
**Are HIV Unaware Persons the Hidden Population at High Risk of
HIV Infection or Re-infection in Uganda**

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ABSTRACT

Introduction

There has been a prejudiced view that HIV infection creates a state of desperation and a feeling of revenge that latently drives persons with HIV/AIDS (PHAs) into risky sexual and reproductive behaviors. This study examined child bearing, new sexual partnerships, disclosure of HIV status prior to coitus, and negotiations on condom use among HIV infected, uninfected and unaware persons as the basis for ascertaining the group at high risk of HIV infection/re-infection.

Methods

HIV infected (86 females and 58 males), HIV uninfected (25 females and 21 males) and HIV unaware (59 males and 40 females) persons were drawn from one parish of Kampala, Iganga, Soroti, Lira, Masaka, Mbarara and Kabale districts. A pre-tested questionnaire which yielded a content validity index (CVI) of .79 was used to measure child bearing, new sexual partnerships, disclosure of HIV status prior to coitus, negotiations on condom use for the three groups. Focus group discussions were also carried out with each group to establish the etiological basis of these behaviors.

Results

HIV infected persons (86%) reported higher levels of child bearing compared to the uninfected (66%) and unaware (57%) persons. Of the HIV infected persons who learned of their HIV status through a test, about 61% went a head to bear children. Also, more HIV infected (44%) and uninfected persons (44%) tend to disclose to partners their HIV status prior to coitus than the HIV unaware persons (35%). However, HIV unaware and uninfected persons reported higher levels of initiation and coitus with new partners during the past year from the time this study was undertaken than the HIV infected persons. Also, HIV unaware (77%) and uninfected persons (77%) reported higher levels of negotiations on the form of coitus (condom use) than the HIV infected (69%). This is especially so because it is easier to declare the HIV status if the test results are negative than positive., Males specifically surfaced as the group more complacent to risky sexual and reproductive behaviors, implying that they are more likely to spread HIV than females.

Conclusion

Childbearing and non-negotiation with partners on condom use turned out as the factors that increase HIV re-infection among PHAs. However, initiation of new sexual relationships and despondency about disclosing their HIV status to partners prior to coitus seem to be the critical risk factors for HIV transmission among the HIV unaware persons. HIV unaware persons feel that if they disclosed their sero-status their partners would be scared and possibly stop the relationship on the suspicion that they have HIV/AIDS. False confidence arising out of the cognition and imagination that the problem of HIV/AIDS is not in vicinity motivates HIV unaware persons to think positively about sexual situations that, in effect, increase the risk of HIV infection. While more research merits in this area, broaden advocacy for and the coverage of all HIV/AIDS preventive campaigns to not only target the HIV infected, but also uninfected and unaware persons.

Introduction

Since the outbreak of the Acquired Immuno-Deficiency Syndrome (AIDS) epidemic, there has been enormous increase in the number of persons infected with HIV in Uganda, and in less than a decade, it has caused huge increases in death rates, particularly among mature adolescents and young adults (UNAIDS, 1999).

Sentinel surveillance data indicate that of the 54,712 reported AIDS cases, 50,757 (93%) were adolescents and young adults aged 12 years and above, and young women specifically account for over half of these AIDS cases. Although these data represent a small fraction of the AIDS cases in Uganda, they clearly show that HIV infection cases begin to increase in the age group 15 – 19 and peak in the age range 20 – 40, thus eliciting the sub population at high risk of infection. The number of girls and young women with HIV in each of these age groups, at present, is more than one to five times than that of boys and young men (HIV/STD Surveillance Report, 1999).

A review of literature reveals that HIV transmission through sharing non-sterile skin-piercing instruments with an HIV infected person and use of infected blood and products were virtually eliminated as of 1991 (Sekatawa, Kiirya, Odongkara & Adiniyi, 2000). However, heterosexual contact with an HIV infected partner has maintained as a major route of HIV infection in Uganda (HIV/STD Surveillance Report, 1999). HIV infected persons, including those who often obtain AIDS care as well as counseling and material support have continued to engage in a range of risky behaviors¹ including reproduction thereby contributing to the pediatric AIDS² (Nasaba & Were, 1997). In addition, stigmatization, denial, suspicion and isolation of persons with HIV/AIDS became a popular norm particularly in the communities that felt more threatened by the AIDS epidemic (TASO, 1994).

These phenomenon have caused an impression that HIV infection creates a state of desperation and a feeling of revenge that latently drives persons with HIV/AIDS (PHAs) into unsafe sexual and reproductive behaviors, thus further spreading the virus (TASO, 1994).

