

## **Factors Influencing Uptake of Provider Initiated Counseling and Testing For HIV at Kijauri Sub County Hospital Nyamira County**

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**Abstract:** The researchers intended to determine the factors influencing uptake of Provider Initiated Counseling and Testing of HIV at Kijauri Sub County Hospital, the main sub county hospital within Borabu Sub County of Nyamira County. The objectives of the study were to determine facility based factors influencing provider initiated counseling and testing of HIV at Kijauri Sub District Hospital, To establish social – cultural factors influencing provider initiated counseling and testing of HIV at Kijauri Sub District Hospital and To assess the level of clients knowledge about provider initiated counseling and testing and its relationship. It had targeted an eligible population of 5,760 adults (15-69 years) who were attending the facility for medical services according to Annual Operation Plan (AOP) of 2013-2014. The study used a descriptive cross sectional study design and sample set was sought using fisher *et al.* 1998 and after use of correction factor a total of 94 homogeneous adults, 47 males and 47 women out of the eligible targets (15-69 years) who sought outpatient services at Kijauri Sub County Hospital were included. A systematic random sampling technique was used to select this sample for the study who were interviewed through self-administered questionnaires as the main data collection instrument. Out of the 94 respondents, all were able to respond to the questions at a  $p < 0.05$ . Age categories varied with, 15-25 (48%), 26-35 (27%), 35-45 (14%) and 45 and above were 11%. 50% of the respondents were either married or cohabiting. Academically most of the respondents were semi illiterate at 58% ( $p < 0.05$ ) while the rest were either illiterate or literate. Although all the respondents had significant information about HIV some had misconceptions on the predisposing causes and symptoms with a total of 14% saying one can tell a person is HIV positive through their physical appearance. Although majority of the respondents, a ratio of 0.85 said it was important to know your HIV status a total of 21 respondents didn't know the repercussions of not getting tested. From the deductions it was established that the major factors influencing the uptake of PICT are illiteracy, lack of sensitization and fear of lack of privacy. Given these outcomes the policy implementation towards zero infection should step up and address those factors in order to reduce and even eliminate HIV within this sub county and indeed in the country.

**Keywords:** Culture, Discordance, Ethical, Respondents, Stigma.

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### **INTRODUCTION**

The researchers intended to study on factors influencing provider initiated counseling and testing of HIV at Kijauri Sub-District Hospital. HIV/AIDS still remain a major global concern currently estimated to be affecting about 45 million people. 22 million of who live in Sub-Saharan Africa. Out of the 45 million, only 33 million have so far been tested and confirmed, while the remaining 12 million are yet to be accessed by counseling and testing [1].

According to [2], knowledge of HIV status by sexually active individuals will be a major step of reducing the spread as those who would have been found infected will be initiated on care and be counseled on transmission reduction package [3]. This will also help programme implementers to initiate them

on care and treatment thus prolongs their lives and improves economic performance [4].

According to a research carried out in Kenya [5], on HIV prevalence and marital status, only 16.4% of the respondents said they knew they were infected, whereas 22.1% said they knew their partners HIV status. From this study it was learned that those respondents who were already aware of their HIV status were more likely to know the status of their partners. Overall, about 33.9% of all the adults interviewed (15-69 years) agreed that they had been tested for HIV at least only once in their lifetime. Moreover there was a wide interprovincial variation in HIV prevalence ranging from 14.9% in Nyanza, 9.2% in Coast, 7% in Rift Valley, 3% in Central 5% in Western, 4% in Eastern, 7.9% in Nairobi, and 0.8% in North Eastern Region [6].

In Kenya an estimated 3.5 million people aged 15-64 years are infected with HIV/AIDS, but only 1.8 million have been so far confirmed [6]. The remaining 1.6 million (47%) people who are presumed infected are yet to be confirmed [7]. In Kenya, about 60% of the HIV infected adults (24-69 years) are married or cohabiting, and out of these, 5.9% of them are discordant (one partner positive and the other negative). Therefore there is need to emphasize on possibility of HIV discordance among couples and risk of transmission by those infected but don't know their status as yet [7].

