

MELA RESEARCH

HIV status disclosure, sexual behaviors, and utilization of key services among People Living With HIV in selected towns of Ethiopia

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ACRONYMS

AIDS	Acquired Immuno-Deficiency Syndrome
ART	Antiretroviral Viral Therapy
ARV	Anti-retroviral
HCT	HIV Counseling and testing
HIV	Human Immunodeficiency Virus
IGA	Income Generating Activity
MARPs	Most at risk populations
MOH	Ministry of Health
PLHIV	People living with HIV
SC/US	Save the Children/USA
STD	Sexually Transmitted Disease
VCT	voluntary counseling and HIV testing

EXECUTIVE SUMMARY

The TransACTION program in Ethiopia, a collaborative effort of the Save the Children Federation, Inc. (SC/US) and its partners, aims to reach out to the most at risk population (MARP) in 120 towns of Ethiopia through HIV/STI prevention, care and support intervention activities. The TransACTION strategic objectives envisages at preventing new HIV infections among at risk population and strengthening linkage to care and support services in towns and commercial hotspots along or linked to with major transportation corridors.

As part of the initial activities of the program, the TransACTION program conducted a baseline study among PLHIV in order to document the current status of HIV status disclosure, sero-discordance, sexual behaviors, condom use, access to and utilization of key services. It is hoped that findings of this baseline study will set benchmark and provide useful information for the monitoring and evaluation of the TransACTION intervention efforts among PLHIV in the target towns.

The study was based on convenient sampling in 5 purposely selected TransACTION implementation towns. A total of 224 male and female PLHIV were recruited in the towns through their associations and participated in the study. The study predominantly collected data using a self-administered questionnaire. It was fielded in August 2010.

This report presents findings from this study. Below is a summary of the salient findings and recommendations.

Background characteristics:

- Most participants (58.5%) were females. Their mean age was 34 years. The males were on average 6 years older than their female counterparts.
- Forty-two percent were currently married, 27.2% divorced, 14.3% widowed, 11.6% never married and the remaining 4.9% were in consensual union.
- The majority of the PLHIV respondents (81.7%) had some education while 18.3% cannot read or write.
- The vast majority of the respondents (89.3%) was working and engaged in some income generating activities.

HIV status disclosure:

- Of those PLHIV respondents who were married or in long term relationships, 83.4% reported that they had informed their HIV positive status to spouses or partners - 89% of the males and 79.3% of the females.
- Disclosure of HIV status to children was reported by 70.9% of the PLHIV who have children. About 77% and 70.2% of the respondents said that they have disclosed their positive HIV status to their mothers and fathers, respectively. Most (83.6%) disclosed to friends.

HIV sero-discordance:

- Based on reports of the PLHIV respondents, 14.3% had HIV sero-negative spouses.
- About 7% of the PLHIV did not know the HIV status of their spouses.
- The reporting of HIV discordant spouse appeared to be higher among the females than the males. Among HIV positive female respondents, 17.5% said their husbands were HIV

negative while 10% did not know the husbands' HIV status. The corresponding reporting for the same by the male PLHIV were 11.8% and 3.9%, respectively.

Sexual behavior:

- The proportion of male and female PLHIV who reported having had sex in the previous year was 89.3% and 50.4%, respectively.
- Two or more sex partners in the previous year were reported by 11.8% of the males and 3.1% of the females.
- The proportion of male and female PLHIV respondents that had sex with spouse/live-in partners in the previous year was 84.5% and 57.5%, respectively.
- Non-regular (non-sex worker) partner in the previous year was reported by 36.6% of the males and 16% of the females.
- About 24% of the male PLHIV reported to have had sex with sex workers in the previous year.
- The proportion of male PLHIV that reported concurrent sexual relationships (i.e. 2 or more sex partners the previous one month) was 11.8%. Of note, none of the female PLHIV reported concurrency.

Condom use:

- Nearly 76% of the male PLHIV and 64.3% of the female reported using condom during their most recent sex with a spouse/live-in partner last year. Consistent condom use with spouse/live-in partner reported to be much lower at 47.5% and 36.7%, respectively, among the males and females respondents.
- The proportion that used condom with the most recent non-regular partner was reported at 75.6% in males and 61.1% in females. The corresponding figures for consistent condom use were even lower at 46.9% and 30%, respectively.
- Among those male PLHIV who had sex with a sex worker last year, 77.3% reported using condom in their most recent sex with a sex worker; and only 33.3% reported consistent condom use with all sex workers last year.
- Condom use by discordant couples is strikingly low with only 47.3% reported using condom during their most recent sex with their HIV negative spouses, and only 31.6% of them reported to have used condom consistently with such partners in the previous year.

Access to counseling and support services:

- About 87% of the PLHIV reported receiving ART last year
- Seventy-four percent of the PLHIV reported receiving psycho-social counseling services last year
- Nutritional counseling service was reported to have received by 65.6% of the PLHIV last year.
- IGA support was reported to be received by 36.2% of the PLHIV last year.
- Forty-two percent of the PLHIV reported to have participated in peer-support groups last year.
- The receipt of food/nutrition support (last year) was reported by 47.8% of the PLHIV.

Recommendations

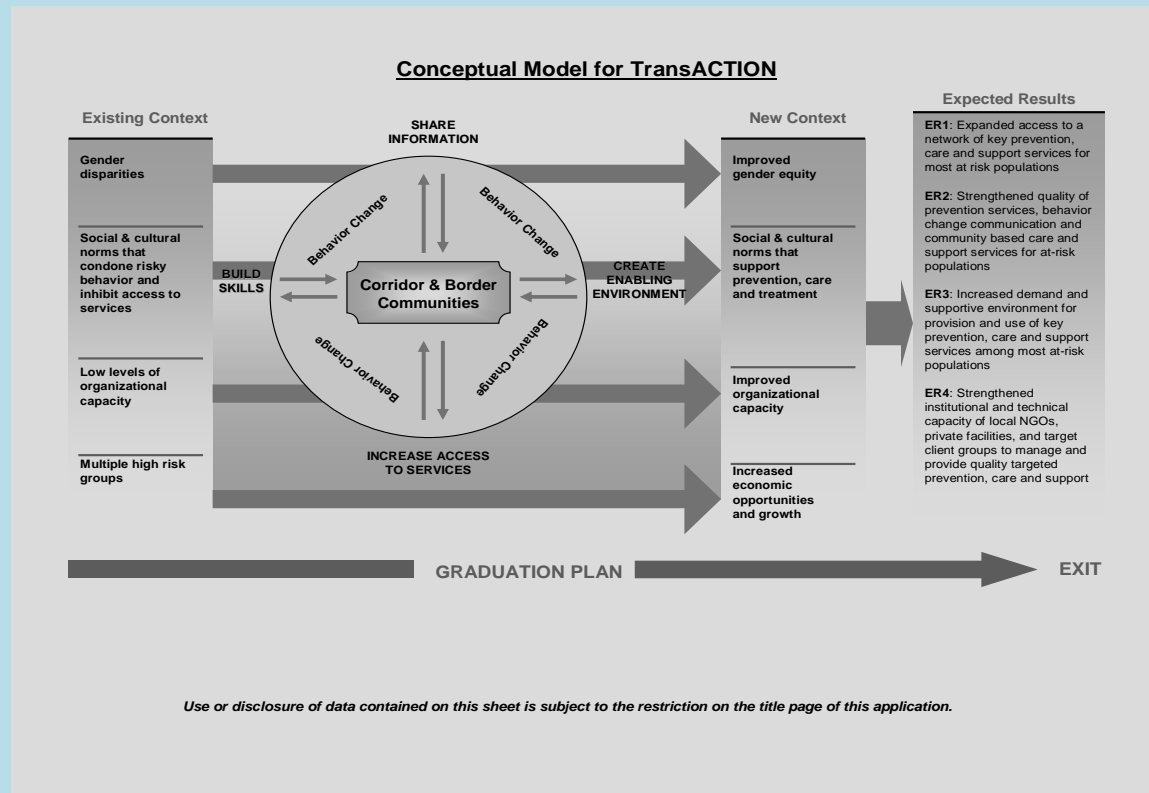
With the caveat of its limitations, the study provide useful baseline information on the current status of HIV status disclosures, HIV sero-discordance, sexual behaviors and condom use of PLHIV as well as their access to and utilization of different services. Findings mostly concur with that of the formative research that was conducted among PLHIV in the same study areas. The formative research provided detail recommendations for programming. Here we only provide some broader recommendations as follows.

