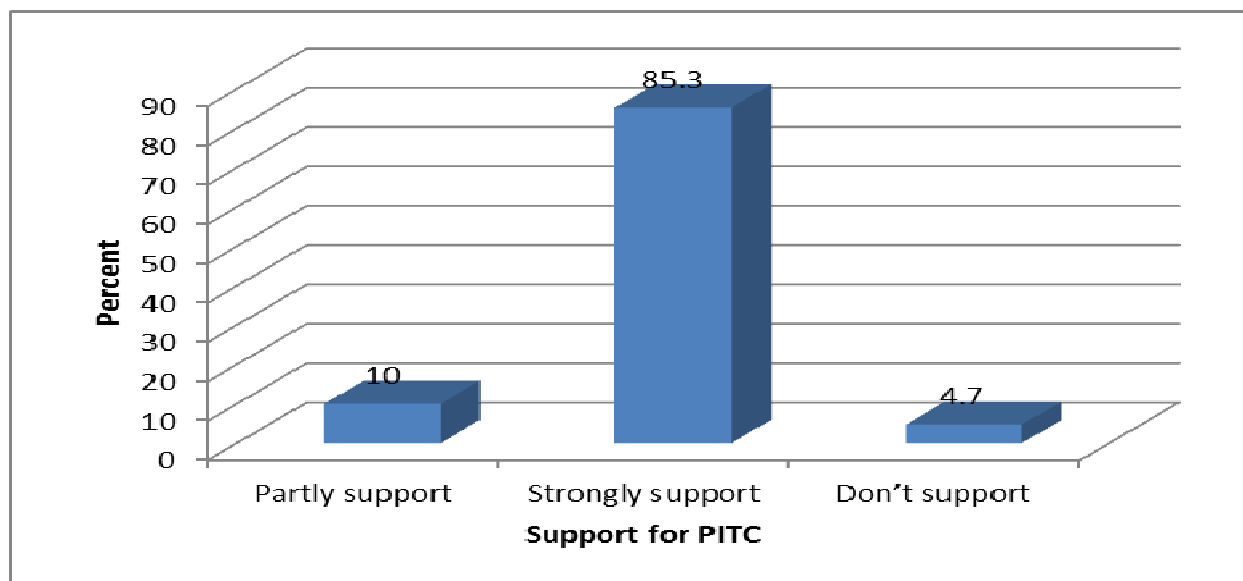


Table 3: Prior history of HIV counseling and testing among women receiving post abortion care services at Kenyatta National Hospital

Variable	N=188 n (%)
Ever taken HIV test before	141 (75)
Never taken an HIV test before	47 (25)
Duration of past HIV test	
Less than 12 months	94 (50)
More than 12 months	94 (50)
Was pregnant during the previous HIV test	61 (32)
Was not pregnant during previous HIV the test	127(68)
Place of HIV test	
In the health facility	126 (67)
At work	4 (2)
Mobile clinics	33 (18)
Others	25 (13)
Sexual partner(s) ever taken HIV test before	100 (53)
Sexual partner(s) never taken HIV test before	88 (47)
Plan to ask partner (s) to go for testing	99 (52)
No plan to ask the partner(s) to go for testing	89 (48)

4.3 History of HIV Testing

Prior history of HIV testing was quite high at 75% of the respondents. Half of those who had been tested before receiving post abortion care services had taken the in less than 12 month preceding the interview while 50% had been tested more than a year before the interviews. Prior testing was done for PMTCT 61 (32%) and most of the testing was in a health facility 67% followed by mobile clinics at 18%.

For those who had been tested, 100 (53%) reported that their sexual partners had also been tested before and 52% of them were still willing to go and tell their sexual partners to have an HIV test. See table 3.

Table 4: Association between different variables and uptake of PITC among women receiving post abortion care services at Kenyatta National Hospital

Variable	PITC		P value
	Accepted N=77 n (%)	Did not accept N=18, n (%)	
Mean age in years (SD)	26.8 (6.6)	28.3 (5.6)	0.328
Miscarriages, median (IQR)	1 (1-2)	1 (1-2)	0.808
Living children, median (IQR)	1 (0-2)	1 (0-2)	0.900
Education level			0.570
Primary	21 (87.5)	3 (12.5)	
Secondary	27 (79.4)	7 (20.6)	
Post-Secondary	26 (76.5)	8 (23.5)	
Marital Status			0.277
Married	53 (82.8)	11 (17.2)	
Single	15 (71.4)	6 (28.6)	
Separated/Divorced/widowed	5 (100.0)	0 (0.0)	
Occupation			0.579
Formal Employment	16 (72.7)	6 (27.3)	
Self-Employment	24 (82.8)	5 (17.2)	
Not Employed	34 (82.9)	7 (17.1)	
Type of Partner			0.179
Spouse	56 (83.6)	11 (16.4)	
Casual Partner	17 (70.8)	7 (29.2)	
Ever taken HIV test before			0.808
No	3 (75.0)	1 (25.0)	
Yes	68 (80.0)	17 (20.0)	
Duration of past HIV test			0.895
Less than 12 months	50 (82.0)	11 (18.0)	
More than 12 months	21 (80.8)	5 (19.2)	
Have partners ever gone for HIV testing			0.395
No	20 (74.1)	7 (25.9)	
Yes	52 (82.5)	11 (17.5)	

4.4 Qualitative Data Results

The qualitative data set originated from two sources. The first set consisted of 5 FGDs (three from the clients receiving PAC services and two from health care workers providing PAC services). The second data set consisted of key informant interviews done on key stakeholders at KNH concerned with provision of HIV testing and counseling. The FGD with the health care providers explored the barriers to utilization of PITC among women receiving post abortion care services, while those with the clients explored barriers to utilization of

PITC by the clients receiving these services. In depth interviews with the key informants tried to explore system or institutional barriers to utilization of PITC services. The main system barriers to utilization of PITC services were shortage of staff, overwhelming work and training.

4.4.1 Provision of PITC along side bedside nursing

Overwhelming workload emerged as a key barrier to utilization of PITC services among patients receiving post abortion care services.

‘ It is very challenging because ward 1d being an acute patient ward, sometimes you are overwhelmed, the staff are less but if arrangement can be made to station someone there who is trained to be doing that work i think our patients will benefit more’.

‘For the PITC services to be provided in ward 1d and at the same time provide bedside nursing services... it is not possible unless someone is completely exempted from the bedside services.’(Nurse trained in PITC)

‘Ideally the workload in ward 1d is too much, it is too overwhelming and unless a specific person who is trained to provide those services is availed it is practically not possible to offer the service’.

4.4.2 Shortage of staff to provide both PITC at the same time provide bedside nursing.

Shortage of staff to provide PITC services and the same time provide bedside nursing emerged as key barrier in offering PITC services among women seeking post abortion care services. It was raised by both the key informants and the services providers participating in FGDs.