In spite of the implementation of provider initiated counseling and testing PITC [8]. Individual regional performance of 2011 PITC is as low as can be seen in NASCOP records of Dec. 2011: Nairobi 56%, Nyanza 34%, Western 30%, North Eastern 7%, Rift Valley 30%, Coast 4%. While at sub county performance level:- Kisumu East 38%, Migori 45%, Kisii Central 28%, Borabu 24%, Kijauri Sub County Hospital achieved 22% [8].

Hence there was need to do the study to find out the factors influencing uptake of provider initiated counseling and testing (PITC) by clients at Kijauri Sub County Hospital.

This could help the country to plan and channel resources to the real areas of need. Kenya declared HIV a national disaster and Total War against HIV/AIDS as cornerstone Health approaches to increase both counseling and test care and treatment uptake at all levels of care. [9]. Provider initiated testing is included in all routine health care programs in order to increase universal access to all target clients who could not be reached by other methods.

#### Experimental section:

The researcher used a descriptive cross sectional quantitative and qualitative study method through employment of structured questionnaire for data collection. The outcome was presented in frequency tables, figures, graphs and percentages.

A systematic random sampling method was used where every  $K^{\text{th}}$  case in the population frame was selected for inclusion in the sample. In utilizing this method of sampling every alternate client of eligible age was recruited and questionnaires administered to make 94 respondents

According to the facility Annual work plan of 2012-2013 target of 5760 adults receive routine outpatient services at Kijauri Sub County Hospital. This gives monthly target of 480 and weekly target of 120.

The desired sample size was determined using Fisher *et al.*, 1998 formula[10].  

$$n = Z^2pq/d^2$$

Where;

$n$  = The desired sample size (if target population is more than 10,000).

$z$  = The standard normal deviation at the required confidence level of 1.96.

$d$  = The level of statistical significance set.

$p$  = The proportion in the characteristics being measured.

$q = 1 - p$

If there is no estimate available of the proportion in the target population assumed to have the same characteristics, the researcher may use 50% of the given sample as recommended by Fisher *et al.*, 1998 for example, if the proportion of a target population is 50, and the Z-statistic is 1.96, and we desire accuracy at the 0.05 level statistical significance, then the sample will be determined as;

$$n = \frac{(1.96)^2 (0.05) (0.05)}{(0.05)^2} = 384$$

The sample size in this study is less than 10,000 therefore the formula for infinite population was used.

$$nf = n/(1 + n/N)$$

Where;

$nf$  = The desired sample size, when the population is less than 10,000.

$n$  = The desired sample when population is more than 10,000.

$N$  = The estimated population size of adults and youths will be 120 (weekly target for facility)

Therefore;

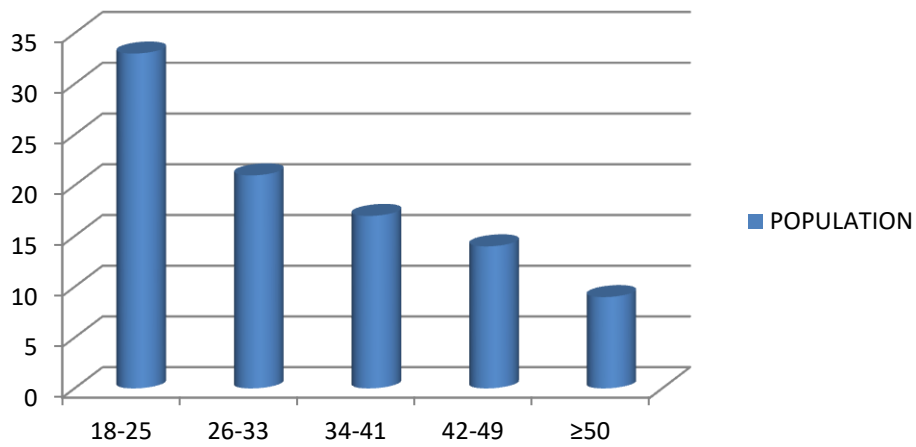
$$nf = 384/(1 + 384/120)$$

Sample size is 96 respondents.