- Disclosure appeared high in this group of PLHIV but needs to be improved further. There is a need to reinforce interventions that promote HIV disclosure in married couples and long term sex partners. Some approaches that proved to be workable include increasing public and general PLHIV awareness on disclosure, dispelling stigma associated with HIV/AIDS, providing training and counseling skills to health workers in HIV disclosure, among others.
- The noted high sero-discordance among couples should be a cause for great concern. Couple counseling on condom use, other safer sex behaviors and regular partner HIV testing should constitute among the priority intervention for sero-discordant couples.
- Program needs to emphasize on prevention of HIV transmission by addressing messages on sex partner reduction, avoidance of casual sex and paid sex among the PLHIV. Risk reduction efforts should give more emphasis to the male PLHIV who in particular are involved in risky behaviors.
- Program should promote condom use of PLHIV in all types of sexual relationships i.e. in couples, live-in, long term steady partners and non-regular partners as well as with sex workers.
- Condom use among discordant couples was strikingly low. Discordant couples should be counseled and encouraged to use condom in order to avoid the possible transmission of the virus to sero-negative partners as well as infection with more and different HIV strains.
- PLHIV reported to have better access to services such as ART, psycho-social counseling and nutrition counseling services and the degrees of utilization of such services is fairly high. On the other hand, their accesses were limited for services such as IGA support, participation in peer-support group, and the receipt of food/nutrition support services. Program needs to strive towards improving PLHIV's access to IGA support services and their participation in peer support groups. Strengthening other key services such as psychosocial counseling of individuals and couple counseling with emphasis to HIV status disclosure, discordance and condom use is also highly recommended.

I. BACKGROUND AND INTRODUCTION

1.1. The TransACTION program in Ethiopia

The TransACTION program in Ethiopia, a collaborative effort of the Save the Children Federation, Inc. (SC/US) and its partners, aims to reach out to the most at risk population (MARPs) in 120 towns of Ethiopia through an HIV/STI prevention, care and support intervention. The TransACTION strategic objectives focus on preventing new HIV infections among at risk population and strengthening linkage to care and support services in towns and commercial hotspots along or linked to major transportation corridors. The program is based on the conceptual model described below.



1.2. Baseline survey objective

As part of the initial activities of the program, the TransACTION program conducted a baseline study among PLHIV in order to document the current status of HIV status disclosure, sero-discordance, sexual behaviors, condom use, access to and utilization of key services. It is hoped that findings of this baseline study will set benchmark and provide useful information for the monitoring and evaluation of the TransACTION intervention efforts among PLHIV in the target towns.

1.3. The status of the HIV/AIDS epidemic in Ethiopia

With a population estimated at nearly 77 million in Mid-2008, Ethiopia is the second most populous country in Africa next to Nigeria. In Ethiopia, the HIV/AIDS epidemic has remained a major public health problem, mainly affecting people in the productive and reproductive age ranges. HIV

prevalence in the general population was estimated at 2.1%¹ in 2008. At present, more than one million people are estimated to be living with HIV in Ethiopia. Women account for 59% of the HIV-positive population. According to the single point estimate, a total of 79,183 pregnant women were estimated to be HIV positive in 2008. In the same year an estimated 14,093 HIV positive births occurred from those infected mothers. Annually, an estimated of 125,147 people are newly infected and 58,290 people die of AIDS².

1.4. Intervention and services for People living with HIV/AIDS

People living with HIV (PLHIV) in resource limited settings should have access to essential interventions to prevent illness and HIV transmission. Several intervention seen as low cost and of particular importance for people living with HIV were identified including psychosocial counseling and support, disclosure, partner notification and testing and counseling, co-trimoxazole prophylaxis; tuberculosis (TB); preventing fungal infections; sexually transmitted and other reproductive tract infections; preventing malaria; selected vaccine preventable diseases (hepatitis-B, pneumococcal, influenza vaccine, and yellow fever vaccines); nutrition; family planning; preventing mother-to-child transmission of HIV; needle-syringe programs and opioid substitution therapy; and water, sanitation and hygiene³. While not all interventions will be needed or equally important in all countries, depending on local and national epidemiology, it is hoped that those most useful will be adopted, adapted as needed and provided to PLHIV.

The advent of Anti-retroviral therapy (ART) has improved survival and the quality of life of people living with HIV (PLHIV) in Ethiopia. Since the advent of the ART program in 2003 in the country, over 200,000 people have started on treatment in 481 facilities throughout the country⁴. The impact of the program on survival and quality of life of patients has been documented^{5,6}. There is however limited parallel efforts to promote positive prevention such as psychosocial counseling and support, disclosure, peer-support groups, partner notification and testing and counseling among PLHIV in the country. These are important areas of intervention to delay HIV/AIDS disease progression, and avoid passing HIV infection on to others or avoid re-infection.

¹ Agreement on a point prevalence of 2.1% was reached in April 2007.

² HAPCO. Multi-sectoral HIV/AIDS Response Annual Monitoring & Evaluation Report 2001 Ethiopian Fiscal Year [July 2008- June 2009]. Unpublished.

³ WHO. Essential prevention and care interventions for adults and adolescents living with HIV in resource-limited settings. ISBN 978 92 4 159670 1

⁴ HAPCO. Multi-sectoral HIV/AIDS Response Annual Monitoring & Evaluation Report 2001 Ethiopian Fiscal Year [July 2008- June 2009]. Unpublished.

⁵ MOH/HAPCO. Effectiveness of ART program in Ethiopia (unpublished). December 2008

⁶ Reniers G et al. Steep decline in population-level AIDS mortality following the introduction of antiretroviral therapy in Addis Ababa, Ethiopia. *AIDS*, 23:511-518, 2009

II. METHODOLOGY

2.1. Study design

This study was based on convenient sampling of PLHIV associations in 5 purposely selected TransACTION implementation towns. The towns were selected so that they somehow represent large-, medium- and small-sized towns. In total, 7 PLHIV associations were involved in the study. The formative research collected a comprehensive list of 15 PLHIV associations in the 12 study towns. The 7 associations to be involved in this study were purposely selected from that list. The study was predominantly based on a self-administered data collection approach.

2.2. Sample size

The study collected multiple indicators. Sample size computation was based on a conservative assumption so as to get an optimum sample size. The following parameters were used in the computation of sample size:

- Anticipated prevalence for key indicators= 50% (conservative estimate)
- 95% Confidence Level
- 80% Power
- Margin of error =8%
- Design effect=1.5
- Total Sample size= 224

2.3. The questionnaire

An individual questionnaire that was pre-coded and convenient for a self-administered interview was implemented. The questionnaire contains information on socio-demographics, HIV status disclosure, discordant HIV status, sexual behaviors, and condom use, attitudes towards disclosure, and condom, and PLHIV's access to key services such as counseling and support services (see Annex 2 for the questionnaire). The questionnaire was administered in Amharic.

