

# Knowledge and Perceptions of HIV/AIDS among Married Couples in Kenya

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**Abstract** Married couples and those in stable relationships account for the highest percentage of new HIV/AIDS infections in Kenya [1]. UNAIDS (United Nations Programme on HIV/AIDS) 2010 Report on the global AIDS epidemic confirms that the decline in new HIV infections over the past 10 years is clearly linked with changes in behaviour and social norms together with increased knowledge of HIV [2]. A report by Population Action International concerning HIV in marriage, in its recommendations, states that, “Many steps can be taken to reduce the vulnerability of married women and men to HIV infection, including stronger policies, better prevention strategies, and changes in harmful social norms.” It specifically goes ahead to propose “Educating men and women about social norms and how those norms negatively impact men and women’s health,” as one of the first steps to reducing HIV infection in marriages [3]. This indicates that wrong perceptions (propagated by harmful social norms in Kenya) and lack of knowledge on HIV/AIDS is a contributing factor to spread of the infection. According to KAIS 2012 – Kenya AIDS Indicator Survey 2012 – report despite the increase in HIV testing levels, 53% of survey participants found to be infected during the survey were not aware of their HIV infection. The aim of this research paper, therefore, is to show ways in which new HIV infections can be reduced among married couples. The research project used the KAIS 2012 data, in which a sample of adults aged between 15 to 64 years was interviewed. The data was analyzed using R-software version 3.1.0, and report presented in form of tables and graphs.

**Keywords** KAIS, Married couples, Kenya, HIV new infections

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## 1. Introduction

Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS) is a spectrum of conditions caused by infection with human immunodeficiency virus – HIV [4]. HIV is transmitted by three main routes: sexual contact with infected persons, exposure to infected body fluids or tissues and from infected mother to child during pregnancy, delivery, or breastfeeding (known as vertical transmission) [5].

The Kenya HIV Response and Modes of Transmission Analysis of 2009 estimated that more than 44% of all new HIV infections in Kenya are occurring in stable or long-term relationships such as marriages [6]. According to the KAIS survey of 2007 of 3256 couples identified in the survey, 2748 (84.4%) had interview and blood testing data. Overall, 3.8% of the couples were concordantly infected with HIV, and in 5.8% one partner was infected, translating to 338,000 discordant couples in Kenya. In 83.6% of HIV-infected Kenyans living in married or cohabitating couples neither

partner knew their HIV status. Encouraging partner testing and condom use among persons with multiple partners and partners of unknown HIV status remains a challenge and a priority in Kenya [7].

Knowledge of HIV status among sexual partners is something of great concern as shown by the 2012 survey. From this it is evident that among sexually-active persons aged 15-24 years, 4% of women and 30% of men reported multiple sexual partners (2 or more partners) in the past 12 months; 57% of women and 38% of men reported that they were aware of their sex partners’ HIV status, and only 11% of women and 43% of men reported consistent condom use with partners of unknown or discordant HIV status [8].

HIV transmission in couples has been associated with ignorance of self or partner's HIV status [9]. Married or cohabitating couples are a population at high risk for HIV transmission and acquisition in Kenya. Discordant couples represent a particular high risk group. Also, partners in the acute phase of a new infection pose a high risk for onward transmission within the couple or if they have unprotected sex outside of the couple. Without intervention, 8–12% of HIV-infected adults living in couples will transmit HIV to their partners annually [10]. Currently, prevention messages often ignore couples, focusing on casual partnerships despite the frequent lack of knowledge within HIV-affected couples

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of the risk of transmission within their partnership or through prenatal transmission. Lack of knowledge may be increased by a lack of risk awareness within a stable relationship that results in low condom use [10]. Low condom use, or better explained as unprotected sex contributes a lot to the spread of new HIV infections and a wide range of other Sexually Transmitted Infections (STIs).

### Problem Statement

In about one out of ten married couples in Kenya, at least one partner is living with HIV. Among married people who are living with HIV, 45 percent have a partner who is uninfected. This is not unique to Kenya—in a study of five African countries, two thirds of HIV-infected couples are sero-discordant (one partner is HIV-negative, while the other is HIV-positive) [11]. In Rwanda and Zambia, it is estimated that over half of new infections occur within marriage or in cohabitating relationships, and just under half in Uganda [12]. While risk of transmission in discordant couples can be drastically reduced, this can only happen when partners are tested, disclose their results, and use condoms. However, the number of people who do so in many affected countries remains low, contributing to infection within marriage [11].