Therefore, intensive and extensive advocacy for positive-living³ especially reduction of sexual partners, regulation of coitus, negotiation for safer sex (protected), discontinuation of reproduction, and disclosure of the correct HIV status to partners and family members has been undertaken in Uganda with a wide range of AIDS care organization, PHA associations and support groups taking the lead in these campaigns (UNICEF, 1997; TASO, 1994). This is because these behaviors not only prevent further acquisition of unwanted pregnancies and sexually transmitted infections but also enhance the quality of life and life span of HIV infected persons, their immediate families and the community as whole

The point of departure for this paper is that although HIV infected persons have been construed as the sub-population more likely to engage in potentially risky sexual and reproductive behaviors such as unprotected sex and child bearing, they aren't if compared to persons unaware of their HIV status. We verified the sub-population more prone to HIV-risk behaviors by examining new sexual partnerships, coitus with new partners, disclosure to partner of the correct HIV status and negotiation on the form of coitus (protected or unprotected) in a relationship among HIV infected, uninfected and unaware persons⁴. Attempt was also made to examine the etiological basis of the behaviors more common in each of these sub-populations. The purpose of the study was to ascertain the risky sexual and reproductive behaviors peculiar to specific sub-populations so as to guide policy-makers and implementers on the behaviors to address when undertaking positive-living campaigns.

Method

Sample

This study employed a cross-sectional survey research design and was conducted in the districts of Kampala, Iganga, Soroti, Lira, Masaka, Mbarara and Kabale in Uganda. One of the reasons for this choice is that sentinel surveillance data (1990 – 1999) show that these districts had high HIV prevalence rates (ranging between 10 – 15%) and pediatric AIDS. In addition, each district had HIV counseling and testing centers and some already organized PHA associations and support groups to draw a sample of HIV infected and uninfected persons.

The final sample consisted of 144 HIV infected (86 females and 58 males), 46 HIV uninfected (25 females and 21 males) and 99 HIV unaware (59 males and 40 females) persons. Of these, the proportion of the married/cohabiting was 39%, single was 27% and widowed/separated was 34%. In terms of education status, 45% ever studied up to primary, 44% studied up to post-primary and 12% studied up to tertiary/university levels.

Sample selection

Selection of the HIV uninfected sample was done with the assistance of counselors based at the AIDS care/HIV testing centers. A coded list for individuals who were expected to collect their final HIV test results was obtained before the “service day”⁵. The code numbers or mother-names with HIV reactive results were separated from non-reactive ones and re-arranged in descending order. The individuals who came to obtain AIDS care and final HIV test results were invited in a separate room after they had received their results, briefed about the study, and requested to participate without disclosing each other’s HIV status⁶. Nearly all of them consented and were retained in the room. Every second code number/mother-name on the non-reactive list was selected until the required sample per district was obtained.

The HIV infected sample was selected with the assistance of care-providers based at the AIDS care/support centers. Persons with HIV/AIDS who had obtained the services were invited in a room, briefed about the study and requested to participate. Those who consented were divided into female and male groups and then randomly hand-picked until a reasonable sample of both sex was obtained. Finally, selection of the HIV unaware sample was randomly done with the assistance of local council leaders and community-based AIDS counselors on successive days. The sampled area was located far from the AIDS care and counseling/support centers.

Instruments

A purpose-driven schedule was developed to assess HIV infected, uninfected and unaware person's preventive behavior concerning HIV/AIDS. The schedule comprised of questions related to sexual partnerships and coitus, negotiation on form of sex (protected or unprotected) in a relationship, disclosure of correct HIV status, reproduction and other aspects. As part of the validation process, each question in the original schedule was rated by three independent experts in psychology and population studies. Each question was rated either as relevant (R), quite relevant (QR) and somewhat relevant (SWR) or not relevant (NR). The ratings were weighted four, three, two and one respectively. All questions with a weight four or three were given a score of one, while those with the weight two and one were scored zero because questions in the former are more relevant compared to the latter.

Out of the 95 questions in the original schedule, 60 were rated as relevant or somewhat relevant and scored one. The first computation of these ratings gave a content validity index (CVI) of .63, meaning a moderate content validity. By interpretation, the original schedule did not adequately measure the constructs it was intended for. Therefore, questions that were rated as somewhat relevant and not relevant in the original schedule were revised and re-rated by the same

experts. The revision raised the number of items rated as relevant or somewhat relevant to 75. The second computation gave a CVI of .79, implying a very high content validity. By interpretation, the revised schedule to a very large extent measured the constructs it was designed for.

To further cross-check face-validity, wording and sequencing of questions, the revised schedule was reviewed by a team of research assistants during the training session. Questions that were poorly worded and arranged were re-written and re-arranged. This instrument was then pilot-tested to a sample size of 30 consisting of HIV infected, uninfected and unaware persons drawn from Kakiri parish in Mpigi district. The revision after pilot-test further strengthened the internal consistency and reliability of the schedule.