2.4. Data collection implementation

Three assistant researchers were trained on the study objectives, the method of data collection, the contents and nature of the questionnaire. These researchers traveled to the field and contacted the PLHIV associations selected for the study. In close consultation and collaboration with the associations' management, individual respondents were recruited from members by the association offices. Participation was entirely on voluntary basis. A detailed informed consent form was also attached in the cover page of the questionnaire. Individual PLHIV respondents were gathered in a class room in the associations' office premises where the researchers explained the objectives of the study, the nature and contents of the interview. Since most individuals (over 80%) were literate, they were able to fill the questionnaire by their own. For those individuals who couldn't write or read, they were assisted by their fellow association members. The quality and completeness of the information was closely monitored by the assistant researchers. The study was fielded in August 2010.

2.5. Data management and analysis:

The data from the questionnaire were computerized using EPI-INFO. Two highly experienced data entry clerks computerized the data. They were given orientation on the nature of the data and data entry techniques. Data cleaning and post coding were part of the quality assurance process. Data security and confidentiality was maintained throughout the study. The analyses mostly focused on descriptive and Univariate statistical methods. All associations/correlations between variables were tested for significance. A p-value <0.05 was considered statistical significant. Analyses were performed using a statistical package, STATA 10.

2.6. Study limitations

The limitations of this study were as follows:

- Firstly, a convenience sampling method was used and respondents were included to the study on voluntary basis, which may lead to an inherent selection bias.
- Secondly, the study targeted PLHIV who were members of the PLHIV associations so the findings may not be generalized to the general PLHIV population who are not members of the associations. The findings from association members may be different from that of the general population of PLHIV because association members naturally have better access to information and services through their active participation in the associations.
- Thirdly, this study was predominantly based on self-administered data collection approach. Self-administration of questionnaires provides more privacy for the respondent and is particularly suitable for sensitive questions. It also eliminates the interviewer effect. However, in this study since some respondents (18.3%) were unable to read/write, they were assisted by their fellow friends. This may create reporting bias in this specific group, as the questions dealt with sensitive issues such as disclosure, sero-discordance and sexual behaviors.
- Self-reported information on disclosure, sero-discordance may be subjected to reporting bias, as there is no way to validate the information. In particular, the information on sero-discordance status of partners can only be ascertained through blood testing for HIV.

III. PRESENTATION AND ANALYSES OF RESULTS

3.1. Background characteristics

Table 1 and Figure 1 detail selected background characteristics of respondents. This self-administered interview was conducted on 224 PLHIVs who were members of the PLHIV associations. Most (58.5%) were females. This was because most of the members of the associations were females. The mean age of the respondents was 34 years. The majority (46.4%) were in the age group 30-39 years. The males were 6 years older than their female counterparts (mean age; 37.7 vs. 31.2 years).

In terms of their marital status, most (42%) were currently married, 27.2% divorced, 14.3% widowed, 11.6% never married and the remaining 4.9% were in consensual union. Significantly more males than females (58.1% vs. 30.5%) were currently married (Figure 1).

The majority of the PLHIV respondents (81.7%) have some education while 18.3% cannot read or write. The proportion that had 1-6 years of schooling was 32.1%. Grade 7-9 years were achieved by 25.5% and another 24.1% had 10 or higher years of schooling. As shown in Figure 1, significantly more males (88.2%) than females (77.1%) had some education.

The vast majority of the respondents (89.3%) was working and engaged in some income generating activities. There was significant variation in the proportion that engaged in income generating activities by sex - 95.7% of the males vs. 84.7% of the females. Different types of occupations of the PLHIV were reported. The leading occupation being trading (30%), followed by paid work in PLHIV associations (21.5%), daily labor (16%), government/NGO workers (10.5%), handicrafts (7%), farmers (6.5%) among few others.

The year of HIV diagnosis of respondents was also assessed. The mean number of years since HIV diagnosis was 3.8. As shown in Figure 2, 14.7% of the respondents were diagnosed in 2004 or before. Between 2005 and 2007, 55.4% of the respondents were diagnosed for HIV and knew their HIV status. Those diagnosed in the last three years represented about 30% of the total and about 9% were diagnosed in 2010.

Table 1. Selected background characteristics of PLHIV respondents, PLHIV, August 2010

	%	N
Sex		
Male	41.5	93
Female	58.5	131
Age		
18-24	8.0	18
25-29	22.8	51
30-39	46.4	104
40+	22.8	51
Mean age (95% CI)	33.9 (32.8-35.0)	224
Marital status		
Never married	11.6	26
Currently married	42.0	94
Consensual union	4.9	11
Widowed	14.3	32
Divorced	27.2	61
Educational status		
Cannot read/write	18.3	41
Grade 1-6	32.1	72
Grade 7-9	25.5	57
Grade 10+	24.1	54
Currently working/earning income		
Yes	89.3	200
No	10.7	24
Type of work (among working; n=200)		
Government/NGOs employee	10.5	21
Trading	30.0	60
Daily laborer	16.0	32
Handicraft	7.0	14
Commercial sex work	0.5	1
Farmer	6.5	13
Work in the PLHIV association (paid)	21.5	43
Home based care worker (paid)	5.5	11
PLHIV Counselor (paid)	2.5	5

Figure 1. Selected background characteristics of respondents by sex, PLHIVs, August 2010