‘Mostly a nurse is allocated to one room or two rooms... so we usually have like an average of 25 patients and for one nurse it is quite challenging to offer nursing care for all of them;

provide nursing care, do treatment and give all the services that they require so sometimes offering PITC can be very challenging... because it needs time. You know time is needed to be with a patient so that you can offer the services quality service.' (The nurse providing PAC)

'The ratio of patients to nurse is like 20 patients per nurse. So concentrating on nursing care, which is more needed makes the PITC uptake somewhat ignored because of the demanding nature of the work that we do.'

4.4.3 Lack of space or rooms to do the counseling and testing.

It emerged as a contributing factor to non-uptake of PITC services among women receiving post abortion care services at KNH. This lack of space compromises patient confidentiality.

'Bringing a patient from one room to another for PITC is also a challenge... so we can say it is a challenge because we don't have enough rooms for testing and counseling.' (Counselor in charge of PITC).

'Another challenge is about confidentiality of the patients. Sometimes you find some are bedridden and others are not bedridden but they are share beds. So offering the PITC becomes a challenge because there is need for privacy to offer the PITC'. (Nurse in charge of PITC)

4.4.4 Lack of training or skills in PITC

Lack of skills or training among the staff offering reproductive health services especially PAC, was noted to a big challenge in offering PAC services. This evident from the responses the HCW and the key informants gave when asked about the challenges facing provision of post abortion care services.

‘Another challenge is the training... lack of skills. If we can be taken for training but not one day... One day is not enough. Maybe you are taught you be shown how to test and you are competent so that way it is ok’. (HCW-Nurse providing PAC)

‘You might be having the knowledge but you don’t have the competency so you need some supervision so that the competency can be achieved’. (HCW-Nurse providing PAC).

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.1. Main Findings

Quantitative data

PITC was acceptable to the majority of the women receiving post abortion care services at Kenyatta National Hospital, even though only half of the clients were offered PITC services. .

Desire to know one's HIV status and having a high risk perception were the most frequent reasons for testing.

The main reason for declining to test was the knowledge of partners' HIV negative HIV status and not being ready for the test,

5.2. Discussion

PITC acceptability

The overall uptake rate was high at 81.1% as compared to the one that was reported in 2010 at the same study place that was at 67.8% (36). Studies from different countries report variable results of acceptability rates of HCT among women seeking PAC care. A study done in Tanzania reported acceptability rate of 58% among women attending a PAC clinic.(24)

The significantly high uptake of PITC in this study could be related to multiple factors. Women were probably less fearful of participating in routine HIV testing because this approach would be perceived by her partner and family as standard of care offered to all PAC clients, thereby reducing the risk of stigma and other adverse social consequences when compared to the opt-in VCT policy. In addition, counseling sessions involving highly motivated PITC providers and availability of on-site rapid HIV testing may also have contributed to the significantly high HIV testing rates among women receiving PAC in this study. The high uptake rate can be explained by those respondents who strongly supported

routine PITC (73%). Although there is limited literature on patients' perceptions of PITC (43), our results agrees with results from other studies which PITC uptake was assessed. In Botswana 81% of participants were extremely in favor routine PITC (5). A study in Zambia reported 96% of patients being in favor of PITC. (44).

Level of education, marital status, occupation, type of partner and parity did not have influence on the uptake of PITC; this was after bivariate and multivariate analysis.

Reasons for not being tested

In our study prior knowledge of a partners' negative HIV status was the most common barrier to the uptake of PITC. This is unique to the findings from studies done in Uganda and South Africa where prior knowledge of personal HIV status was the most common barrier to PITC uptake(45,46). This implies that the respondents trust their partners so much and may not be aware that there is window period could positive but the test is negative.

Those who had tested or known their HIV status before were less likely to utilize PITC services than those who didn't know their status or have never tested before.

Not being ready for an HIV test and fear of positive HIV test results were the second and third most causes of refusal to take PITC services respectively. These findings are consistent with findings from studies done in Botswana and Zimbabwe (21,47,48).

The perception and the knowledge of use of a condom was another barrier to the uptake of PITC services by those who declined HIV testing. Concern of lack confidentiality was another barrier to the uptake of PITC by women receiving post abortion care services at Kenyatta National Hospital. One of the clients said during the FGDs, " *maybe the fear that if you get tested in the hospital the service provider can go out there and tell on you.*"(client). The same concern was raised by a health care provider during the FDGs and she said '*Another challenge is about confidentiality of the patients. Sometimes you find some are*

bedridden and others are not bedridden but they are share beds. So offering the PITC becomes a challenge because there is need for privacy to offer the PITC'. (HCW-The nurse)

Qualitative results

PITC coverage

The health care workers are the cornerstone for implementation of PITC strategy. PITC is widely accepted by the health care providers of PAC at KNH, however some health facilities factors were barriers to PITC provision. This unexpectedly led to 49.5% of those who had received PAC having not been offered PITC despite the high acceptability of HIV testing. The system and provider associated barriers leading to this low coverage of PITC, were coming out clearly through recurrent themes during the FGDs and interviews with key informants. Almost all the health providers mentioned constraints in human resources and mentioned having to attend to too many patients as barriers to PITC provision in this study and therefore the general perception among HCWs seems that the few health care providers who were available felt overwhelmed by an additional work load required to offer PITC. Studies in sub-Saharan Africa reported increased workload and occupational stress (49) and patient waiting time (50). For these reasons, Roura et al [29] report the importance for additional resources and efforts to effectively implement routine PITC. The increased work load was compounded with shortage of staff. Kenya is facing a massive shortage of staff in the health sector and the situation is set to get dire with the impending retirement of a significant number of staff. There is a shortfall of about 20,000 doctors and 42,000 nurses as at June 2014, according to the ministry of health. Kenya loses a huge part of its trained health workforce to the private sector and other countries who offer better opportunities. Out of 13,000 personnel trained each year, only 3000 remain in the public sector.

The other barrier to provision of PITC as reported by the health care workers during the FGDs was lack of physical rooms for counseling and testing. There are many patients who

need to be tested but there is only one room for counseling and testing. This forces the providers of PITC to do the testing at the bedside. This compromises the confidentiality and the quality of the counseling process.

The health care workers mentioned lack of adequate training as one the barriers to adequate coverage of PITC services. Three day training may not be adequate to master the skills of testing and counseling required, this makes the staff to lack motivation to carry out the testing in addition to the bedside nursing.

5.3. Conclusion

Among the women receiving post abortion care, at Kenyatta National Hospital the acceptability of PITC was very high. Despite the high acceptability of PITC, the coverage was poor since almost half of the respondents were not offered PITC services by the HCWs. Wanting to know one's HIV status and self perception of being at a high risk of HIV infection were commonest reasons why HIV test was accepted by the respondents while prior knowledge of partners' negative HIV status, not being ready for the test and fear of positive results were the reasons among those who declined the testing.

Overwhelming workload and lack of training were the main reasons why the coverage of PITC was poor.

Among those who tested the HIV prevalence rate was at 5.2%.

5.4 Recommendations

Based on our findings we would like to recommend the following.