From the KAIS 2012 survey 5.6% of adults aged 15 to 64 years were infected with HIV. This corresponds to approximately 1,192,000 persons living with HIV infection in 2012. HIV prevalence increased with increasing age, with the highest prevalence among adults aged 45-54 years. Whereas the statistics from the 2007 KAIS survey indicated that prevalence was highest in the 25-34 year age category. The change of rate of HIV prevalence between the two age groups, i.e. 2007 high prevalence between age 25-34 and 2012 between 45-54, can be attributed to the increased HIV awareness and testing campaigns done between 2007 and 2012 targeting the youth who fall between ages 25-34. By being aware of what HIV/AIDS is and knowing their status, their perception about the epidemic has changed and they can now implement measures to protect against new HIV infections.

Adults, especially those aged between 25 to 54 years are in marriage institutions. The KAIS reports hence suggest high prevalence of HIV infections among couples. This can be majorly attributed to lack of awareness and ignorance about HIV infection among these adults. Most of the partners have not been tested for HIV and they are not aware of the HIV status of the other partner. Knowledge and/or implementation of preventive measures against new HIV infections is also minimal among couples in Kenya.

Effective HIV and AIDS education can help prevent new infections by providing people with information about HIV and how it is passed on, and in doing so equip individuals with the knowledge to protect themselves from becoming infected with the virus [13].

### Objectives of the Study

1. To find out the level of awareness on HIV/AIDS among couples in Kenya and their perception about the epidemic.

2. To find out whether one's knowledge of his/her HIV status and that of his/her partner impacts on the rate of spread of new HIV infections.
3. To find out the perception of HIV/AIDS among married couples in Kenya and how this affects the spread of new HIV infections in the country.

### Justification

Lack of knowledge of one's own and one's partner's HIV status remains an important obstacle to prevention [8]. Two-thirds of adults aged 15-64 years have not been tested for HIV. The major reason for not testing is attributed to low perception of risk, which should be addressed in HIV testing campaigns [14]. Hence this research paper will be very important in showing how lack of knowledge about HIV and the perception about the disease among married couples leads to spread of new HIV infection. From this we can get the best way on how to tackle this problem so as to reduce the spread of new infections.

### Limitation

This research paper will look at data collected from adults aged above 15 years who are living marriage institutions. This limits the research as there people, especially women, who are married off as early as 12 years. This is a common case in the interior parts of the country such as Pokot. Hence some important information from these groups of people may have not been captured.

## 2. Literature Review

The HIV/AIDS pandemic has emerged as one of the leading challenges to global public health and development. Sub-Saharan Africa, in particular, has become the epicentre of the pandemic, with over 29.4 million people currently living with the virus and more than 2.4 million people having succumbed to the disease [15].

Currently, 7.2 percent of Uganda's population is living with HIV. This amounts to an estimated 1.4 million people. HIV prevalence has been rising since its lowest rate of 6.4 percent in 2006. New infections are diagnosed in 150,000 people a year [16].

Sub-Saharan Africa has the highest prevalence and incidence of HIV infection worldwide, mostly attributable to heterosexual transmission [17]. In Africa, there is increasing evidence that a large proportion of new HIV infections occur in cohabitating couples [18], many of whom are unaware of both partners' sero-status [19]. In East Africa, 40–50% of married or cohabitating HIV-infected persons are in an HIV-discordant partnership [19]. In Kenya, Uganda and Malawi, over 80% of all unprotected sex acts by HIV-infected persons occur with spouses or cohabitating partners [19]. Consequently, a high proportion of incident HIV infections occur within married or cohabitating heterosexual couples, e.g. in Uganda 65% (2004–5) and in Zambia (2001–2) and Rwanda, an estimated 52–93% (2005) [19].

As early as the 1990s researchers recognized that marriage could be a risk factor in acquiring HIV infection. Since then studies have been conducted, mostly in India, Thailand and some African countries, showing contradictory findings in the relationship between marital status and HIV status. For example, one study from Zimbabwe associated HIV-positive status with being single. This study was conducted in antenatal clinics, where the population is not representative of the general population. However, another study conducted in four African cities (namely Cotonou, Yaounde, Kisumu and Ndola), and with representative samples, found a higher HIV prevalence among those who were currently or previously married than among those who were single [20].

From the National Aids Control Council report of 2014, 65% of new infections occurred in 9 of the 47 Counties in 2013 in Kenya. 21% of new adult HIV infections occurred among young women aged 15-24 in 2013. 1,410,000 adults (15+ years) were living with HIV in 2013 and it is estimated that 58% were women [21].