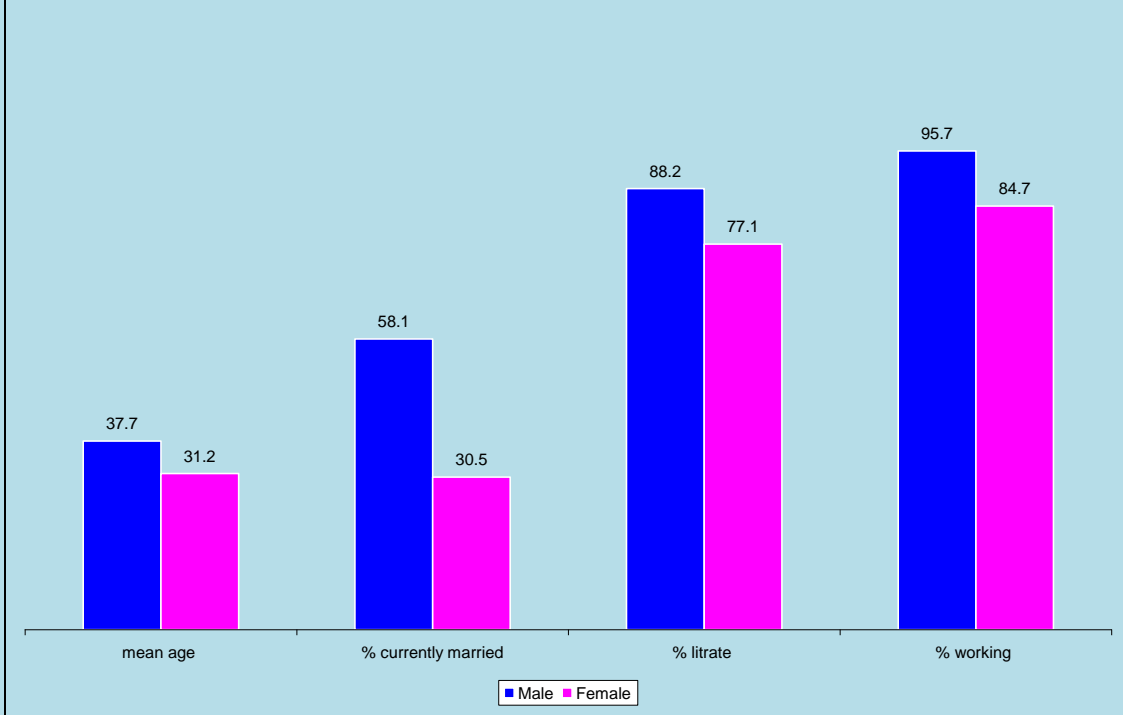
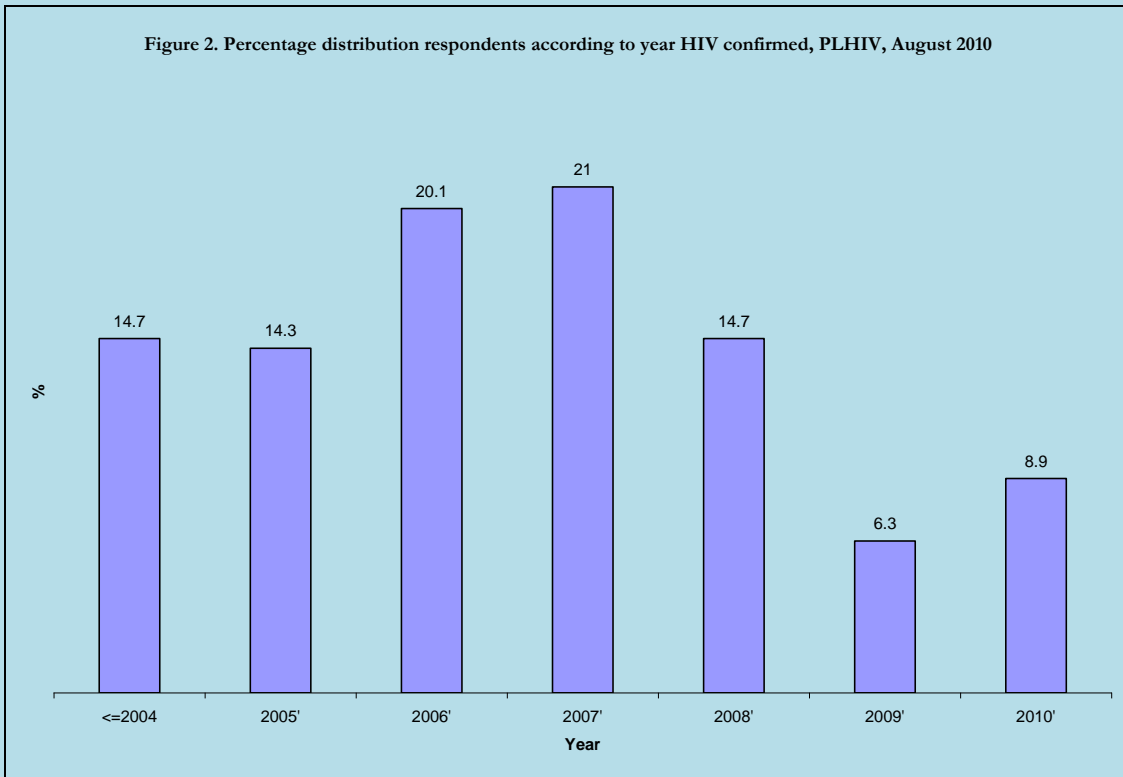


Figure 2. Percentage distribution respondents according to year HIV confirmed, PLHIV, August 2010



3.2. HIV status disclosure

One of the major challenges in HIV care in developing countries is acceptance and disclosure of a positive HIV status by PLHIV. Denial and non-disclosure of HIV status hinders prevention efforts as well as access to treatment, care and support for these people. Disclosure of one's HIV status, which is linked to acceptance of an HIV-positive diagnosis, is the first step in accessing family and community support. The more that people can come to terms with and disclose their HIV status, the more likely it is that their community's awareness, openness, and understanding about HIV will increase, particularly in the context of access to care and treatment for those in need⁷.

In this study respondents were asked to report whether they have disclosed their HIV status to their spouses, parents, children, relatives and friends. As shown in Table 2 disclosure of ones HIV status by PLHIV to different people appeared to be notably high.

Disclosure to spouses or long term partners:

Of those PLHIV respondents who were married or in long term relationships, 83.4% reported that they had informed their HIV positive status to spouses or partners. There was boarder-line significant difference ($p=0.07$) in the proportion who disclosed their HIV status to spouse by sex (89% for males and 79.3% for females – Figure 3). The noted sex difference concurs with the findings of the formative research in that females are less likely to disclose their HIV status due to power imbalances and fear of negative consequences of disclosure. On the other hand, this study documented lower disclosure level than previously recorded in Ethiopia. For instance, a recent study among 705 PLHIV found that 90.9% of the men and 90.7% of the women had disclosed their HIV positive test results to their current main partner⁸. The two studies cannot be easily compared, however. First, our study was based on self-administered data collection method while the previous study was based on one-on-one interview. Differences in study areas and sampling methods may also complicate comparison of findings from the two studies.

Disclosure to family, relatives and friends:

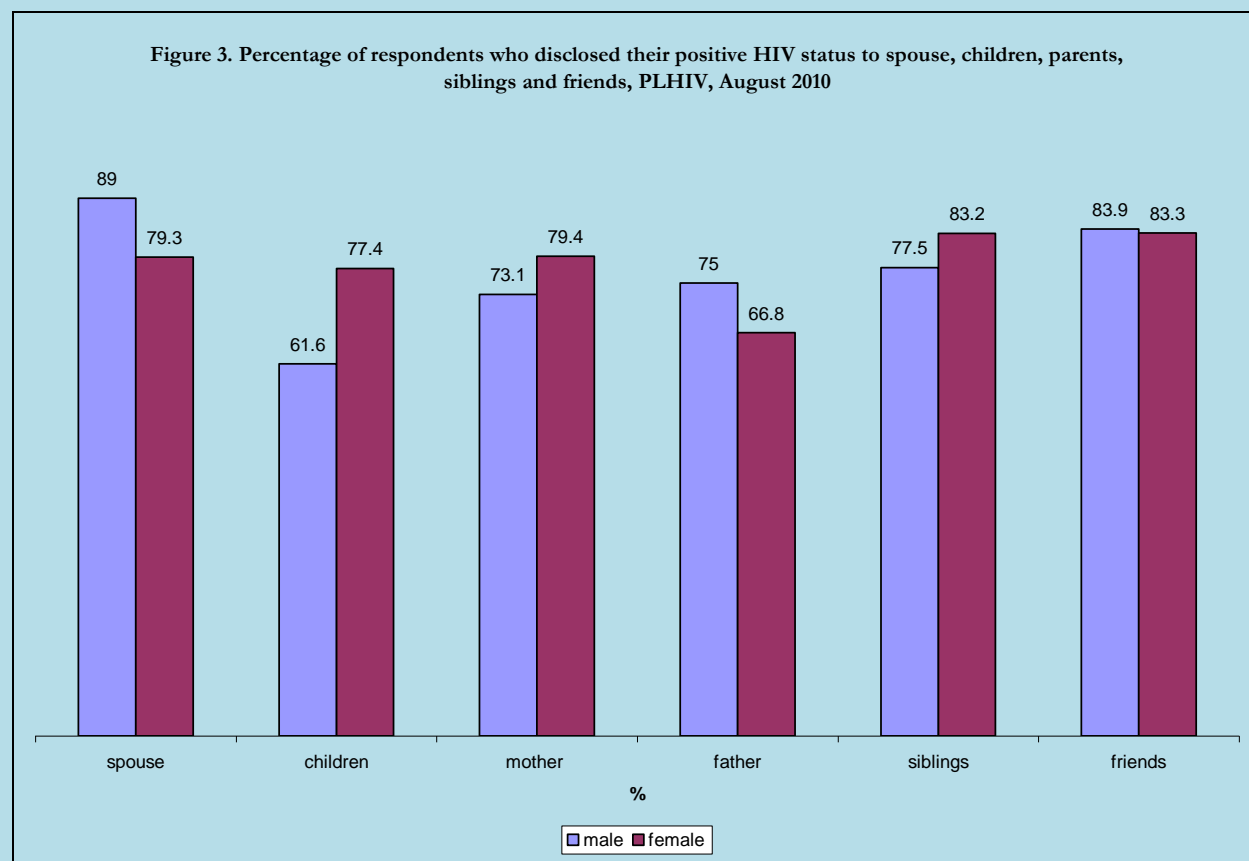
Disclosure of HIV status to children was reported at 70.9% among those respondents who have children. About 77% and 70.2% of the respondents, respectively, said that they had disclosed to their mothers and fathers. Disclosing HIV status to siblings also appeared to be common as reported by 80.8%. It appears that friends are the most trusted in terms of informing about ones HIV status, as reported by 83.6% of the respondents. Figure 3 also shows that females are more likely than their male counterparts to disclose their HIV status to children (77.4% vs. 61.6%, $p=0.023$). Disclosure to other parents, family members and friends did not vary significantly by sex.