- Training of HCW (nurses, clinical officer interns and medical officer interns) on HIV counseling and testing should be done since they are the primary care givers of post abortion care services. This will help to capture those patients who come at night, treated and discharged the same night when the PITC counselors are not on duty.
- More nurses to be employed to overcome the barrier of overwhelming job.
- At least one nurse per shift should be assigned to offer and oversee provision of PITC services.
- Confidentiality of HIV counseling and testing should be assured to the clients. PITC provision should only be done in a separate and private room and not in a room where all the patients are receiving the treatment. More rooms for counseling and testing should be created.
- We also recommend task shifting and linkage to care.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

My name is-----am a student at the University of Nairobi, am kindly inviting you to participate in a research am undertaking titled: **Assessment of the uptake and barriers to utilization of provider initiated HIV testing and counseling (PITC) among patients seeking post abortion care at Kenyatta National Hospital.** The main objectives of this study are to find out provider, client and system barriers to utilization of PITC. Your responses are completely confidential; your name or any other personal identifiers will not be written on the questionnaire and will never be used in connection with any of the information you provide. You don't have to answer any question you don't want to answer, however your honest answers to these questions will help us to understand the uptake and the barriers to utilization of PITC.

We would like to thank you in advance for your help. Do you consent to be interviewed? (If the respondent consents, the research assistant signs the consent form to show that consent has been given verbally. If the respondent refuses to participate the research assistant politely thanks the respondent and discontinues the interview.

Name of research assistant: -----signature-----

Date of the interview-----

APPENDIX II: QUESTIONNAIRE

General Information

1. What is your age?
2. How many pregnancies have you lost before?
 - a. 1
 - b. 2
 - c. >3
3. How many children do you have?
4. What is your education level?
 - a. Primary.....
 - b. Secondary.....
 - c. Post-secondary.....
 - d. None
5. What is your marital status?
 - a. Married
 - b. Single
 - c. Separated/divorced/widowed
6. What is your employment status?
 - a. Employed (formal or self-employed).....
 - b. Not employed.....
7. Which type of partner do you have?
 - a. Spouse.....
 - b. Casual partner

2. HIV Services Received During The Visit

No.	Questions	Coding categories		
2.1	During your treatment in this facility, did a health provider talk to you about HIV/AIDS?	Yes		
		No		
		Don't know		
2.2	If yes, what did the provider tell you?	Not prompted	Prompted	Don't know
	1. Having multiple sex partners increases HIV risk			
	2. HIV risk is high if partner has multiple sex partners			
	3. Using condoms reduces HIV risk			
	4. Abstinence reduces HIV risk			
	5. Recommended HIV test for me			
	6. Recommended HIV test for my partner			
2.3	During your treatment in this health facility, did a health provider recommend to you an HIV test (PITC) before discharge or a referral for HIV testing?	Yes, take the test before discharge		
		Yes, referral to another clinic		
		No		
2.4	Did you accept the test?	Yes		
		No		
2.5	If yes, why did you accept the test?	Self-interest because of high risk perception of HIV infection		
		Because it was initiated by the health care provider		
		To know my HIV status		
2.6	Did you receive the results?	Yes (give test results) results		
		No		

2.7	Do you intent to have HIV testing today?	Yes (give test results)	
		No	
2.8	If no, what are reasons for refusal to test?	Not ready	
		Not sure of confidentiality	
		I trust my partner who is negative	
		I use condom consistently	
		Afraid of positive results	
		Only have one partner	
		Already tested/know status(give results)	
	Other		
2.9	Where do you plan to go for testing?	This facility	
		Other facility	
		Other	
2.10	Have you ever taken an HIV test before?	Yes	
		No	
	If yes how long ago?	Less than 12 months ago	
		More than 12 months ago	
2.11	Were you pregnant at the time you took the test?	yes	
		No	
2.12	Where did you go to be tested?	This facility	
		Other facility	
		Doctor	
		Work	
		Other	
2.13	Have any of your sexual partner(s) gone for HIV testing	Yes	
		No	

2.14	Do you intend to ask your sexual partner(s) to go for HIV test?	Yes	
		No	
2.15	Do you support the idea of an HIV test being recommended to you by the health care provider while seeking any kind of medical care?	I don't support	
		I partly support	
2.16	Why don't you support PITC?	It is not voluntary	
		I don't have trust in the health care	
		It is not convenient and lacks of confidentiality.	
2.17	On your discharge, were you given a follow up date/return date?	Yes	
		No	
2.18	For what services were you referred	PMTCT	
		FP	
		Cervical cancer screening	
		Other nutrition, etc	
		None	

APPENDIX III: FOCUSED GROUP DISCUSSIONS GUIDE FOR HEALTH CARE SERVICE PROVIDERS

My name is Dr Mulunda Tapson, am a student currently doing my study on Assessment of the uptake and barriers to utilization PITC among patients seeking PAC at KNH. Thank you for verbally consenting to participate and welcome to this group discussions. There is no right or wrong answer but only differing points of view. I will be recording the discussions and therefore I will request that one person to speak and I will guide the discussions. I assure you of confidentiality and no names will be used in the final report.

I would like to hear from you concerning your perceptions, challenges and how PITC program might be improved.

1. In your current working condition as a nurse working in this ward is provision of PITC doable?
2. What are the challenges that you are facing in the provision PITC among patients who are receiving post abortion care from your point of view?
3. What do you think can be done to increase the uptake of PITC?

APPENDIX IV: FOCUSED GROUP DISCUSSIONS GUIDE FOR CLIENTS.

My name is Dr Mulunda Tapson, am a student currently doing my study on Assessment of the uptake and barriers to utilization PITC among patients seeking PAC at KNH. Thank you for verbally consenting to participate and welcome to this group discussions. There is no right or wrong answer but only differing points of view. I will be recording the discussions and therefore I will request that one person to speak and I will guide the discussions. I assure you of confidentiality and no names will be used in the final report. I would like to hear from you concerning your perceptions, challenges and how PITC program might be improved.

1. Do you have any reservations on PITC? Explain.
2. What are the factors that will make you not to be tested for HIV in a hospital setting?
3. What do you think can be done to increase the uptake of PITC?

APPENDIX V: KEY INFORMANT INTERVIEW GUIDE

Good morning my name is Dr Tapson Mulunda, am a student currently doing my study on Assessment of uptake and barriers to utilization of provider initiated HIV testing and counseling among women seeking PAC at KNH. All information will be combined and will be kept confidential. No one will know what you have said. Would you like to participate in this interview?

Verbal consent: yes or no.

Respondent information

Title

1. Do you have any challenges as an institution that you are facing in the implementation of PITC? Explain.
2. What do you think can be done to improve the uptake and utilization of PITC among women seeking PAC at KNH?

Thank you for accepting to participate in the interview.

Do you have any one in mind that can participate in this study?