Another instrument was developed to assess the etiological basis of sexual partnerships and coitus, negotiation on form of sex (protected or unprotected) in a relationship, disclosure of correct HIV status and reproduction among HIV infected, uninfected and unaware sub-populations. This instrument was also pre-tested two groups. One group session comprised of six HIV infected discussants and another six HIV unaware discussants. The biased and offensive questions at pre-testing were eliminated. The revised instrument was finally used to guide the group discussions for the HIV infected, uninfected and unaware persons.

Procedure

The final schedule was administered by trained research assistants to a sample of 289 subjects, which comprised of HIV infected, uninfected and unaware persons. Prior to administration research assistants read the instructions from pre-printed schedule and the assured subjects of treating their responses in confidence throughout the study. Each question was read out in local language (Luganda, Lusoga, Atesot, Luo and Lunyankore-Lukiga) and filled in English when seated face-to-face. Male research assistants administered to male respondents and

female research assistants administered to females. These strategies minimized biases and guesswork in responses.

Meanwhile, focus group discussions sessions for the different targeted groups were arranged with the assistance local council leaders and community counseling aides. These were approached and requested to propose names of HIV infected, uninfected and unaware persons with each of them comprised of males and females from whom six discussants were randomly selected. Those selected were invited, briefed and requested to participate in the group discussions. Discussants were then seated in a semi-circular structure facing the moderator and note-taker. After the moderator had introduced the note-taker, each discussant introduced him/herself by name while the note-taker assigned a numerical code (01 – 06) to each of them. Prior to each discussion session, permission to use a recorder was sought and placed before discussants who consented.

The moderator initiated the discussion by asking questions relevant to the themes, and probed discussants by name so as to bring them closer. Domination of discussions by a few was limited by requesting for contributions from each discussant on every discussion issue. The note-taker also sought clarification for every question and answer not understood to ensure accuracy of the recorded information. The discussion notes were then written according to codes assigned to each discussant and summarized according to the discussions themes at the end of each session.

Analyses

The responses on the schedule were then coded, checked, entered and analyzed using the SPSS computer package. Cross-tabulations were run to establish the percentage distribution of responses on sexual partnerships and coitus, disclosure of correct HIV status, negotiations on the form of coitus (condom use), child bearing and other aspects. A chi-square statistical analysis was then performed to establish whether the results did not occur by chance.

Content analysis of data for each FGD session was done thematically, and the summary analyses for each group session were harmonized teasing out the common cultural, socioeconomic, biomedical and psychological factors that are of etiologic significance to sexual and reproductive behaviors.

Results

Reproduction (child bearing)

HIV infected persons (86%) reported significantly higher levels of child bearing compared to the uninfected (66%) and unaware (57%) persons ($\chi^2(2) = 87.6, P < 0.01$), and the females specifically exhibited higher levels of child bearing than males for each of these groups.

Table 1: Child bearing among HIV infected, uninfected and unaware persons

Characteristic	HIV infected		HIV uninfected		HIV unaware		P
	n	(%)	n	(%)	n	(%)	
Ever had child (Both sex)	120	(86)	29	(66)	54	(57)	< 0.01
Never had child (Both sex)	20	(14)	15	(34)	45	(43)	
Total	140	(100)	44	(100)	95	(100)	
Ever had child (males)	41	(34)	13	(45)	27	(50)	< 0.01
Ever had child (females)	79	(66)	16	(55)	27	(50)	
Total	120	(100)	29	(100)	54	(100)	
Had child after testing positive (both)	19	(61)					> 0.01
No child after testing positive (both)	12	(39)					
Total	31	(100)					
Had child after testing HIV positive (male)	10	(53)					> 0.01
Had child after testing HIV positive (fem.)	9	(47)					
Total	19	(100)					
No child after testing HIV positive (male)	5	(42)					> 0.01
No child after testing HIV positive (fem.)	7	(58)					
Total	12	(100)					

Note: The number of HIV infected persons who reported having bore a child after infection does not add up to 120 because most of them learned about their HIV status through clinical diagnosis i.e. examination by an AIDS specialist from a reputable AIDS care and support service center

Table 1 further shows that of the HIV infected persons who learned of their HIV status through an HIV test, about 61% went ahead to bear children. In addition,

whereas this behavior is most prevalent among the males (53%) than females (47%), a chi-square test indicated that there is no significant association between reproduction after testing HIV positive and sex ($\chi (1) = 3.99, P > 0.01$).

New sexual partners

Results show that more HIV uninfected (80%) and unaware (76%) persons reported new sexual partners during the past one year than the HIV infected persons (45%), implying that this behavior is significantly higher among the HIV uninfected and unaware persons than the HIV infected ($\chi (2) = 12.6, P < 0.01$). In addition, with the exception of the HIV uninfected sample, this behavior is more common among males.