⁷ Ncama BP. Acceptance and disclosure of HIV status through an integrated community/home-based care program in South Africa. *Int Nurs Rev* 2007;54(4):391-7.

⁸ Deribe K., Bernard J. et al. Gender Differences Regarding Barriers and Motivators of HIV Status Disclosure among HIV Positive Service Users. www.africamnet.org/events/practicum/.../x/.../ToTellorNottoTellEthiopia.pdf

Table 2. The percentage of PLHIV respondents who disclosed their HIV status to their spouses, parents, children, relatives and friends, PLHIV, August 2010

	%	N
% who reported that they had informed their HIV positive status to spouse or long term partner	83.4	193
% who reported that they had informed their HIV positive status to children	70.9	179
% who reported that they had informed their HIV positive status to mother	76.7	159
% who reported that they had informed their HIV positive status to father	70.2	131
% who reported that they had informed their HIV positive status to siblings	80.8	187
% who reported that they had informed their HIV positive status to friends	83.6	213
% who reported that they had informed their HIV positive status to relatives	71.6	194



Attitude towards disclosure:

Respondents were asked of their opinion concerning HIV disclosure (Table 3). There is a general positive attitude towards HIV disclosure by PLHIV respondents of this study. For instance, 56.4% of the PLHIV respondents strongly agreed with the statement "A person living with HIV should inform that he/she has HIV to spouse" and another 32.6% agreed with this same statement. Similar positive

attitude of the PLHIV respondents was noted concerning disclosure to other peoples. The proportion that held positive attitude (strongly agreed/or agreed to the statements) towards disclosing ones HIV status to children, family and friends were notably high at 81.%, 86% and 89.3%, respectively.

Table 3. Attitude towards disclosure of HIV status among PLHIV respondents, PLHIV, August 2010.

	% N=224
<i>"A person living with HIV should inform that he/she has HIV to spouse"</i>	
Strongly disagree	5.0
Disagree	3.7
Unsure	2.3
Agree	32.6
Strongly agree	56.4
<i>"A PLHIV should inform that he/she has HIV to his/ her children"</i>	
Strongly disagree	6.0
Disagree	5.5
Unsure	7.0
Agree	31.3
Strongly agree	50.2
<i>"A PLHIV should inform that that he/she has HIV to family"</i>	
Strongly disagree	5.4
Disagree	4.1
Unsure	4.5
Agree	34.4
Strongly agree	51.6
<i>"A PLHIV should inform that that he/she has HIV to friends"</i>	
Strongly disagree	7.0
Disagree	8.9
Unsure	3.8
Agree	32.9
Strongly agree	47.4

3.3. HIV sero-discordance

Where a person who is HIV sero-positive is in a relationship with a HIV sero-negative partner the couple is described as being HIV sero-discordant⁹. In this study, discordance in HIV status was assessed for currently married women and those divorced/widowed.

Reported magnitude of HIV discordance between couples:

Discordance in HIV status (i.e. respondent HIV positive while spouse HIV negative) was reported by 14.3% of the currently married PLHIV. On the other hand, 6.6% of the respondents do not know the HIV status of their currently married partner. Among those divorced/widowed the level of discordance was reported at 18.8%. It is however difficult to interpret this data since 43.8% of the respondents did not know the HIV status of the partners they divorced or diseased.

The reporting of HIV discordant spouse appeared to be higher among the females than the males (Figure 4). Among HIV positive female respondents to this study, 17.5% reported their husbands

⁹ Paul Collini and Angela Obasi. Interventions to reduce HIV sexual transmission within discordant couples. BMJ Publishing Group Limited 2006.

were HIV negative while 10% did not know their husband's HIV status. The corresponding reporting by the HIV positive male respondents were 11.8% and 3.9%, respectively.

The prevalence of sero-discordant couples in populations varies. Several factors may play their part including the stage of infection, coital frequency, and the absence of STDs and differing levels of susceptibility between partners, among others¹⁰. In sub-Saharan Africa studies have found HIV discordance rates of 3–20% in the general population, and higher rates of 20–35% in studies of those presenting to voluntary counseling and testing (VCT) services¹¹. In a longitudinal study of couples in Tanzania, risk of HIV for a sero-negative partner in a sero-discordant couple was several-fold higher than that of partners in sero-concordant HIV negative couples (Relative Risk 57.9, 95% CI 12 to 244)¹². Similar increased risk was seen in the Rakai cohort in Uganda, where females in sero-discordant marriages are reported as having twice the infection risk of males^{13,14}.

Table 4. Percent distribution of PLHIV respondents according to the HIV status of their spouses, PLHIV, August 2010

	%
<u>Currently married PLHIV respondents</u>	n=94
Spouse HIV status	
Spouse HIV Positive	79.1
Spouse HIV Negative	14.3
Do not know HIV status of spouse	6.6
<u>Divorced/widowed PLHIV respondents</u>	n=48
Spouse HIV status	
Spouse HIV Positive	37.5
Spouse HIV Negative	18.8
Do not know HIV status of spouse	43.8

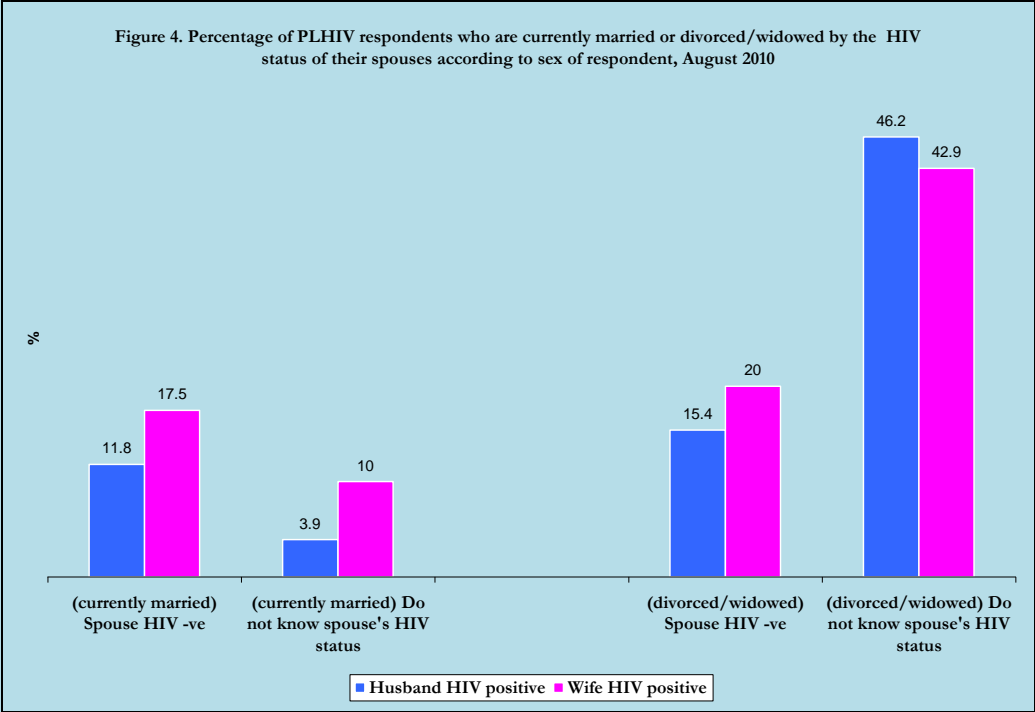
¹⁰ Berhane Y, Mekonnen Y, Seyoum E, D. Wilson, L. Gelmon. HIV/AIDS In Ethiopia: an epidemiological synthesis. World Bank Global AIDS Program. April 2008

¹¹ Bunnell RE, Naddozi J, Marum E, et al. Living with discordance: knowledge, challenges, and prevention strategies of HIV-discordant couples in Uganda. *AIDS Care* 2005;17:999–1012.