APPENDIX VI: STUDY PARTICIPATION CONSENT FORM

This is an informed consent form inviting you to participate in my research on Assessment of the uptake and barriers to utilization of provider initiated HIV testing and counseling among patients seeking post abortion care at Kenyatta National.

Name of investigator: Dr Tapson Mulunda

Department: Obstetrics and Gynecology

Registration no: H58/80651/2012

Contact: 0720644999

Introduction

Provider initiated HIV testing and counseling refers to HIV testing and counseling which is recommended by healthcare providers to persons attending healthcare facilities as a standard component of medical care. While voluntary counseling and testing generally relies on the patient initiating attendance at a test site, the PITC uses the care provider to make a clinical recommendation that the patient have a voluntary HIV test. This presents an opportunity to ensure that HIV is more systematically diagnosed in health care facilities in order to facilitate patient access to needed HIV prevention, treatment, and care and support services. The main justification for routine PITC is to increase the number of patients tested and thus the number of HIV-infected patients identified and linked to medical care and support services.

Purpose of the study: I am carrying out a study as part of the requirement for masters of medicine qualification. My main objective is to find out the uptake and client, provider and system barriers to utilization of provider initiated HIV testing and counseling among patients seeking post abortion care at Kenyatta National Hospital.

I am requesting for your participation in this study as a client seeking PAC or as a staff offering or involved in the formulation and implementation of HIV care related policies at KNH. I would like to bring to your attention the following ethical considerations which will guide your participation.

1. Participation in this study is purely voluntary
2. You may withdraw from the study at any time and there are no consequences for your decision to withdraw.
3. After you have read the explanation, please feel free to ask any questions that will allow you to understand the nature of the study.

4. Any information you provide including details on your demographic characteristics, HIV status or your personal views concerning the study topic will be treated as confidential.
5. The study protocol has been reviewed by an ethics committee. The protocol can be accessible to you should you choose to know the details.

I will be available to answer any questions that will help you to understand the nature of this study. If you wish to seek for any clarification, kindly contact me on 0720644999.

Ethical consideration

The study was designed to comply with international ethical guidelines that govern human research and was carried out after approval by the department of Obstetrics and Gynecology, University of Nairobi and the KNH/UoN Ethics Review Committee.

Study procedure: Either a structured questionnaire, a key informant interview guide or a focused group discussion guide will be administered. It should take approximately 10-15 minutes to complete. The principle investigator or the research assistant will ask you the questions upon which you can chose to respond. You will be required to give consent by signing the consent form if you accept to participate in the study.

Risks and Benefits: The study will involve answering personal questions by the participant that may infringe on her privacy and this will be clearly discussed prior to enrolment. There will be no direct benefit to the participant but the findings will be used by relevant authorities to improve patient management.

Confidentiality

Participants will be treated with utmost confidentiality and no names will be used. No part of the medical records will be photocopied and patient’s outpatient or inpatients number will not appear anyway either in data collected or in the analysis of results. For health care providers or key informants, no names or their titles will be tagged to their personal views on the study topic.

Voluntary participation

The study is voluntary and participants will be free to ask any questions or clarifications. Anyone wishing to withdraw from the study will be free to do so at any point without any victimization.

Dr Tapson Mulunda:

Signature:

Date:

Subject's statement /Consent to participate in the study

I the undersigned have read the foregoing information and voluntarily consent to this study. I have asked questions which have been answered to my satisfaction. I have been assured of confidentiality and freedom to withdraw from the study at will. If I have more questions later about the study I will ask the investigator, and if I have any questions on my rights as a research subject, I can call the University of Nairobi Ethics and Research Committee on 2726300. I am entitled to receive a copy of this consent form if I ask for.

Name of participant

Signature

Date

Name of the witness.....

Signature.....

Date.....

Idhini ya kushiriki utafiti

Hii ni fomu ya idhini ya kushiriki kwa utafiti lengo lake kuu: Kudadasi utumiaji na shida zinazo kumba upimwaji wa ukimwi unaopendekezwa na mhuduma wa afya kwa wamama wanaotafuta matibabu kwa hospitali kuu ya Kenyatta baada ya kupoteza mimba zao kabla hawajapitisha wiki ishirini.

Jina la mchunguzi mkuu: Dkt Tapson Mulunda

Ofisi: Obstetrics and Gynaecology

Nambari ya shule: H58/80651/2012

Nambari ya Simu: 0720644999

Utangulizi

‘Provider initiated HIV testing and counselling refers to HIV testing and counselling’ ni upimwaji wa ukimwi unaopendekezwa na mhuduma wa afya kwa wale wote ambao wanatafuta matibabu kwa vituo via afya hata kama hawana dalili za ukimwi. Umuhimu wake ni kwamba, ni nafasi pekee ya kuakikisha kwamba kila mtu anayetembelea kituo cha afya anajua hali yake ya ukimwi ili kuwawezesha kupata kujikinga na ukimwi au kupata matibu ya ukimwi kabla haujaenea sana.

Umuhimu wa utafiti huu: Kiini cha utafiti huu ni kudadisi kiwango gani cha wamama wanaotafuta matibabu kwa hospitali kuu ya Kenyatta baada ya kupoteza mimba zao kabla ya kufikia wiki ishirini wanaopimwa virusi via ukimwi baada ya kupendekezwa na mhaduma wa afya. Pia tutaangalia sababu gani zinazofanya wengine wasipimwe.

Utafiti huu utanufaisha hospitali kwa kupendekeza mbinu ambazo zitasaidia wale wamama ambao wanatafuta matibu baada ya kupoteza mimba wasirudi nyumbani bila kujua hali yao ya Ukimwi.

Twakuomba uwe mmoja wa washirika katika utafiti huu. Kiini cha idhini hii ya makubaliano ni kukupa maneno ambayo utahitaji ili kukuwezesha kupatiana ilani ya kwamba ungependa kuhusika kwa uchunguzi huu. Tafadhali yasome mawaidha haya kwa makini. Unaweza uliza maswali kuhusu mambo tutakayo kuuliza, uzuri na ubaya wowote unaohusiana nayo, na haki zako kama mwenye kujitolea kushiki kwa utafiti huu, ama swala lolote kuhusu uchunguzi huu, ama chochote katika idhini hii ambayo haujaelewa. Maswali yako yote yatajibiwa na utosheke, unaweza amua kama utahusika na uchunguzi huu au la. Utaratibu huu unaitwa “idhini uliyoarifiwa”.

1. Kushiriki ni kwa kujitolea na si lazima
2. Unaweza kujitoa kwa uchunguzi wakati wowote bila madhara kwako kama mshiriki.
3. Baada ya kusoma idhini ya kushiriki uwe huru kuuliza swali lolote kuusu uchunguzi huu na litajibiwa.
4. Habari yoyote utakayo toa na hata maswali ya kibinafsi yatakuwa siri.
5. Uchunguzi huu utaangaliwa na idara inayosimamia utafiti ya hospitali kuu ya Kenyatta na chuo kikuu cha Nairobi. Na kama utatakujua jambo lolote, uko huru kuuliza.