Comprehensive HIV and AIDS knowledge has increased over a 15 year period among urban young women from 9% in 1993 to 54% in 2008/09. Despite this improvement, a lot more needs to be done to attain the target of 90% threshold set by UNGASS (United Nations General Assembly). While both young women and men should be targeted with education on HIV prevention, concerted efforts should be directed at young women as many continue to get infected due to low levels of comprehensive HIV knowledge [22].

Though annual testing rates have increased, there remains a significant disparity between men and women. In 2008/9, 22.8 percent of men and 29.3 percent of women aged 15-49 reported having an HIV test in the previous 12 months [23]. In 2012, 35.8 percent of men had a HIV test in the previous year compared with 47.3 percent of women [24]. As a result, there has been a concerted effort to increase testing rates among Kenyan men with community-based testing programmes proving successful in particular [25]. As a result, in 2012, nearly half of all Kenyans living with HIV were aware of their status (47 percent) - up from 16 percent in 2007 [24]. However, an unacceptable number of people in Kenya still do not know their HIV status [26].

### 3. Methodology

#### Study Area and Design

The study was conducted in Kenya from October 2012 to February 2013. Adults of 15 years and above were interviewed. The study specified on couples living together or in marriage institutions. The study involved secondary analysis of data from the Kenya AIDS Indicator Survey (KAIS) conducted in Kenya in 2012. KAIS focuses on obtaining nationally representative estimates for HIV indicators which is critical for evaluating a country's response to the HIV epidemic.

This study will use descriptive analysis to draw conclusions from the KAIS 2012 data.

#### Variables Considered in the Study

The main outcome variable was the level of awareness about HIV/AIDS among married couples defined as ever hearing about an infection called HIV, the virus that causes AIDS. Study participants were asked if they have ever heard of HIV infection, if they have ever tested for HIV and if they knew the status of their partners. Those who answered to have tested for HIV were asked how many times they have gone for the test. Those who answered not to have ever gone for the test were also asked to state why.

Independent variables included age and marital status. Age minimum was 15 while maximum was 64 from the data.

#### Data Analysis

Data from KAIS 2012 was analysed using R-software version 3.1.0 to draw the charts and graphs to show the effect of HIV/AIDS awareness among married couples on the spread of new infections of the pandemic. Descriptive analysis was used to illustrate the risk of lack of knowledge about HIV/AIDS among married couples by examining the spread of the disease among those who knew about the disease, their status and that of their partners against those who didn't.

Cross tabs of one's knowledge about HIV/AIDS against their status was calculated and results of the frequencies shown below.

### 4. Results

**Table 1.** A crosstab of response of individuals to having taken a HIV test with their partners against the results received from the test

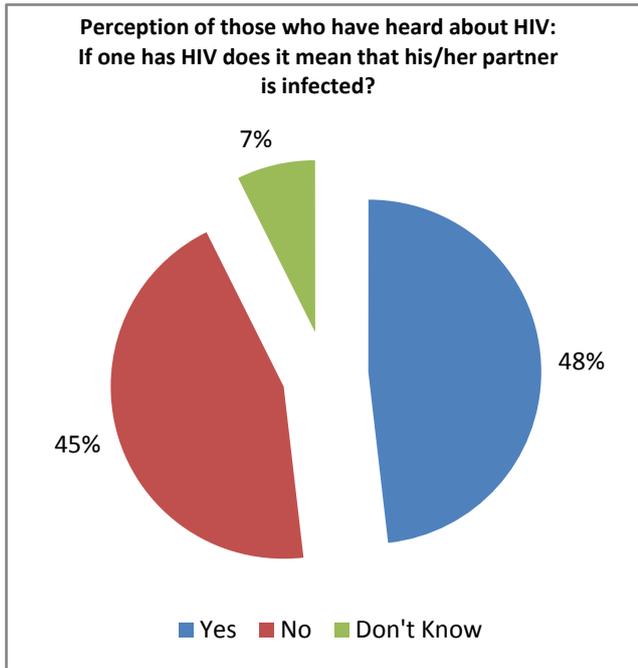
HIV RESULTS	Taken test with partner		
	YES	NO	NO PARTNER
POSITIVE	119	148	16
NEGATIVE	3083	5225	659
INDETERMINATE	3	7	1
DIDN'T RECEIVE RESULT	8	65	19
NO RESPONSE	0	5	0

From the table above there were 8653 couples, i.e. those who had partners. From this number of 8653, only 3213, i.e. 37.13% had taken an initiative to go with the partner to take a HIV test. To know your HIV status you must take a HIV test and to be sure of your partner's status you should take the test with him or her. From the table it is also evident that 0.25% still do not know of their HIV status and that of their partners as they did not receive the results even after taking the test.