¹² Hugonnet S, Mosha F, Todd J, et al. Incidence of HIV infection in stable sexual partnerships: a retrospective cohort study of 1802 couples in Mwanza Region, Tanzania. *J Acquir Immune Defic Syndr* 2002;30:73-80

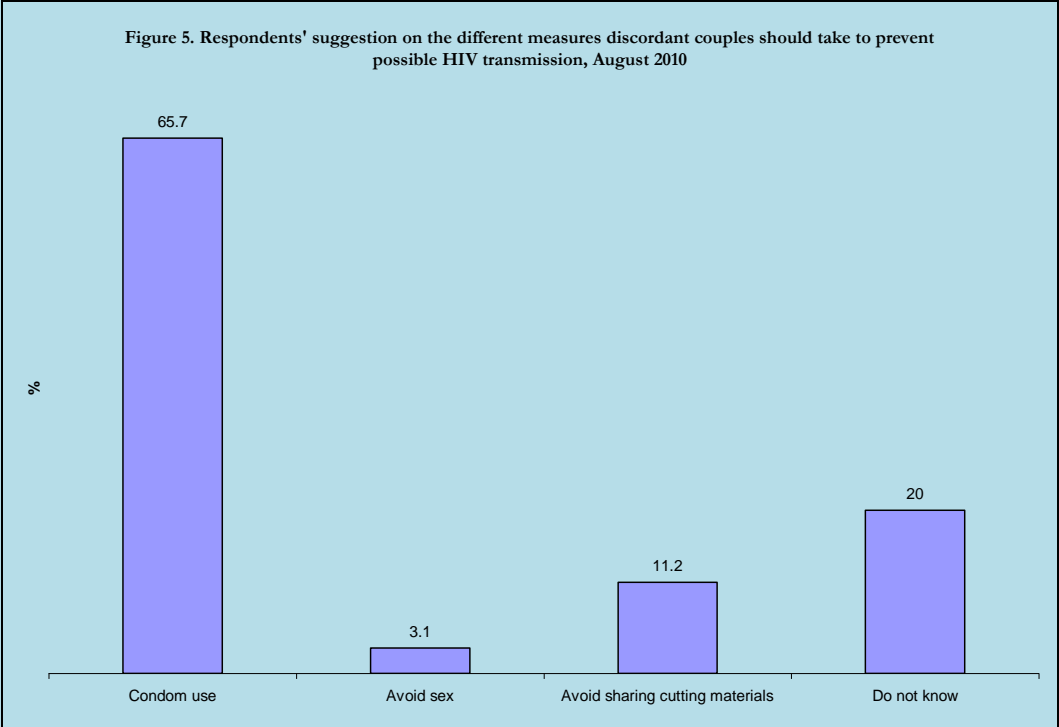
¹³ Serwadda D, Gray RH, Wawer MJ, et al. The social dynamics of HIV transmission as reflected through discordant couples in rural Uganda. *AIDS* 1995;9:745–750

¹⁴ Carpenter LM, Kamali A, Ruberantwari A, et al. Rates of HIV-1 transmission within marriage in rural Uganda in relation to the HIV sero-status of the partners. *AIDS* 1999;13:1083–1089



Respondents' suggestion on how to prevent HIV transmission between discordant couples:

About two-third (65.7%) of the respondents suggested that discordant couples should use condom in order to avoid possible transmission of the virus to the uninfected partner. There are also those who suggested avoiding sharing of cutting materials by such couples at 11.2%. Only 3.1% said such couples should avoid sex. Of note, 20% of were unable to make any suggestion on how to avoid HIV transmission in discordant couples (Figure 5).



3.4. Sexual behaviors

Sexual behaviors of PLHIV respondents were assessed in regards to their lifetime sexual experience, number and type of partners in the previous year.

Sexual experience:

As shown in Table 5, virtually all respondents reported to have had sex in their life time – 96.8% of the females and 96.2% of the males. In the previous year, significantly more males than females reported to have had sex (89.3% vs. 50.4%). The reporting of two or more partners (last year) was also significantly higher among the males (11.8%) than the females (3.1%).

Table 5. Percentage of respondents who ever had sex, who had in the last 12 months, and the total number of sexual partners, PLHIV, August 2010

	Male N=93	Female N=131
Ever had sex	96.8	96.2
Had sex in the last 12 months	89.3	50.4
Total Number of sexual partners (last year)		
0	10.7	49.6
1	77.4	47.3
2+	11.8	3.1

Types of sexual partners:

Different types of sex partners of respondents were assessed as shown in Table 6. For the males three types of sex partners were identified i.e. (1) spouse/live-in partner, (2) non-regular (non-sex worker) and (3) sex workers. Females' sex partners encompassed spouse/live-in and non-regular partners.

The proportion of PLHIV respondents that had sex with spouse/live-in partners last year was 84.5% in males and 57.5% in females. Non-regular partners were reported by a significantly higher proportion of the males (36.6%) than the females (16%). This suggests that the males are significantly more likely than their female counterparts to have had cohabiting as well as non-regular partners in the previous year.

Paid sex with sex workers (last year) was reported by 23.7% the male PLHIV respondents. This rate appeared much higher than the 14.8% and 16.8% documented among the male daily laborers and truckers, respectively¹⁵.

¹⁵ Ibid, 9

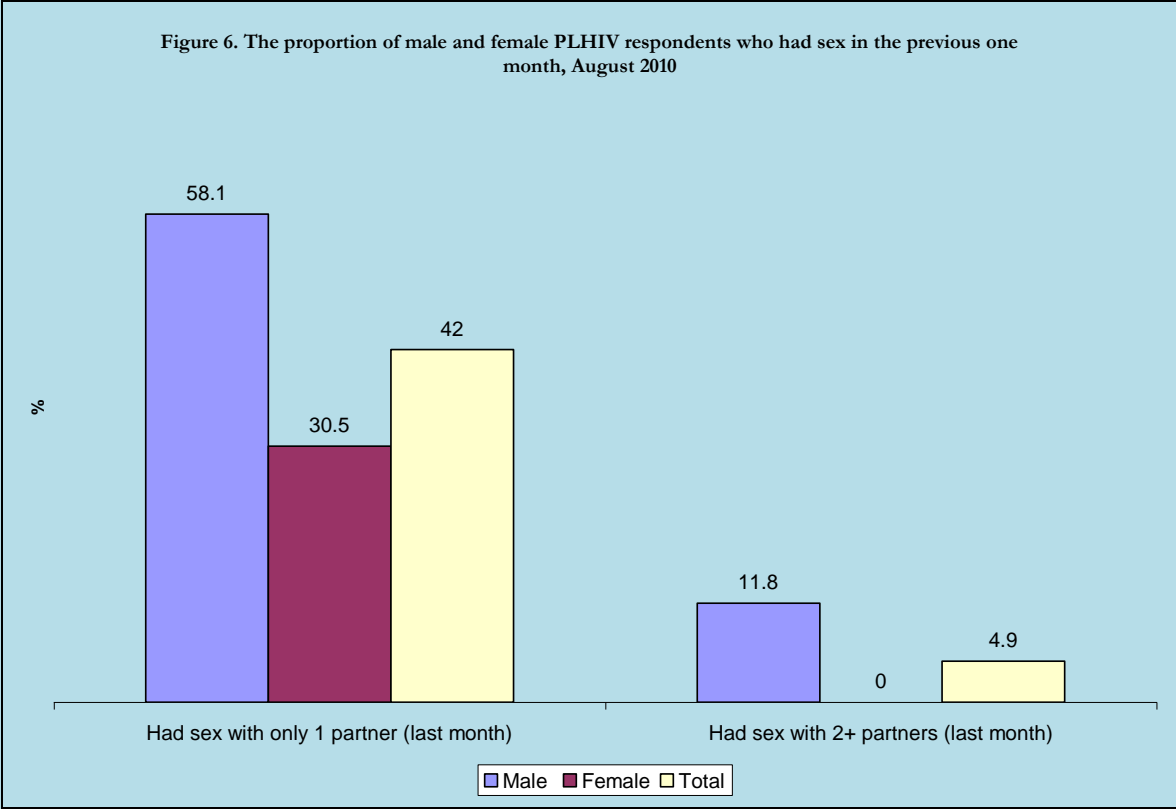
Table 6. Percentage of respondents according to the number of regular, paid (CSW) and non-regular (non-CSW) partners during last year, PLHIV, August 2010