Nitakuwa tayari kujibu swali lolote litakalo kukuwezesha kuelewa uchunguzi huu. Unaweza kunipigia simu kwa hii nambari yangu ya simu: 0720644999.

Maadili ya utafiti

Utafiti huu utafuata kiwango cha kimataifa kuusu maadili ya utafiti yanao ngoza utafiti wa kibinadamu na nitapata kibali kutoka kwa afisi ya Obstetrics and Gynecology, chuo kikuu cha Nairobi na idara inayosimamia utafiti ya hospitali kuu ya Kenyatta na chuo kikuu cha Nairobi.

Utaratibu wa utafiti huu: Tutatumia fomu rasmi ya kukuuliza maswali tofauti tofauti kulingana na lengo la utafiti huu. Itachukuwa muda wa kama dakika 10-15 kumaliza kujibu maswali hayo. Utaweka sahihi kwa fomu ya idhini kabla ya maswali.

Madhara na faida

Uchunguzi huu utanufaisha hospitali kwa kupendekeza mbinu ambazo zitasaidia wale wamama ambao wanatafuta matibu baada ya kupoteza mimba wasirudi nyumbani bila kujua hali yao ya Ukimwi, kwa hivyo wewe binafsi hautapata faida yoyote moja kwa moja.

Hakuna madhara yoyote utakayo pata kwa kushiriki utafiti huu.

Siri

Utambulisho wako katika uchunguzi huu utawekwa siri. Mchunguzi tuu na watafiti wenzake wa Chuo Kikuu cha Nairobi ndio pekee watakuwa na maandishi yako na haya maandishi yatakodiwa na nambari ya siri ambayo haitalinganishwa na jina lako. Jina lako halitatumika katika maandishi ya finali.

Uhuru wa kushiriki

Uko na uhuru wa kushiriki utafiti huu na tena unaweza kujitenga na uchunguzi huu, ukatae kujibu maswali unayeulizwa ama ujitowe kwa utafiti huu wakati wowote bila madhara ama uzuri wowote.

Ukiwa na maswali kuhusu uchunguzi huu unaweza shirikiana na mchunguzi ambaye jina lake lapatikana kwenye idhini hili. Unaweza kataa kushiriki katika uchunguzi huu bali huduma na matibabu unayotarajia utapokea kama ilivyo haki yako au bila kupoteza kazi yako kama wewe ni mfanyikazi wa hospitali ya KNH.

Sahihi ya mtafiti:Tarehe.....

Jina la Mtafiti

Idhini ya mshirika

Nimeelezwa juu ya chunguzi huu. Nakubali kushirikiana na wachunguzi. Nimepata fursa ya kuuliza maswali. Nikiwa na maswali zaidi nitaweza kuuliza mchunguzi mkuu. Nikiwa na maswali juu ya haki yangu katika uchunguzi huu, naweza piga simu kwa halmashauri ya maadili ya utafiti Hospitali Kuu ya Kenyatta na Chuo Kikuu cha Nairobi kwenye nambari ya simu 2726300. Nikitaka barua yangu ya idhini hii, niko huru kupewa.

Sahihi ya mshirika _____ tarehe _____

Jina la mshuhudia.....

Sahihi yake.....

Tarehe.....

Chuo kikuu cha Nairobi Halmashauri ya Maadili ya utafiti

Hospital Road katika Ngong Road

Sanduku la Posta 20723-00202, Nairobi

Nambari ya simu 2726300 Ext 44355

Barua Pepe: uonknh_erc@uonbi.ac.ke

Tovuti: www.uonbi.ac.ke/activities/KNHUoN

Mhazili, KNH/UON-ERC: PROF, A.N. GUANTAI

Kupitia: 1. Mshirika 2. Mtafiti

APPENDIX VII: FULL REPORT OF QUALITATIVE DATA

I. PITC provision

P 3: FGD clients2.docx

Did anyone talk you about HIV/AIDS?

All: yes

P 3: FGD clients2.docx

Has anyone of you been tested?

All: yes

II. PITC support by the clients

FGD 1. Clients

Do you support the provision of HIV testing and counseling by a health care provider alongside your primary aim of coming to the hospital?

R1: it is ok

R2: it is ok

R3: that one is good

R4: it is ok

R5: it is ok

R3: For me, I cannot refuse to test... There is nothing wrong to be tested. It is good to be checked, so that when you leave the hospital you have been told all your problems ...even those you did not know when you came.

FGD 2. Clients

Do you support the provision of HIV testing and counseling by a health care provider alongside your primary aim of coming to the hospital?

R1: Yes

R2: Yes

R3: It is ok.

R5: there is nothing wrong

All: it is ok

FGD 3 Clients

Do you support the provision of HIV testing and counseling by a health care provider alongside your primary aim of coming to the hospital?

All: Yes, that is okay.

IDI (In charge of VCT services)

What is your overall assessment on the uptake of PITC?

I think most of the patients we have done counseling to, we have ended up providing the testing, so I can say their attitude is positive and they respond well to HIV testing and counseling but usually the only challenge is that we have so many acute emergencies and a big number of patients such that you are not able to go that extra mile of doing the HIV testing and counseling you just end up providing the emergency services that have brought the patient to the hospital.

IDI (Assistant nurse in charge): The uptake is good because most of our clients are to be tested... post evacuation.

IDI (The nurse in charge): when the numbers (nurses) are not there they feel it is an extra task and you find a few are not willing to test. They would rather do the evacuation and just give family planning counseling but they are not going to test the client.

IDI nursing officer1: PITC is doing well... we have done this now for 9 years since inception. Every patient has to be tested unless the patient is not ready but we still encourage them that the testing is very important since it is much related with the diseases that they come with.

IDI nursing officer1: The patients are good, they accept to be tested and they are ready for it. In-case anyone turns positive... I don't think majority will be in denial... very few like one or two but majority accept their status and they readily start on the drugs.

III. What are the challenges facing utilization of PITC services?

1. *Those patients being seen at night.*

IDI (PITC provider in charge).

R: Since we are very few, we have other departments like pediatrics unit where we cover night but not in acute gynecology ward. We told every nurse who does MVA for patients that she should know how to test. So that when they come at night for MVA they are able to give the MVA services and the PITC services... so that when you come in the morning we can be able to see that the patients who come at night got the services and they have gone back home.

IDI The nurse incharge.docx:

R: The few who come... let me say the early hours of night like between 6 and 8, I think they are testing but that again depends on the number because usually most of the patients ...usually ask whether it is an emergency to do the HIV testing and it's at night or it's an emergency that has actually brought them to the casualty. Ok earlier on I mentioned that we have taken a few of the ward nurses on orientation course on PITC. Why we did that is because we had in mind that some of these patients come at night. So that any nurse who is a located there, be it at night or during the day is able to do the testing and the counseling... be it at night or during the day.

IDI (deputy nurse in charge): In most cases those patient who come at night we don't really capture 100% of them for HIV testing and counseling.