Table 2: Reported new sexual partnerships and coitus in the past one year

Characteristic	HIV infected		HIV uninfected		HIV unaware		P
	n	(%)	n	(%)	n	(%)	
Ever had new partner (both sex)	64	(45)	36	(80)	74	(76)	< 0.01
Never had new partner (both sex)	77	(55)	9	(20)	23	(24)	
Total	141	(100)	45	(100)	97	(100)	
Ever had new partner (males)	43	(67)	13	(43)	49	(66)	> 0.01
Ever had new partner (females)	21	(33)	17	(57)	25	(34)	
Total	64	(100)	30	(100)	74	(100)	
Never had new partner (males)	13	(17)	6	(67)	10	(66)	> 0.01
Never had new partner (females)	64	(83)	3	(33)	13	(34)	
Total	77	(100)	9	(100)	23	(100)	
Ever had coitus with new partner (both)	59	(42)	30	(68)	72	(74)	
Never had coitus with new partner (both)	83	(58)	14	(32)	25	(26)	
Total	142	(100)	44	(100)	97	(100)	
Ever had coitus with new partner (males)	38	(64)	13	(43)	47	(65)	> 0.01
Ever had coitus with new partner (females)	21	(36)	17	(57)	25	(35)	
Total	59	(100)	30	(100)	72	(100)	

Table 2 further shows that coitus with new partners in the past year was more common among the HIV unaware (74%) persons than the HIV uninfected (68%) and HIV infected (42%). Consistent with previous results, males reported higher levels of this behavior.

Disclosure of HIV status prior coitus

Table 3: Disclosure of HIV status to partner prior coitus

Characteristic	HIV infected		HIV uninfected		HIV unaware		P
	n	(%)	n	(%)	n	(%)	
Ever sought for partner's status (Both sex)	48	(38)	17	(41)	40	(42)	> 0.01
Never sought for partner's status (Both sex)	77	(62)	25	(59)	55	(58)	
Total	125	(100)	42	(100)	95	(100)	
Ever sought to know partner's status (male)	28	(58)	6	(35)	24	(60)	> 0.01
Ever sought to know partner's status (female)	20	(42)	11	(65)	16	(40)	
Total	48	(100)	17	(100)	40	(100)	
Ever disclosed to partner status (Both sex)	52	(44)	20	(44)	30	(35)	> 0.01
Never disclosed to partner status (Both sex)	67	(56)	21	(56)	56	(65)	
Total	119	(100)	45	(100)	86	(100)	
Ever disclosed to partner status (males)	30	(58)	8	(40)	18	(63)	> 0.01
Ever disclosed to partner status (females)	22	(42)	12	(60)	12	(37)	
Total	52	(100)	20	(100)	30	(100)	

Table 3 shows that whereas fewer HIV infected persons (38%) ever requested to know the HIV status of their partners than uninfected (41%) and unaware persons (42%), more HIV infected and uninfected (44%) ever disclosed to the partners their correct HIV status prior to coitus compared to the HIV unaware persons (35%). Results further show that whereas males were more curious about their partner's HIV status and keen to disclose their HIV status to partners prior coitus, a chi-square test indicated that there is no significant association between these behaviors and the subject's sex ($\chi^2(2) = 2.28; 1.97, P > 0.01$).

Negotiations on coital form

Table 4: Negotiation with partner on form of coitus

Characteristic	HIV infected		HIV uninfected		HIV unaware		P
	n	(%)	n	(%)	n	(%)	
Negotiate with partner (Both sex)	81	(69)	34	(77)	66	(73)	< 0.01
Never negotiate with partner (Both sex)	36	(31)	10	(23)	25	(27)	
Total	117	(100)	44	(100)	91	(100)	
Negotiate with partner (males)	42	(52)	17	(50)	41	(62)	< 0.01
Negotiate with partner (females)	39	(48)	17	(50)	25	(38)	
Total	81	(100)	34	(100)	66	(100)	

Table 4 shows that negotiations for condom use is more common among the HIV

uninfected (77%) than the HIV unaware (73%) and infected persons (69%), and the males in each of these samples specifically exhibited significantly higher levels of negotiations for condom use than females.

Discussion

The current study investigated prevalence of reproduction (child bearing), new sexual partner disclosure of HIV status prior coitus, and negotiations on the forms of coitus for the HIV infected, uninfected and unaware as the basis for ascertaining the hidden sub-population at high risk of HIV transmission in Uganda. This is because since the advent of the HIV/AIDS epidemic in Uganda, persons with HIV/AIDS have been construed as “victims” and a threat to social stability and continuation of humanity. These prejudices owe their origin to individual’s cognition that HIV infection creates a state of desperation and feelings of hopelessness, carelessness, recklessness and revenge not only among persons whose partner or family member died due to AIDS, but also social and coital networks closely linked to persons living with HIV/AIDS.