#### RESULTS AND DISCUSSION:

A total of 96 individuals were successfully recruited for inclusion into the study and a total of 96 respondents qualified for the inclusion criteria aged between 18 and 65 of whom 54 were female respondents and 42 were male. A total of 33 respondents were between the ages of 18-25, 21 were between 26-33, 17 were between 34-41 years, 14 respondents were between 42 – 49 while 8 respondents were  $\geq 50$  years old. Graph 1. Represents the demographic distribution of the respondents

## POPULATION



**Graph.1: Graph showing population distribution**

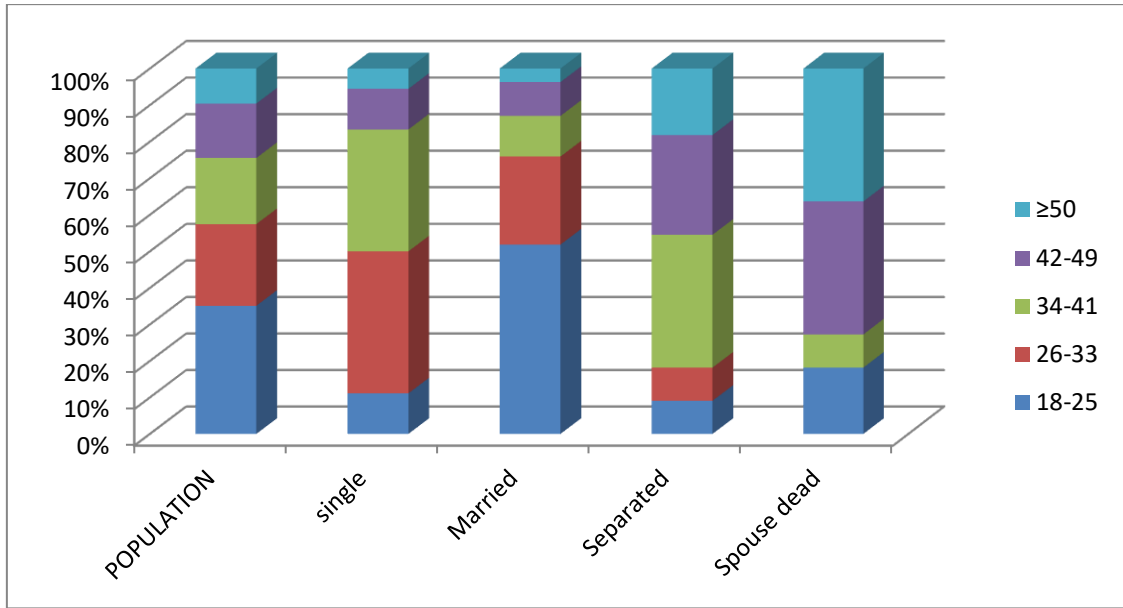
The distribution in age showed gradual decline in sample population visiting the hospital with age with those between 18-25 years constituting the highest population and those over 50 years being constituting the least number of respondents visiting the hospital.

The study sought to establish the marital status of the respondents as either being single, married, separated, cohabiting, widow or widower and these status were corrected for age. Graph 2 below shows the marital status of these respondents;



**Graph.2 : Graph showing the marital status of the respondents**

On correction for age the data showed most of those in marriage were in the age bracket of between 18-25 while the least population were those widowed.



**Graph.3: Graph showing age set distribution in relation to marital status**

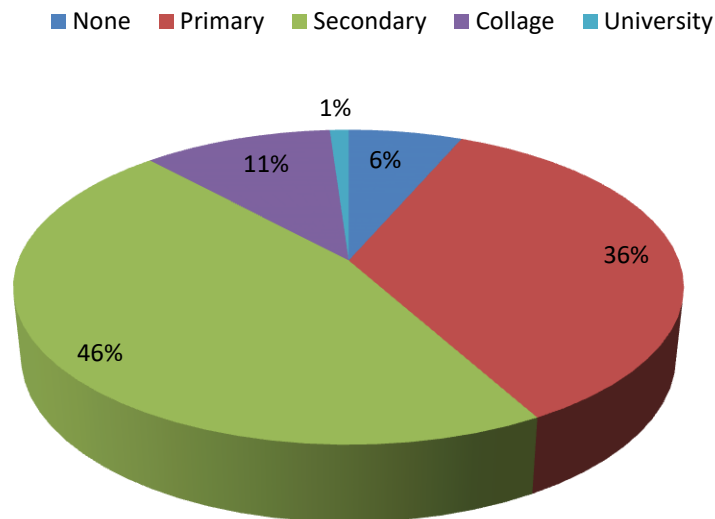
This data can be summarized in table 1 below;