IDI (HCW –Nurse in charge of PITC).

I agree with you that most of the time we have that gap. Most of the clients who are evacuated at night we really miss them out on PITC... because also the willingness of the client at night... you find that some of them have stayed for long hours awaiting to be seen in gynecology casualty room... that is especially at night, so that when they reach here for evacuation you find that the willingness test is not there... you know ones you counsel a client for PITC some will say yes or... they have a right to disagree or accept. So you find in the late hours of the night, there is that challenge... the willingness of the patient is also compromised, because of the many hours they have spent in causality before they are seen or some come with severe complications and we may not do it immediately but they are captured later on in the ward for those ones who will be admitted maybe due to anemia imperforation or sepsis... they will be captured much later on in the wards for PITC. We also

have counselors, the general counselors apart from the nurse counselors... we have the general counselors who also actually participate in the capturing such kinds of cases when they are admitted in the wards.

2. Lack of training or refresher courses.

FGD (HCW-nurse): *Another challenge is the training... lack of skills. If we can be taken for training but not one day... One day is not enough. Maybe you are taught you be shown how to test and you are competent so that way it is ok.*

FGD (HCW): *If we have the knowledge at least when one gets time... if there enough time one can be able to provide the service for patients.*

IDI (The nurse in charge): Almost all the nurses are trained in HIV testing and counseling.

IDI (The in charge of PITC): Around 80% of them are trained. Just offer the basic package of HIV testing and counseling then after that we usually refer them to follow-up centers... in our case the comprehensive care centre for further support and follow up.

IDI (Nurse in charge of PITC): On the side of the doctors I can't really comment but basically HIV testing and counseling done by HIV counselors and the nurses who are trained on the same.

FGD (HCW) : The testing kits are available. At no given time have we had a shortage in the supply of HIV testing kits. Those ones are available.

3. Overwhelming workload

IDI (The nurse in charge): They usually complain of overwhelming workload and ask for back up and all that but so far we haven't been able to get a funding for the same. So what we agreed is that when the numbers are less or there are no many acute emergencies, whenever you are allocated in the room you have to do the HIV testing and counseling and actually provide the whole package for the patient and even in addition to that we have also introduced family planning. So if you were to see the patients who are in the reproductive age, apart from just HIV testing and counseling you are also supposed to do family planning counseling and again provide the services for those who are agreed to get the services.

IDI (The in charge PITC): We have so many acute emergencies and a big number of patients such that you are not able to go that extra mile of doing the HIV testing and

counseling you just end up providing the emergency services that have brought the patient to the hospital.

IDI (The assistant nurse in charge): We deal with a big number of patients in our gynecology casualty and compared to the ratio of doctor to nurse you find that you are... as much as the staff are willing to provide the services sometimes they are overwhelmed by the number of patients, so they just end up providing the acute emergencies that have brought the patients to the facility. On a twenty four hour shift the room is covered by one nurse and one doctor.

IDI (The nurse in charge): I can say like 50 patients in 24hrs. So that is why I was saying there is a discrepancy in rate of patient to nurse or patient to doctor because if you were to handle the patient emergencies and again end up doing HIV counseling and testing... then it means that one nurse in a day would have handle like above 25 patient both providing the acute emergencies and going an extra mile of providing HIV testing and counseling. And you know the patients who usually turn positive you really have to give them support and aware that you have actually linked them to a proper care system for follow up : because you cannot start testing a patient then once you finish you just give the results and leave the patient distressed... you have to really support the patient. So with those numbers you find that it is sometimes usually difficult to provide all the services to the patients.

FGD (HCW-Nurse 1): It is very challenging because acute gynecology wards being an acute patient ward, sometimes you are overwhelmed, the staff is less but if arrangement can be made to station someone there who is trained to be doing that work I think our patients will benefit more.

FGD (HCW-Nurse 2): It is challenging because of the workload and the number of staffing.
FGD (HCW-Nurse 3): for me it is the same case... offering the services in relation to the workload it becomes a challenge.

FGD (HCW-Nurse 4): ideally the workload in ward acute gynecology ward is too much, it is too overwhelming and unless a specific person who is trained to provide those services is availed it is practically not possible to offer the service

FGD (HCW-Nurse 5 Trained in PITC): For the PITC services to be provided in ward acute gynecology ward and at the same time provide bedside nursing services... it is not possible unless someone is completely exempted from the bedside services.

FGD (HCW-Nurse 6): Acute gynecology ward is where you get so many diagnoses, sometimes you get a patient with anemia and you have to transfuse, some are supposed to be taken for radiotherapy and there is no porter to take them so as a health provider you require to take the patient for that radiotherapy. We have five rooms and on a shift you might find one provider is serving two rooms and the patients are too many and they need total nursing care. Sometimes patients come when they are very sick and they need total nursing care like bathing and all that... so it is difficult to offer PITC services

FGD (HCW-Nurse 7): Mostly a nurse is allocated to one room or two rooms... so we usually have like an average of 25 patients and for one nurse it is quite challenging to offer nursing care for all of them; provide nursing care, do treatment and give all the services that they require so sometimes offering PITC can be very challenging... because it needs time. You know time is needed to be with a patient so that you can offer the services quality service.

FGD HCW- Nurse 8: Acute gynecology ward is an acute ward and you find like MVA patients when they come they are in stage 3 or 4. Most of the patients are bedridden and you are alone in a room of 10 patients so that becomes a challenge.

IDI (Assistant nurse in charge): Also at times it is also a challenge if you have got a high number of clients you find that the queue is long and you know testing and counseling takes some time and there is only one nurse who is with that doctor in that particular room

FGD (HCW –Nurse 9): The ratio of patients to nurse is like 20 patients per nurse. So concentrating on nursing care, which is more needed makes the PITC uptake somewhat ignored because of the demanding nature of the work that we do.

FGD (HCW-Nurse 10): I agree with my colleague that the work load is too much... like the ratio of 1 to 20 and it is impossible to offer PITC because at least you need 10 to 15 minutes with one client. So it is impossible

FGD (HCW-Nurse 1) it is a challenge because... it can be do-able if the work load would be maintained to a certain level but since it is so much work sometimes you are doing so much at the same time that makes it difficult.

FGD (HCW-Nurse 2): Like now you might find in the morning you are reporting only three people mostly plus the care in the ward the patients are so many.

4. Mentorship and supervision

FGD (HCW-Nurse 1): You might be having the knowledge but you don't have the competency so you need some supervision so that the competency can be achieved.

5. Lack of private rooms

FGD (HCW-Nurse 2): Another challenge is about confidentiality of the patients. Sometimes you find some are bedridden and others are not bedridden but they are share beds. So offering the PITC becomes a challenge because there is need for privacy to offer the PITC.

FGD (HCW-Nurse 3): Bringing a patient from one room to another for PITC is also a challenge... so we can say it is a challenge because we don't have enough rooms for testing and counseling.