Reproduction (child bearing)

In spite of the widely held view that HIV infection creates a state of desperation and feeling of revenge that latently drive PHAs into unsafe sexual practices, results show that HIV infection creates both positive and negative behavioral outcomes for the PHAs and the HIV uninfected or unaware persons. The survey revealed that HIV infected persons encountered significantly higher levels of child bearing than other sub-populations, thus confirming that child bearing actually increases the possibility of HIV re-infection.

Of the HIV infected persons who reported child bearing, a relatively large proportion (61%) went ahead to bear children even after learning that they had the virus that causes AIDS, with the males specifically accounting for the group that reported higher levels of this behavior. Focus group discussion data revealed that

the fear of embarrassment, separation/divorce, being labeled infertile or cursed, and society ostracism and ridicule of those who die without a child often drive persons particularly those who are married couples into reproduction even after learning that they contracted HIV.

One 35-year-old woman living with HIV/AIDS when asked about why she continues to bear children noted that “It is absurd to die without a child. It is better to leave behind someone of my lineage so that I do not pass away in disgrace”. She further noted that “If I had not produced children, my husband would have gotten other women and chased me after learning that I had HIV ... I would rather continue bearing children so that even if I die, I do not completely disappear in people’s minds”. Another 34-year-old man with HIV/AIDS noted that “I don’t have a child. If I died without one, I will be buried like a mouse. What will I have left behind that will be announced during my funeral if I don’t bear a child? He asked”.

Clearly, persons who acquire HIV before bearing children often engage in reproduction partly to avoid conflicts with the partner, and being labeled barren or impotent. In addition, cultural values and constructions attached to child bearing and the belittling rituals performed during funerals of persons who died without bearing a child such as removing the dead body from the house through an improvised outlet on the wall latently encourage some persons to reproduce after HIV infection.

The other factor that latently drives persons into reproduction even after HIV infection, is that the girl-child does not culturally become heir (inherit the father’s property) and competition with co-wives to bear children. Discussion data revealed that a number of women especially those in polygamous unions often compete to bear baby-boys in anticipation that one of theirs would become the heir, thus enabling them have a reasonable share of the property upon the death of the husband. Besides being a barrier to consistent contraceptive use and family

planning, this practice often compels persons with HIV/AIDS who have not bore a boy-child to strive to get one in spite of the dangers associated with bearing children after acquiring HIV.

This concurs with Marie de Bryun, Jackson, Wijermars, Knight and Barkvens (1995) who found that HIV infected women would hardly adopt low risk reproductive behaviors without contradicting with their set roles in society. Women in marriage are required to bear and rear children, procreate and access unprotected or protected sex to a husband in case of need. As such married women, irrespective of their HIV status would most probably not challenge their male partners' sexual needs and society expectations of a woman, i.e. child bearing.

In addition, the possibility of bearing an HIV negative child when the parents are HIV positive, and access to drugs that prevent mother to child transmission of HIV is another reason for the significantly higher levels of child bearing among PHAs. Discussion data revealed that PHAs often access information regarding the possibility of bearing an HIV negative baby from service providers and peers/friends, which in turn encourages experimentation. One 29-year old female PHA, indeed noted that " I was told by a friend that it is possible to bear a child who is not HIV infected. My husband and I also wanted to have at least a child ... since we didn't have any we therefore decided to get one".

Clearly, PHAs and other community members in need of children not only merely think positively about the possibility of bearing HIV negative babies, but actually do so with the view that they would bear HIV negative children. In view of this, it seems unlikely that persons with HIV/AIDS would disregard peer and family pressure to bear a child.

Anecdotal data further indicates that some HIV infected women have of recent accessed drugs that prevent mother to child transmission of HIV through their

relatives abroad and the HIV drug access initiative. Given that this study did not control for access to drugs for prevention of MTCT, some of the PHAs involved in this study may have bore children after learning that they had contracted HIV because they accessed these drugs. Therefore, access to HIV drugs appears to have contributed to the large proportion of women who continued with reproduction even after learning they are HIV infected.

Furthermore, some women with HIV/AIDS whose husbands are dead tend to re-marry or have sex with casual partners with the aim of becoming pregnant and bearing children so that she is able to access financial assistance not only for her welfare but also for children she gotten with the previous partner. One 20-year-old woman indeed noted that “I have children whose father died. I could neither sustain them nor build myself a house to live in. So I decided to remarry to a wealthy man with whom I got another child. My new husband always gives me financial and material assistance to care for the child. I have used part of this assistance to pay fees for the other children and build myself a house”.

This illustrates that socioeconomic reasons such as death of a bread winner and lack of resources to cater for the orphans social welfare such as health, shelter and education, also drive a number of PHAs into coitus with casual partners, re-marriage and bearing children, thus further predisposing them to HIV re-infection.