**Table-1: Table showing age distribution in relation to marital status**

AGE	POPULATION	single	Married	Separated	Spouse dead
18-25	33	2	28	1	2
26-33	21	7	13	1	0
34-41	17	6	6	4	1
42-49	14	2	5	3	4
≥50	9	1	2	2	4

In terms of educational levels there was rampant illiteracy within the respondents as most did not have

tertiary education. Chart .3 represents the literacy levels of the respondents;

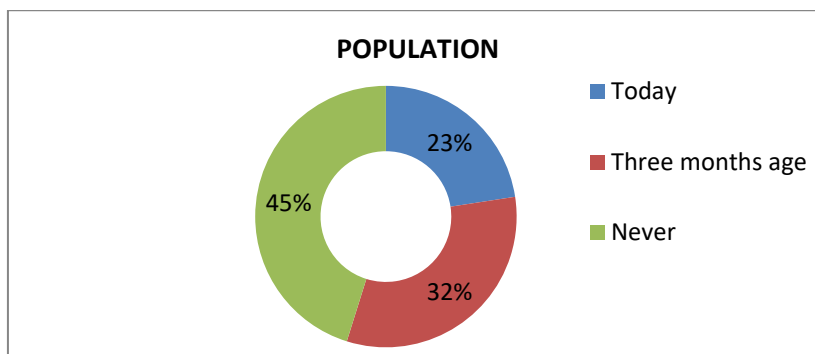


**Chart.1: Pie chart showing the academic qualifications of the respondents**

There was enough knowledge on the meaning on of HIV/AIDS as all the 93 (100%) respondents claimed to have heard about HIV/AIDS but there was a knowledge gap on the common modes of transmission as a ratio of 0.49 were not aware that the disease could be transmitted from mother to child and 0.16 were not aware that sharing of needles could lead to transmission of HIV/AIDS. Although all the respondents at ratio of

1.0 (100%) were well aware that Unprotected sex would lead to transmission of HIV/AIDS at significance level of 98%. When assessed for testing most people confessed to having not been tested while a few had taken the test before that date ( $p > 0.5$ ).

The Graph. 4 shows the HIV/AIDS testing statistics for the respondents-



**Graph.4: Graph showing the HIV testing statistic of the respondents**

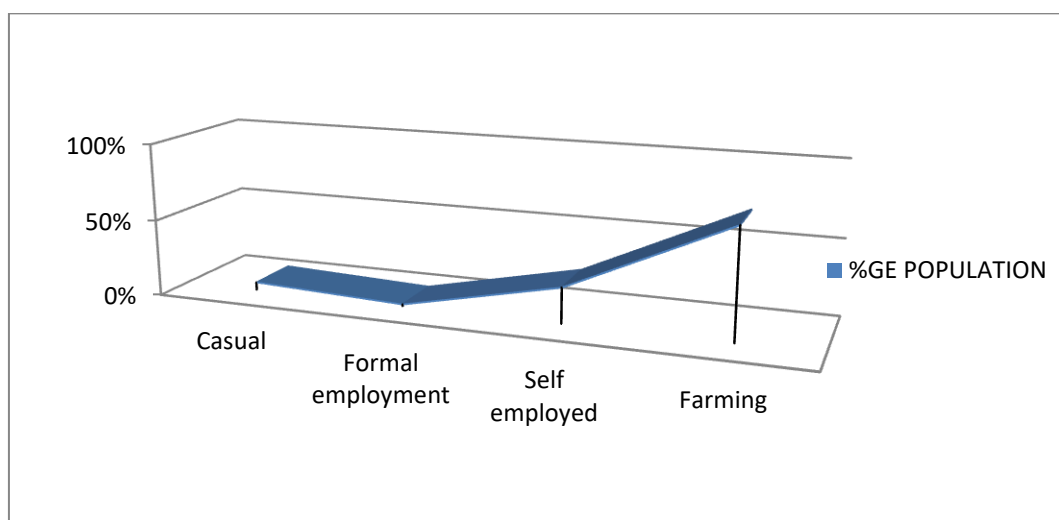
When corrected for gender to testing practices the results were as tabulated below Table-2-