	Male	Female
<u>Regular (spouse/live-in/divorced/widowed) partner:</u>	n=71	n=73
% who had sex with regular i.e. spouse/live-in partner (last year)	84.5	57.5
<u>Non-regular (non-sex worker) partner (s):</u>	n=93	n=131
% who had sex with non-regular non-sex worker partner (s) (last year)	36.6	16.0
<u>Paid sex (with sex workers):</u>	n=93	N/A
% who had sex with commercial sex workers (last year)	23.7	

N/A= not applicable

Sex partners' concurrency

A little bit over half of the PLHIV respondents (53.1%) reported to have had sex during the last one month. The proportion of both sexes that reported concurrent sexual relationships (i.e. 2 or more sex partners the previous one month) was 4.9% (Figure 6). There was significant variation in the reporting of concurrent sexual partnership by sex. The male PLHIV respondents were significantly more likely than their female counterparts to have had sex with two or more partners in the previous one month (11.8% and 0.0%). The recorded level of sex partners' concurrency by the male PLHIV respondents found much higher the rate for most at-risk population included in the TransACTION baseline survey. Concurrent sexual partnership was reported at 5.8%, 0.5%, 5.3% and 3.5%, respectively, among waitresses, female daily laborers, male daily laborers and truckers.



3.5. Condom use

Condom use with spouses, non-regular partners and in paid sex:

Condom use in general can be considered low among this group of PLHIV respondents. The proportion that used condom in their most recent sex with a spouse/live-in partner was 75.9% in males and 64.3% in females (Table 7). The noted difference in condom use between the males and females was statistically significant. Consistent condom use as defined as the use of condom with all spouses/live-in partners every time, was reported much lower at 47.5% in males and 36.7% in females.

Likewise, respondents reported lower condom use with a non-regular partner. The proportion that used condom with the most recent non-regular partner was 75.6% in males and 61.1% in females. The corresponding figures for consistent condom use were even lower at 46.9% and 30%, respectively. On the whole, the males reported to have significantly higher condom use rate with non-regular partners than their female counterparts.

Notably, the male PLHIV's condom behavior with sex workers appeared far off what is naturally expected in such relationships. Among those males who had sex with a sex worker last year, 77.3% reported using condom in their most recent sex with a sex worker and only 33.3% reported consistent condom use with sex workers.

Table 7. Reported condom use with spouse/live-in partners, non-regular (non-sex workers) partners and sex workers (last year), PLHIV, August 2010

	Male	Female
<u>Condom use with regular (spouse/live-in) partner:</u>	n=59	n=42
% who used condom in their most recent sex with a spouse/live-in partner	75.9	64.3
Frequency of condom use with all spouses/live-in partners (last year)		
Every time	47.5	36.7
Almost every time	10.2	2.4
Sometimes	23.7	38.1
Never	18.6	23.8
<u>Condom use with a non-regular (non-sex worker) partner (last year)</u>	n=33	n=18
% who used condom in their most recent sex with a non-regular partner	75.6	61.1
Frequency of condom use with all non-regular partners (last year)		
Every time	46.9	30.0
Almost every time	9.4	15.0
Sometimes	28.1	25.0
Never	15.6	30.0
<u>Condom use with sex worker (last year)</u>	n=22	N/A
% who used condom in their most recent sex with a sex worker	77.3	
Frequency of condom use with all sex worker (last year)		
Every time	33.3	
Almost every time	14.3	
Sometimes	28.6	
Never	23.8	

N/A= not applicable

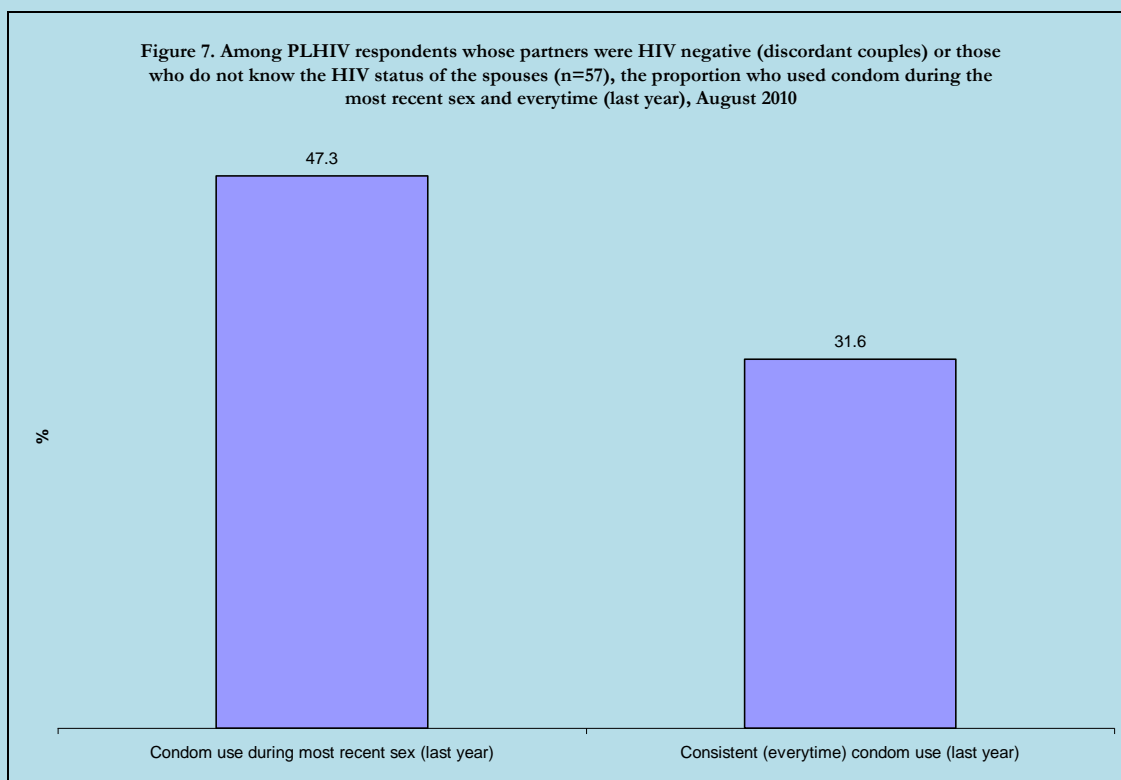
Condom use in discordant couple:

Understanding condom use pattern in discordant couples has important programmatic implications in the prevention of HIV transmission within couples and, thereby, the general population. Studies from elsewhere suggest that condom use in sero-discordant couples is associated with 80% reductions in HIV transmission^{16,17}.