Therefore, if child bearing is to be used as the measure for HIV risk, then persons living with HIV/AIDS would qualify as the hidden sub-population at high risk of HIV transmission. However, examination of other sexual behaviors such as new partners, coitus with new partners and inadequate negotiation with the partner on the form of coitus suggest otherwise.

New sexual partners

Results showed that new partners in the past one year was significantly higher among the HIV uninfected and unaware persons than the infected persons, and

males were specifically more prone to this behavior. This clearly shows that despondency towards new sexual partnerships is high among the HIV infected persons, implying that once a person is known to have HIV, potential partners are usually scared-off.

Discussion data revealed that some PHAs, particularly the females encounter diminished interest for sex and often avoid new sexual relationships so as to forestall its probable negative outcomes i.e. HIV re-infection, STDs, unwanted pregnancies and a reduced life span. This suggests that females are more aware of the negative outcomes of new sexual relationships. Also, interest for sex tends to diminish due worries about eminent death. One 37-year-old woman living with HIV/AIDS when asked if she had sexual relationships with new partners in the past year responded that: “Ever since my husband died two years ago, I have not had any sexual partner. I have no interest in sex anymore. I feel normal and comfortable ... I am more preoccupied with caring for my children”.

These citations suggest that whereas avoiding ‘new sexual relationships’ after acquiring HIV are some of the widely advocated positive-living measures, some PHAs most especially the males tend to encounter much difficulty in adopting these behaviors. This seems to be closely linked to the fact that whereas men usually need the care, love and company of a woman as they become of age, women are often more pre-occupied with caring for their children, implying that men would often continue getting new partners in an effort to secure the desired care, love, comfort and companionship.

On the other hand, discussion data revealed that the higher levels of complacency on new sexual relationships particularly among the HIV uninfected and unaware persons is often driven by the false confidence and imagination that they and their partners do not have the virus. This cognition tends to influence HIV uninfected and unaware persons to positively perceive and experiment on situations that are potentially risky in terms of HIV transmission such as having unprotected sex and

pregnancies with new partners whose HIV status is unknown. This indeed concurs with Irwin & Millstein (1986) who found that false confidence or imaginations often drive persons into thinking out positively about potentially risky behaviors such as continued reproduction even after contracting HIV and rationalization like “my partner has had coitus but has not gotten pregnant or any sexually transmitted disease”, thus increasing the possibility of further coitus with him/her and HIV transmission.

Coitus with new partners

Likewise, results showed that coitus with new partners in the past year was more common among HIV unaware persons than the HIV infected and HIV uninfected, thus suggesting that being aware of your HIV status (negative or positive) to a certain extent creates a despondent attitude towards new sexual relationships.

From the results, it seems not being aware of the HIV status creates some kind of false confidence or illusion that HIV/AIDS is not in vicinity which in turn causes a despondent attitude towards sex abstinence and other safer behaviors. In addition, lack of experience of how it feels to have HIV, suspect that you are HIV infected and the anxiety one goes through before HIV test results are declared, tends to influence unaware persons to dare sex with new partners whose HIV status is unknown.

Misconception about abstinence also surfaced as another factor of etiologic significance for experimenting coitus with new partners, most especially among HIV unaware persons. Discussion data revealed that HIV unaware persons have myths and misconceptions that abstinence causes pain in the genital areas and impotency. A 35-year-old woman unaware of her HIV status and staying alone when asked about sex avoidance responded that: “Its very difficult to do without sex. Whenever I try abstinence, I feel uneasy, and pain in the stomach and genital areas. I also encounter menstruation more than once. The more I attempt to

abstain, the more I develop the desire for sex ... I just cannot abstain from sex". Another 40-year-old man living with HIV/AIDS responded, "After the death of my wife, I was tested and found HIV infected. I resolved not to have any other sexual partner. But with time life proved difficult without a partner. I felt frightened and often failed to sleep at night . I decided to get another partner with whom I usually have sex ... life is better now".

Clearly, fear of experiencing pain in the genital areas and impotency are some of the myths and misconceptions about abstinence that drive persons, most especially those who are young and unaware of their sero-status into coital exploration.

Disclosure of correct HIV status prior coitus

Results indicated that seeking for the correct HIV status of the partner and disclosing to the partners of the correct HIV status prior to coitus are uncommon behaviors (less than 45% prevalence rate) among the HIV infected, uninfected and unaware persons. However, curiosity about the partner's HIV status and keenness in disclosing to partners the HIV status prior coitus is least prevalent among the HIV unaware persons most especially the females.