**Table-2: Table showing odds ratio of HIV testing characteristics**

WHEN TESTED	POPULATION	MALE	FEMALE	ODDS RATIO	P Value
Today	21	7	14	2.0(95% CI)1.6-2.5	>0.005
Three months age	30	13	17	1.3(95% CI) 1.0 - 2.0	>0.005
Never	42	33	9	0.27(95% CI)0.20-0.32	>0.005

Social cultural practices have been shown to hamper PITCT given the ideological beliefs associated with cultural orientation and other social cultural inclinations. This study sought to understand the set-up of the population and how it affects their knowledge and practices as far as HIV/AIDS is concerned.

In terms of employment majority of respondents were farmers at 71%, 23% were self-employed 5 percent were casual employees while 1% was in formal employment. There was a high degree of unemployment among the respondents with even those respondents with tertiary education. This information is represented in graph 5 below;



**Graph.5: Graph showing the employment status of the respondents**

All the respondents (100%) claimed that it was important for people to know their HIV status ( $p \geq 0.5$ ) and a total of 71 respondents confessed that they will disclose their status to their partners or friends. Among those who claimed that they wouldn't disclose their status 80% were male respondents.

On the aspect of disclosure to spouse in HIV status, male respondents were more reluctant to disclose

their status to their spouses with a total of 33 out of the 42 male respondents saying they won't disclose their status. Female respondents were relatively at ease with disclosing their status to their spouse at a 98% significance level 31 female respondents affirmed they will disclose their status to their spouses while 17 said they will disclose the information to close friends. The graph below illustrates the responses on information disclosure to spouses.

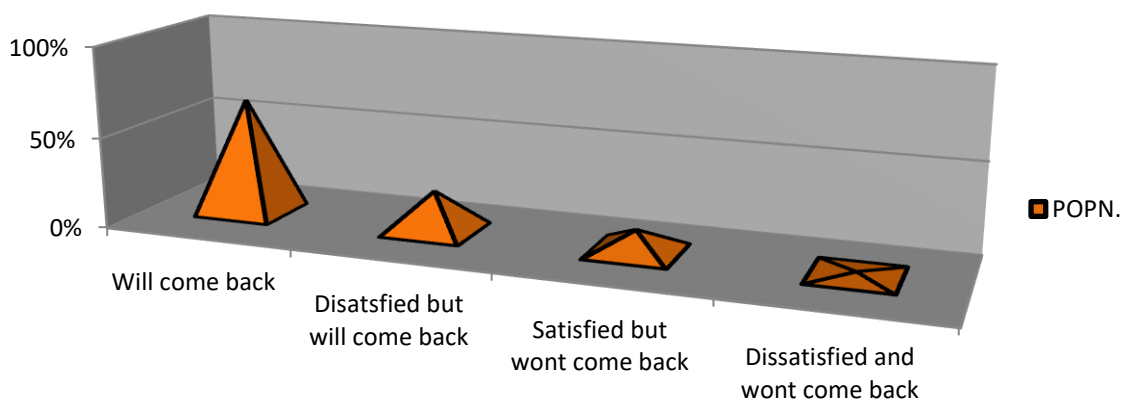
**Table-3: Table showing responses towards disclosure of status to spouse**

RESPONSE	POPULATION	
	MALE	FEMALE
Will disclose if negative	38	46
Won't disclose if negative	3	2
Will disclose if positive	7	33
Won't disclose if positive	33	12
Am not sure	2	1

It was important to investigate the facility based factors that influences testing and counseling and therefore the research sought to establish the respondents' view of the way they were handled by the healthcare providers. Of those who attended the facility that day only 15 individuals (10 female and 5 males) were tested for HIV/AIDS and showed unanimous satisfaction with the way they were handled by the healthcare providers in terms of counseling and the

overall explanations but cited need for more privacy since the testing rooms were open to other users hence compromising the privacy of the exercise and eventually the rates of testing.