IDI (The nurse in charge): You find two patients on one bed and maybe both of them cannot walk... that is a challenge because you cannot test the patients on the same day. You have to wait for one to get well so that you can ask them to leave the room you go talk to the other one (*privacy*).

IDI (The nurse in charge): Yes, sometimes we test at the bed side if the patient is one on the bed but when they are two it is a challenge you cannot test there... you have to wait another day. And maybe you wait for the other day and sometimes you find the patient has left for home or passed on and she never got the services.

6. Shortage of staff.

IDI (Assistant nurse in charge): challenges we face here mostly is staff shortage because as much as we give orientation courses to our staff who participate in the PAC.

IDI (The in charge PITC): There is still lacking in the skill. Ok the shortage plus the skill. The skill in doing the counseling and testing... so you will find most of our staff are not

trained in counseling and testing but so far we have introduced some orientation courses for them so that they are able to counsel and test these clients post evacuation.

IDI (Assistant nurse in charge): Ideally the main thing is the staffing. In such a case... because if we could have two nurses allocated in the procedure room, one could be doing the testing and counseling and the other one will be with the doctor attending to the client.

IDI (The in charge PITC): We are not enough but at least we cover every apart but not the entire hospital. We are about 30 counselors covering the wards and the outpatient so still we are few... we need more people so that we can give quality services to our patients

7. Lack of communication of availability of PITC services

IDI (nursing officer): Most of the doctors not... ok they are aware about the PITC services but they don't inform their clients that HIV test is a must for every patient. That is the big challenge that we have. So it is our own initiative... on ourselves that we must initiate it to our clients... that HIV testing is very important and what it really means for them to test.

Some doctors have been asked to go and train for the course but some don't go...for the doctors I don't know why they are not informing their patients that HIV testing is a must for every patient.

IV. What do you think can be done to improve the uptake of PITC in our unit?

FGD (HCW –Nurse 1): I can say that it is do-able if only the duties and these responsibilities were directed to one individual. At least per day that duty of PITC be allocated to someone but you cannot mix nursing care and gain you are doing PITC... it can really become a challenge.

FGD (HCW- Nurse 2): I think if people can be well trained and then they get enough time to practice I think it can be better, because at times when you are doing other things and then at the same time you are required to do the PITC, you cannot concentrate and you cannot be able to do it in a quality way.

FGD (HCW-Nurse 3): If more people were trained then we can be able to share the duties. Maybe when you are busy somewhere and somebody else is not so busy, then that person can take over if all of us are trained.

IDI (The nurse in charge): First and for most the thing is to increase the staff so that all the patients benefit from the service. Because you cannot chase away patients to reduce the

numbers, so the best thing would be... to increase the numbers of staff so that at least we have adequate number of nurses and doctors to reduce the length of stay of patients in our causality...because again because of the same number of patient and shortage of staff you usually find that a patient has stayed in causality for a long period of time such that after getting a service from the doctor. Now coming to initiate the process of HIV counseling and testing by that time this patient is tired and they just want to go home.

IDI (The nurse in charge of PITC): So far what is in place is the supply of the test kits and the room is in pace. The post abortal care counseling room is already assigned but we need to bring in the test kits so that we also get the support from the hospital. Actually the support from the hospital is very important because we cannot do it alone here. It is only when the hospital management understand that we really need more staffing and for what reason we need more staffing.

FGD (HCW-Nurse 4): unless someone is completely exempted from the bedside services. That is the only time when someone can provide effective PITC services to the patients

FGD (HCW –Nurse 5): Unless a specific person who is trained to provide those services is employed then the uptake of PITC will remain low.

FGD (HCW-Nurse 6): Time is needed to be with a patient so that you can offer quality service.

FGD (HCW-Nurse 7): I would suggest that more staff to be hired and not necessarily from the nursing fraternity but even from other teams like the Liverpool VCT centers. They can be employed here and in the wards so that they are on duty every day to take care of our patients and to give enough counseling for them.

FGD (HCW-Nurse 8): You know that is not a thing that you do for 10 minutes and you are done... for some of them you really need to talk to them and reassure them, to cool their anxieties. So when you mix the nursing care and those other services I think we would be doing very little for our patient and they will not benefit. So my suggestion is that the hospital if possible to employ more staff so that when you are doing the testing and the counseling the ward is not left lacking care.

FGD (HCW-Nurse 9): Just like now if we look at the ratio that we have here the five of us... only one nurse has been trained in PITC. The four of us are not trained... so I think training is a major thing. The hospital needs to arrange and train most of us so... because most of the times we are with these patients so that at least we need to have some knowledge.

FGD (HCW-Nurse 10): They can select just one nurse from the ward and train and allocate that nurse to be dealing with PITC services only; I think it will be an advantage to the patients.

FGD (HCW-Nurse 1): I think it is more of capacity building and empowerment and once you are empowered to provide the PITC services we appoint that staff to give the services. For nursing services when one is not that busy to help give the services as need be.

FGD (HCW-Nurse 2): Empower all the nurses with the knowledge so that at least even if it is on locum there could be somebody specifically for that work.

FGD (client 1): Add more health providers that have those skills of testing.

FGD client 2: Here at acute gynecology ward I have observed that everyone that comes must be tested. So it should have been for all sickness..., everywhere that a sick person goes, it should be the first thing... testing.

FGD client 3: there are places I have seen when people are tested and they are found to have it HIV, they are given food, drugs. They are given things like flour...I mean things that can use to improve your health

FGD client 4: After testing if found positive you should be started on medications immediately and any other thing that they need to start immediately because they will HIV known my status now.

FGD client 5: What I think can be good for someone to be going to people's homes to test and counsel them with their family present...that way other people out there will not know what is happening.

FGD client 6: It is good to test and doing door to door to testing in the homes is still ok like you used to do some time back.

FGD client 7: To encourage those who have HIV and advice so that she can have courage and to adhere to medications in order to live long.

FGD client 8: I would like before you test someone you first counsel them because not all people are the same. There are those who are emotionally weak and there are those that are strong... because like for me the person who tested me in the morning... I even told her that I had been tested in the clinic but still tested me... you will find someone has not told you anything, how you are supposed to live after testing and all that... you know, being counseled is good, at least you know and your mind it is settled whether you will be found positive or negative.

Interviewer: So counseling was not good?

Client 8: It was not there.

FGD client 9: One is supposed to be counseled, told we are going to test you on this and if you are found to be positive what you are supposed to do and what you are not supposed to do.

FGD client 10: and I think that would be better because she just comes and she wants to do it the HIV testing and maybe you are in pain and you just tell her do it and that acceptance is not coming from the heart you are just doing for the sake of it.

FGD client 11: To improve maybe is to talk to someone first before like if you are found to have it don't fear...yeah... this and this and this. And I guess that will be better rather than just testing and we are not saying she is a bad person... like when she tested me she talked but it wasn't bad... she need to improve on the counseling part... so that even if you are found to have it you will not fear.