HIV uninfected persons seem more complacent to know their partner's HIV status and disclose their own HIV status to them. This is partly because it is usually easier to declare ones HIV status if the test results are non-reactive (negative) than when reactive (positive). Furthermore, discussion data revealed that a number of HIV uninfected persons disclose their HIV status prior coitus mainly to build partner confidence and trust with the partner, and as a preventive measure against initiating coitus and relationships with persons whose HIV status is positive or unknown.

One 33-year-old HIV uninfected man, when asked if he ever disclosed his HIV status to the partner prior coitus indeed responded that “ I always do so. If I don’t, I may end up having coitus with a person who has HIV/AIDS. As a result of disclosing my status, most persons I have had as sexual partners consider me faithful and responsible”.

Thus, non-reactive HIV test results not only contribute to self-confidence of the past sexual behavior and raise more self-consciousness about the HIV virus, but also motivate individuals into adopting extra precautions when initiating new sexual relationships.

The survey further revealed that even persons living with HIV/AIDS tend to disclose their HIV status prior coitus more than the HIV unaware persons, implying that contrarily to the prejudiced view that HIV infection creates a state of desperation and feeling of revenge, HIV infected persons in this study seem more mindful than the HIV unaware persons about the need to notify others of their HIV status and keen to know the partners status prior coitus. It is plausible that PHAs often do so to guard against HIV re-infection. Therefore, it seems that unawareness of the HIV status not only creates a cognition and imagination that the virus is not in vicinity, but also false confidence which often results into careless and risk-taking behaviors. In which case, some HIV unaware persons may think that asking for the HIV status of the partner or disclosing to partner the HIV status prior coitus could instead scare-off potential sexual partners.

Negotiations for condom use

Results indicated that negotiations on condom use is most prevalent among the HIV uninfected (73%) and unaware persons (73%) than the HIV infected (69%), implying that unilateral decisions on whether to have protected or unprotected coitus with the partner is more common among the HIV infected persons. This is especially so because a number of HIV infected persons involved in this study are

often counseled to insist on condom use as a preventive measure for HIV re-infection and unwanted pregnancies. A number of PHAs, particularly those who are old and already have children often take the advice seriously and insist on condom use, while others, particularly those who have never had a child usually object to condom use due to the desire to bear a child before they die.

One 16-year-old girl with HIV when asked if she would ever negotiate with the partner on condom use responded that “I would only use a condom when I deem it necessary. As of now, I feel bad that I don’t have a child ... I have to bear one with the man I suspect to have infected me with HIV so that I get a child before I die”. This citation suggests that PHAs, most especially those with a high desire for child bearing would most probably not seriously consider negotiating with the partner on condom use.

A further analysis indicated that negotiation for condom use is more common among males than females in the three samples, implying that condom use among women is to a greater extent influenced by the superior male power which exists in our gender stratified society. This gender issue begins from childhood through the socialization process when different social and reproductive roles are expected to be done by boys and girls. For example there is a society construction and perception in Uganda that boys are the ones to initiate a sexual relationship and even decide when to use the condom. These constructions and perceptions allow males to coerce females, especially the married ones, into dependency on men in decision making regarding various reproductive health choices, including condom use and child bearing. This concurs with Young (1984) who found that women’s decision making over major issues in their social and reproductive life is limited (by husbands) by virtue of their marriages.

Also, the fact that condoms are constructed within a masculine perspective- right from dressing to removal- gives the males more power to decide on when and why to use them (Reid, 1993). Therefore, it is unlikely that females would

effectively negotiate to use devices such as condoms for which they have limited manipulation and control.

Conclusion

If child bearing and non-negotiation with partners on condom use are used as the basis for determining proneness to HIV transmission, then the HIV infected persons surface as the sub-population at high risk of HIV re-infection. However, the situation changes if disclosure to sex partners the HIV status prior coitus and initiating new sexual partnerships and coitus are used to determine the sub-population more prone to HIV transmission. In this case, more HIV unaware persons tend to initiate new sexual partnerships and coitus, and are more despondent about disclosing their correct HIV status to partners prior coitus.

It is plausible that HIV unaware persons do not disclose their HIV status to the potential sexual partners for fear that they would be scared off and as such, terminate the relationship on the suspicion that they (HIV unaware persons) have HIV/AIDS. In addition, the false confidence based on the imagination that the problem of HIV/AIDS does not exist influences HIV unaware persons into thinking positively about sexual situations that, in effect, increase the risk of HIV infection, thus exposing them as the hidden sub-population at highest risk of HIV infection in Uganda.

Furthermore, this survey established that coitus and reproduction are inextricably linked, and form the cog-wheel around which sexual relationships revolve. Coitus was found to be used as a means of obtaining sexual pleasure and psychological satisfaction (procreation), acquiring children, consolidating relationships, communicating trust, resolving domestic tension and conflicts, and accessing resources particularly for women. Because coitus is often used to achieve these psychosocial considerations, discontinuity of reproduction as a positive-living measure seems unattainable, particularly for married PHAs.