Of those tested 78% said they will come back for future tests or otherwise if need be and expressed satisfaction as in graph 6



**Graph.6: Graph showing satisfaction of the respondents**

## DISCUSSION AND INTERPRETATION

It was realized that majority of the respondents were those between the ages of 18-25 with a population of 33 individuals, while the least number of respondents were those between the ages above 50 years old, this could be attributed to the fact that those of younger age were more conscious of the health status as opposed to

the elderly members of society who have been in marriage for long and probably have mature children. Those in middle ages were average in number hence depicting moderate concerns on the health status.

Early marriage was predominant in the findings with those below the age of 25 years old interviewed in

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marriage being 28 out of a total of 33 respondents which represents a total of 84% of the respondents in this age bracket. This could be as a result of poverty and poor school attendance in this study area as most people after finishing primary education or secondary stop schooling and resort to marriage. This could be shown to have a predisposition additive value in the HIV/AIDS infection

Most of the younger population seemed to shun school as opposed to those of over 25 years old but below 50 years in both gender. This can be attributed to poor economic standards which drive especially female respondents out of school at an early age. Coupled with early pregnancies and other social cultural attributes, the findings can indicate a significant knowledge gap in relation to HIV/AIDS as most of these people lack adequate knowledge on importance of getting tested for the same. The population of those above 50 years within the sample set was not sufficient enough to draw conclusion on average level of education but the trend showed high level of illiteracy at this level as only one of the respondents had post primary education.

Respondents were well aware of the causes of HIV with 100% certainty that unprotected sex with an infected person caused infection. It was though clear that some respondents were not aware of other modes of transmission like blood transfusion, mother to child transmission and sharing of needle and syringes hence depicting a knowledge gap on that end.

Female respondents were more ready to disclose their HIV status to their spouses in instance if they turned out positive but male respondents confirmed to be reluctant. This could result from the fact that women felt more submissive to their husbands as opposed to the men who have a superiority mentality towards their wives.

From the responses, out of the 93 respondents 64 of those who visited the HIV clinic had undertaken the test while 17 claimed that they were not prepared for the outcome while 12 refused to take the test citing lack of confidence in the facility's confidentiality. Despite the outcome, 98% of the respondents indicated that they were well received by the healthcare providers and showed satisfaction with the explanation given about taking an HIV test. Majority expressed optimism of coming back to the facility in future in case they wished to do another test or wished to be advised on proper practices for those found positive.

## CONCLUSION

In conclusion, the study found out that female respondents seemed to take more responsibility and initiative when it comes to HIV testing. Male respondents were somewhat reluctant to talk about it and were unwilling to involve their spouses. This could

have a detrimental effect on families especially where young children are involved or the unborn babies.

HIV testing still remains a key parameter in curbing its spread but still a knowledge gap looms and this calls for more proactive measures like home visits and field days to sensitize the people. More resources need to be allocated to this course to enhance the outreach by the healthcare provider. PITCT is a noble venture and needs to be explored more as it will most likely reduce the effect and impact of HIV and AIDS.

## Recommendation

More resources need to be allocated towards this course since there is underfunding. According to this study it was discovered that unawareness is still deep seated in majority of people especially in rural set ups. There is sufficient evidence to deduce that more resources are required for purposes of sensitization and testing of people and more specifically follow ups of victims affected and infected by HIV and AIDS as well as suspected individuals at the level of their homes hence home visits.

On the other hand more emphasis is required towards guarding the patient doctor privacy as most clients cite lack of adequate privacy and hence need for specialized facility infrastructure to cater for the infected and affected groups in society.

Early marriage seems to be adding more harm as those who get into marriage early in life seem not prepared and end up into promiscuity and unfaithfulness in their marriage hence individual of marrying age should be adequately prepared to face marriage as an investment rather than a convenience exercise.

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