FGD client 12: It is important to be counseled... just like me when I went for the scan and I was told my baby heart beat was not there...I did not even wait for the results... I stayed here at KNH doctors plaza for 4 hours I was unable to go back home until someone came to pick me...so what if you have been told you have HIV...and you haven't been counseled. It can be very scary

FGD HCW-Nurse 4: If we have enough staff it is do-able. One per shift to be allocated to do the MVA then you proceeds and to do the PITC.

IDI nursing officer: Our doctors need to be aware that, when they have received the patients it is important to let them know that HIV testing is mandatory, so that the patients can be aware. When they come to the ward, they don't start saying the doctor didn't tell me about HIV testing and now you have come to tell me about it...so if our doctors can inform our patients that when you come here these are the test that we do for every patient... so that the patient can know what we usually do in the wards.

FGD HCW-Nurse 6

I think it is more of capacity building and empowerment and once you are empowered to provide the PITC services we appoint those staff to give the services. For nursing services when one is not that busy to help give the services as need be.

Client's reasons for refusal to test (Factors that affect PITC utilization)

FGD client 12

You see sometimes, someone might fear because you don't know your status and you think you might be tested and found to have it... And that can make one to start worrying a lot.

FGD client 1

It is just fear that can make you not to be tested.

Interviewer: Fear of what?

Client 1: You just start worrying that if tested will you have it (HIV) or not have it.

FGD client 2: Fear.

Interviewer: What do you fear? Tell me more about that fear.

Client 2: Fear of being tested.

Interviewer: When you are tested what makes you fear?

Client 2: Like right now I have stress, I wouldn't want to be tested.

FGD client 3

So if it were something you can buy from the shop like you buy other things like those that you share with your partner it can be possible for many people to test (*talking about self testing kit*). You know it will be the two of you doing the testing in private but the issue of queuing in the hospital is scary...right now every hospital are doing HIV testing. So most people don't want to go to the hospital because the first thing that is done is the HIV testing.

FGD client 4

Maybe just fear... Fear can make one not want to be tested.

FGD client 5

Maybe you know you have HIV and you fear that if tested you will be put on medication or you can just have fear of being tested.

FGD client 6

You just start worrying that... I will start taking drugs and how it will be like if HIV positive.

FGD client 7

Sometimes you might feel if I agree to be tested... there are some people who might have high blood pressure and that can make them get anxious or worry and it is not good for them...but if you have been told it is good to be tested you should accept what the doctor has told you.

FGD client 8

For me it is only fear.

FGD client 9

For me, what I know is that, if like this one is my neighbor and I have HIV and she finds out that I have it she will go round tell everyone that so and so has HIV.

Interviewer: 'So you fear that other people might know your status and they go around telling others your secrets'. **Client 9:** Yes... and even when you go to pick your drugs, you still fear that so and so might see me.

FGD client 10

I think it is just fear that people will tell on you.

FGD client 11

Fear that people will tell on you... when you pass by other people might start talking about you that you are positive.

FGD client 12

Just like what my colleagues have said the fear and shame... somebody fears the shame.

FGD client 1

Fear of being talked about.

FGD All clients: Fear.

FGD client 3

Maybe you already know you have the HIV, you had tested out there and you know... so you don't want anyone else to know.

FGD client 4

You could be scared if you have never been tested before and now here you are being asked to test... so you might fear and start wondering whether you have it or not.

FGD client 7

Might have fear... because there are some who have HIV like upcountry and they don't know, they have never gone for testing and they believe they have been bewitched. I had a cousin who did not accept her status and she died very fast. She believed that she had been bewitched but she was suffering from HIV.

FGD client 11

Not being ready and having fear of knowing one's HIV status.

FGD client 12

Those who have high blood pressure... can be told their result and they collapse and die. ... So I think before the testing you should first get the person's blood pressure. You ought to find out whether they have high blood pressure or something like that.

FGD client 6

I have come with my problem, I am in pain so I would like I be treated first before any other thing like the testing and counseling... would prefer that and I know most of the people would prefer that. They would like to be treated first for the primary problem that brought them then after they have recovered then someone can come and talk to them about the testing and the counseling.

FGD client 9

Let's say you have been brought for clinic by your husband and most of time when the husband hears that there is testing for HIV he disappears. Many men don't want to be tested.

FGD HCW-Nurse 3

Sometimes there might not be good counseling prior to testing and some of them still need time for counseling for them to come to terms with results because some patients are scared of a positive result. They might not know what to expect so they are afraid of the results so that makes it not easy for them to just say yes.

FGD HCW-Nurse 6

I can say that this being, provider initiated, sometimes it becomes a challenge for you to convince this client to accept to be tested... you have to create a good rapport for them agree but I can say there is a good number who accept and few who decline... and you cannot force them so it is actually 50 to 50... some can accept and some can decline.

FGD HCW-Nurse 7

Some will lie that they have recently taken the test. And you see if a client tells you that maybe she has taken the test recently you can't go ahead and force her or him to test. So for me I can say that being that you are the one who is initiating not all will agree to be tested.

FGD HCW-Nurse 8

Most of them at times are not willing to be tested because... you talk to a client and she doesn't tell you she has an issue... say she has an infection... so because of the infection she will start worrying that what if I am found to be positive, will I be able to handle the current problem and HIV. Also sometimes some have been tested before and maybe they know their status and maybe some are even on ART and they have defaulted, others have been maybe tested and they haven't been started on ART but they are not willing and they don't want to tell you that they have been tested and they know their status. So they just refuse to be tested

again and go through the same process of being told you know the test it is positive. I think that is also another challenge

Clients' reasons for accepting to have an HIV test

FGD client 1: after you have been tested you just feel it is good.

FGD client 2: It is good to be tested so that you can know your status. Like now we went and got tested and we know our status and we now know how we will go and plan our lives.

FGD client 3: But is good you be tested so that you know how you can plan your life.

FGD client 4: I will still be tested because maybe I was tested sometime ago and there has been a long duration.

FGD client 5: yes... in all hospital you go that is what is done first. So that at least as you are treated they know... you know that disease (HIV brings other many diseases. So when tested first they will know how to treat you.

FGD client 6: I cannot fear to be tested because I have children who I want to care of so I would rather follow their instructions so that I get treated and be well.

FGD client 9

So your husband must give you permission so that you get tested? He cannot prevent me. If he refuses you let him be and you go get tested.

FGD client 10: Me I cannot fear because, even if I fear and people laugh at me it is my status, just like one can get accident on the road.

FGD client 11: No need of having fear because you might be suffering from the HIV disease and you don't know and you think it is another disease.

FGD HCW-Nurse 3: Most of the times when you explain to the patients, some might refuse and some are willing but because these days it is like mandatory that we have to know the patient status for us to give quality care so most of them will accept.

FGD HCW-Nurse 8: Most patients are willing according to me. Especially when they come to hospital, most of them are weak and maybe would like to know maybe the causes of their illness and so they are in that position that once they are in hospital they should accept whatever management or whatever thing they are told to do in hospital. So they tend to accept just because they are in the ward and they are helpless and like that...