Therefore, whereas sex avoidance, masturbation and condom use are effective HIV/AIDS preventive measures, they tend to contradict the very tenets upon which marriage revolves i.e. coitus and reproduction. In which case, discontinuing coitus and reproduction imputes impotency/bareness and mistrust, and breeds suspicion and domestic conflicts, irrespective of ones HIV status.

Recommendations

For this study, a large proportion of HIV infected persons reported not only non-negotiation with partners on condom use but also child bearing after knowing that they had HIV. This confirms that unprotected coitus, re-infection, reproduction and mother-to-child transmission (MTCT) of HIV including the negative outcomes arising from these behaviors are a reality in this sub-population. These findings indicate that stopping child bearing as a positive-living measure is unattainable, particularly for married and unmarried PHAs who feel like having a child before they die. There is need therefore not only to increase community sensitization about the dangers of reproduction when already infected with HIV and continuous supportive counseling for PHAs, but also advocacy for contraception and access to cheap effective drugs in reducing the risk of MTCT such as AZT and Niverapine.

On the other hand, HIV unaware persons involved in this study surfaced as the sub-population more likely to conceal their correct HIV status to partners prior to coitus as well as initiate and have coitus with new partners. This implies that HIV unaware persons stand a higher risk of acquiring and/or spreading HIV especially if one of the partners in the sexual network had HIV. The false confidence arising from cognition that the epidemic is not in vicinity creates a positive perception towards risky situations such as new coital partnerships. There is need not only to target consistently unaware persons with information regarding the risk involved

in initiating and having coitus with new partners but also encourage them to seek voluntary counseling and testing.

In nearly all the three groups involved in this study, males surfaced as the sub population more likely to reproduce after testing HIV positive as well as initiate and have coitus with new partners, which implies that sexually active males indeed bear a higher chance of spreading HIV. Therefore, there is an urgent need not only to increase involvement of males in sexual and reproductive activities, but also to specifically focus on/target men all HIV/AIDS preventive campaigns.

Finally, this study examined child bearing *per se*, reproduction after testing HIV positive, initiation and having coitus with new partners, disclosure of correct HIV status to partner prior to coitus and negotiation for condom use as the basis for ascertaining the sub-population at high risk of HIV infection or re-infection. In course of this examination, marital status, religion, level of education and place of residence including access to drugs for prevention of MTCT surfaced as the factors likely to modulate sexual and reproductive behaviors for respondents. However, the small sample size of 289 did not permit desegregation and analysis of data against these variables. Therefore, there is need for further research in this area with a larger sample.

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Endnotes:

- ¹ Risky sexual behaviors include unprotected sexual intercourse, continued child bearing when already HIV infected, not seeking regular HIV tests and accepting the results, irregular/or no medication for diseases related to AIDS, poor nutrition habits (feeding on fatty/acidic/spicy food stuffs); and excessive consumption of alcoholic beverages and psychoactive drugs, etc.
- ² The actual AIDS Care and Support Centers where this information was generated are not mentioned because we did not want to breach the confidentiality principal of the centers. It is unethical on the part of researchers as well as care and support organizations to divulge information that is generated upon agreement with their clients to uphold confidentiality. It is not also our intention to cause a situation where the regular and potential clients may lose interest and confidence in the concerned service centers or even blame and/or sue them for breaching the confidentiality contract. The progressively increasing number of HIV infected individuals giving birth to HIV infected children or vice versa implies an increasing trend in HIV vertical transmission. It also suggests that whereas there is a deliberate attempt to guide, counsel and educate HIV infected persons especially women on the importance of living positively with HIV/AIDS, they continuously engage in risky sexual and reproductive practices that further reduce their quality of reproductive life.
- ³ Positive living is a concept coined by the AIDS Care and Support organizations in Uganda. It holds that individuals who contract HIV and adopt safer behaviors such as regulating coitus, stopping reproduction and remarriage, seeking HIV tests and follow-up tests, notifying partner about the test results, seeking prompt

care, and good nutrition would improve their quality of life and prolong life expectancy.

- ⁴ HIV infected individuals are operationally defined as those who have been tested or clinically diagnosed by an AIDS specialist from a reputable AIDS care and support service center and found infected with HIV. HIV non-infected persons are those whose blood has been screened and found not to have HIV. HIV unaware persons are those who have never had blood screened or clinically diagnosed of HIV.
- ⁵ Data collection was scheduled in such a way that it coincided with the days health units or AIDS support organizations provide HIV testing/counseling/care services to community members.
- ⁶ This strategy was in consonance with government policy of voluntary and anonymous HIV testing, and guaranteed the confidentiality of HIV status from a client's point of view.