To show the effect of knowledge about one's status and that of the partner on HIV prevalence, we compare the number of couples aware of their status and that of their partner's and are infected with HIV against those who are infected but are not aware of the status of their status or that of their partner. From the table of those found be HIV positive, most of them, 52.3%, had not taken the test with their partners, though they had partners, implying that they

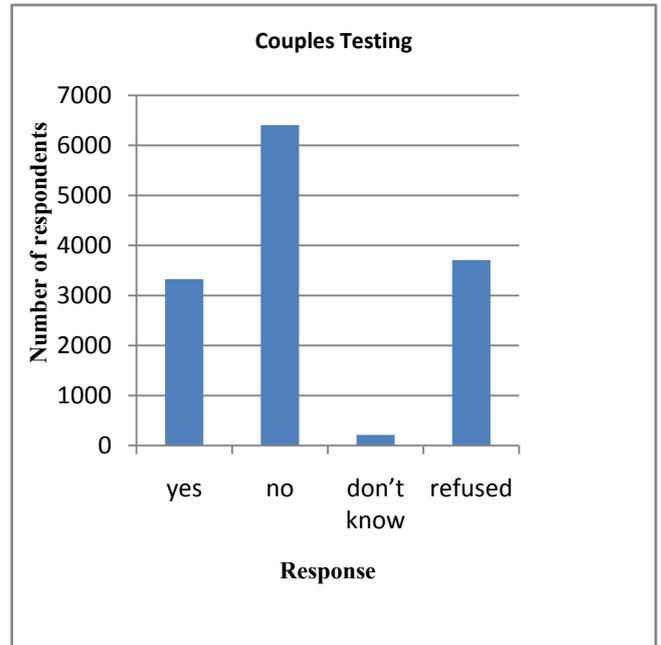
were not aware of their partner’s status.

From the study 99.6% of the adults aged 15 to 64 have heard about the virus called HIV which causes AIDS. Though, a high percentage has heard about the HIV virus, their perception about the spread of the virus, especially among partners, does not reflect a deep understanding of the disease. Those who have heard of the virus were asked, “If one of the partners has HIV, does it mean that the other partner also has HIV?” and the response was as shown below.



**Figure 1.** Chart showing the response of individuals when asked if they believe that if one has the HIV virus then automatically his/her partner is also infected

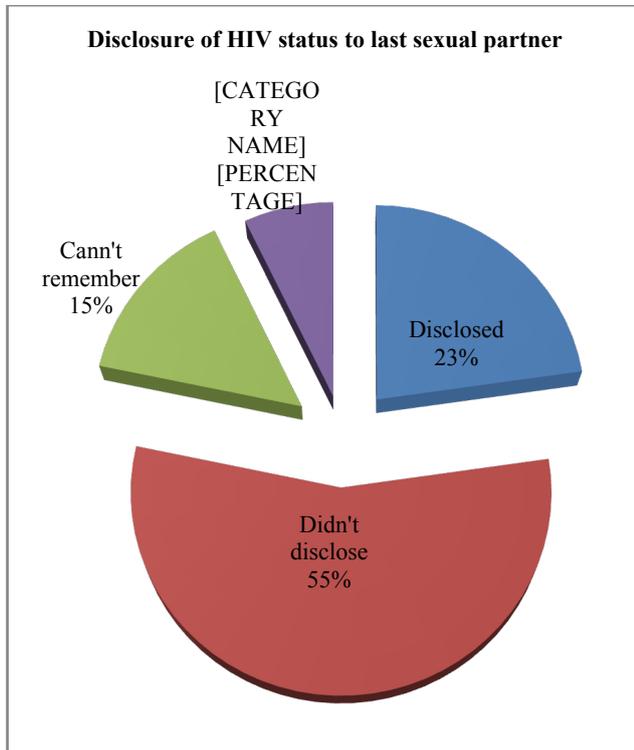
The chart above indicates that though people have heard of HIV they still do not know the facts about the virus. The belief that if one is HIV positive then the partner is also positive – as responded by 48% of those who know about the virus – is not a true belief as there are many discordant couples living together. Such beliefs have really stigmatized the discordant couples as they are judged wrongly. This has contributed to partners avoiding to go for HIV tests together or inquiring about the status of their partners before exposing his/her partner(s) or even himself/herself to the virus.



**Figure 2.** A bar graph showing the levels of HIV testing among couples. The graph shows the response of the couples when asked if they have ever tested for the HIV virus

Form these results it is evident that more couples have not tested for HIV, i.e. 6405 which is 46.9% of the total number interviewed. Hence many people who live with their partners or/and are in marriage life do not know of their status or/and that of their partners. Worse still, the number who refused to answer whether they have tested as a couple for HIV is also higher (i.e. 3708 which represents 27.2%) than those who have gone for the test, who are only 3326 (24.4%). This speaks about their perception about the virus. This unwillingness to disclose information about couples testing shows how adults are still not free to share about HIV/AIDS.

From the survey we also found that many of the adults who are sexually active do not disclose their HIV status to their sexual partners. 55% of those asked if they did disclose their HIV status to their last sexual partners answered “No.” The results are as shown in the following chart:



**Figure 3.** Chart showing individuals' willingness to disclose their HIV status to their sexual partners

This result implies that many of the adults put themselves and/or their partners at risk when they do not disclose their HIV status to their partners. This also shows that these adults are not aware of the risk of acquiring the HIV virus when they have sex with people who they are not aware of their status. Some are also still ignorant of the disease.

Most of the sexual partners have never gone for an HIV test together and received the results. This is as indicated from the results in the table below:

**Table 2.** Table showing the number and percentage of respondents who had ever taken a HIV test with their partners and got the results together. It also shows those who had never done so and a fraction who could not remember doing such a thing

Taken Test With Partner and Got Results Together		
Response	Frequency	Percentage
Yes	3347	30.78
No	7503	69.01
Don't Know	23	0.21

Since many do not go for the test together, i.e. 69%, and also many do not disclose their status to their partners, as displayed earlier, then it means that most couples stay with their partners and have sexual relationships without knowing the status of their partners. This ignorance by such couples is caused by lack of awareness of the risk involved in having sexual relationships with partners who you are not aware of their HIV status.

Couples responses to using contraceptives is shown by the table below.

**Table 3.** A crosstab of the response of the respondents on taking HIV test with their partners and receiving the results together against use of contraceptives (condom) each time they had sexual intercourse

Taken HIV Test With Partner Got Results	Condom Used Every Time Sexual Intercourse Last 12 Months			Total
	Yes	No	Don't Know	
Yes	424	214	0	638
No	1060	362	4	1426
Don't Know	5	2	0	7
<b>Total</b>	1489	578	5	2071

Though many use the contraceptives, 71.9%, there are still some 29.9% who do not use these contraceptives. Worse still, the highest number of those who do not use contraceptives do not know the status of their partner i.e. 362 persons which reflects 62.6% of those who do not know the status of their partners and also do not use contraceptives.

## 5. Conclusions

Many couples are not aware of their HIV status or that of their partners. Some have never even heard of the virus called HIV nor the disease AIDS. Worse are those who are not even free to share about HIV/AIDS or disclose their HIV status to anyone not even their sexual partners. Some of the couples in Kenya still believe in false statements about HIV spread e.g. those who believe that if one is infected then his/her partner is also infected. These shows how many couples in Kenya still do not understand fully what HIV/AIDS is, how it spreads and how to control new infection of the virus.

Couples are also at high risk of acquiring the virus as they do not know their HIV status or that of their partners but they still engage in unprotected sex.

HIV/AIDS awareness and testing campaigns need to be emphasized more on the married couples or those who live together with their sexual partners, since most of the people in this bracket still exhibit lack of knowledge and negative perception about the HIV virus.

## 6. Recommendations

1. The study recommends that since most of the couples are not aware of their HIV status or that of their partners', the HIV self-test kit, which is a method where people can test for HIV in private or at home, should be made available to these couples as it is more convenient to use for testing especially to those who fear going to the VCT centres.
2. The government should also increase HIV/AIDS awareness campaigns among the adults, as it has been done with the youth especially those who are in learning institutions. This will help increase couples knowledge about HIV and how to live with it avoiding

new infections.

3. More revenue and research on HIV/AIDS prevalence should concentrate on the married couples also those partners who live together as married since they are at a great risk of acquiring the virus.
4. Mass media should be used more to create awareness about HIV/AIDS as this will reach more the couples who are not in learning institutions.

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