The data from this baseline study suggest that condom use by discordant couples is strikingly low with only 47.3% of the HIV positive respondents reported using condom during their most recent sex with their HIV negative spouses, and only 31.6% of them reported to have used condom consistently with such partners in the previous year (Figure 7). This is despite the fact that about two-third of the PLHIV respondents suggested condom use as an important strategy to avoid infection in discordant couples (Figure 5 above).

¹⁶ Weller S, Davis-Beatty K. Condom effectiveness in reducing heterosexual HIV transmission. In: The Cochrane Library, Issue 2, 2006. Chichester, UK: John Wiley & Sons, Ltd

¹⁷ Ibid, 3



3.6. Access to counseling and support services

In this baseline study, we also assessed PLHIV respondents' access and utilization of selected key services. As shown in Table 8, some services appeared to be more accessible to PLHIV than others. The services that were frequently reported to be received by the respondents last year include ART (86.6%), psycho-social counseling services (74.1%) and nutritional counseling services (65.6%). On the other hand, their accesses were limited for services such as IGA support (36.2%), participation in peer-support (42%) and receipt of food/nutrition support services (47.8%).

Table 8. Percentage of respondents who reported receiving different counseling and support services last year, PLHIV, August 2010.

	N=224
% who received Psycho-social counseling service last year	74.1
% who received Nutrition-counseling service last year	65.6
% who received food/nutrition support services (rationing or therapeutic) last year	47.8
% who received ART last year	86.6
% currently on ART	85.7
% who received IGA service last year	36.2
% who participated in a peer support group last year	42.0

IV. SUMMARY AND RECOMMENDATIONS

There is in general a dearth of information on sexual behaviors, HIV status disclosure and discordance in HIV sero-status of PLHIV in Ethiopia. Perhaps, this is the first study that attempted to systematically document a number of programmatically important indicators. With the caveat of its limitations, the study provide useful baseline information on the current status of HIV status disclosures, HIV sero-discordance, sexual behaviors and condom use of PLHIV as well as their access to and utilization of different services. Findings mostly concur with that of the formative research that was conducted among PLHIV in the same study areas.

As part of the activities towards meeting the target set forth for the universal access in treatment, care, and preventive services for PLHIV, targeted intervention is due to addresses HIV disclosure, discordance, including infection prevention, improving access to key services, among others. The formative research provided detail recommendations for programming on these areas. Only key findings and broader recommendations are put forward below.

Disclosure of HIV status to spouse, families and friends by the PLHIV in this study reported to be reasonably high but needs to be improved further.

- Disclosure of HIV status to spouse or live-in partners was reported by 83.4% of the PLHIV included in this study – 89% of the males and 79.3% of the females. Although this is a reasonably high figure there are still about 17% of the PLHIV who did not disclose their HIV status to their spouses or live-in partners. **It is therefore imperative to reinforce intervention that promotes HIV disclosure in couples and long term sex partners. Some approaches that proved to be workable include increasing public and general PLHIV awareness on disclosure, dispelling stigma associated with HIV/AIDS, providing training and counseling skills to health workers in HIV disclosure, among others.**

HIV sero-discordance among currently married couples reported to be notably high

- Discordance in HIV status (i.e. respondent HIV positive while spouse HIV negative) was reported by 14.3% of the currently married PLHIV. On the other hand, 6.6% of the respondents did not know the HIV status of their currently married partner. The formative research provides some useful programmatic recommendations to addressee the needs and concerns of HIV sero-discordant couples. **Couples counseling on safer sex behaviors and regular sero-negative partner HIV testing are among the priority intervention for sero-discordant couples.**

The PLHIV studied are in general characterized by risky sexual behaviors including high prevalence of sex with non-regular partners and with sex workers. Such behaviors, including concurrent sexual relationship, appeared to be much more pronounced in males than in females.

- Significantly more males than females reported to have had sex last year (89.3% vs. 50.4%). The reporting of two or more partners (last year) was also significantly higher among the males (11.8%) than the females (3.1%). Non-regular partners were reported by a significantly higher proportion of the males (36.6%) than the females (16%). About 24% of the males reported to have had sex with sex workers last year. Of note, the reported magnitude of non-regular partners by both the male and female PLHIV in this study compare well with

the TransACTION baseline survey data recorded for the same indicator among some at-risk groups, including the male daily laborers, truckers and waitresses¹⁸. The reporting of paid sex by the male PLHIV appeared much higher than the 14.8% and 16.8% documented among the male daily laborers and truckers, respectively¹⁹. **Program thus needs to emphasize messages on sex partner reduction, avoidance of casual sex and paid sex among the PLHIV. Risk reduction efforts should give more emphasis to the male PLHIV who in particular are involved in risky behaviors.**

Condom use within marriage as well as with non-regular partners and sex workers reported to be markedly low. Females are less likely than the males to use condom in different sexual encounters.

- Consistent condom use with all spouses/live-in partners (last year), was reported by 47.5% of the males and 36.7% of the females. With non-regular partners, 46.9% and 30% of the males and females, respectively, reported using condom consistently last year. Among those males who had sex with a sex worker last year, 77.3% reported using condom in their most recent sex with a sex worker and only 33.3% reported consistent condom use with sex workers last year. **Program should promote condom use of PLHIV in all types of sexual relationships i.e. in couples, live-in, long term steady partners and non-regular partners as well as with sex workers. Females should be encouraged to negotiate and adapt condom use in all types of relationships.**

Condom use within discordant couples reported to be quite low

- Condom use among discordant couples was strikingly low with only 31.6% reported using condom every time they had sex with such partners in the previous year. **Discordant couples should be counseled and encouraged to use condom in order to avoid the possible transmission of the virus to sero-negative partners as well as infection with more and different HIV strains.**

PLHIV reported to have better access to services such as ART, psycho-social counseling and nutrition counseling services and the degrees of utilization of such services is fairly high. On the other hand, their accesses were limited for services such as IGA support, participation in peer-support group, and the receipt of food/nutrition support services.

- **Program needs to strive towards improving PLHIV's access to IGA support services and their participation in peer support groups. Strengthening other key services such as psychosocial counseling of individuals and couple counseling with emphasis to HIV status disclosure, discordance and condom use is highly recommended.**

¹⁸ TransACTION baseline survey among MARPS in 12 towns of Ethiopia. Unpublished report. September 2010

¹⁹ Ibid, 9

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ANNEX 1. SELECTED BASELINE INDICATORS

	%	N
HIV status disclosure:		
% who disclosed their HIV status to spouse	83.4	193
% who disclosed their HIV status to children	70.9	179
% who disclosed their HIV status to friends	83.6	213
HIV sero-discordance:		
% PLHIV whose spouses/live-in partners are HIV sero-negative	14.3	94
% PLHIV who do not know the HIV status of their spouses/live-in partner	6.6	94
Sexual behaviors:		
% <u>male</u> PLHIV who had sex last year	89.3	93
% <u>female</u> PLHIV who had sex last year	50.4	131
% <u>male</u> PLHIV who had two or more sex partners last year	11.8	93
% <u>female</u> PLHIV who had two or more sex partners last year	3.1	131
% <u>male</u> PLHIV who had sex with a non-regular (non-sex worker) partner last year	36.6	93
% <u>female</u> PLHIV who had sex with a non-regular (non-sex worker) partner last year	16.0	131
% <u>male</u> PLHIV who had sex with a sex worker last year	36.6	93
% <u>male</u> PLHIV who had sex with 2 or more partners last month (concurrency)	11.8	93
% <u>female</u> PLHIV who had sex with 2 or more partners last month (concurrency)	0.0	131
Condom use:		
% <u>male</u> PLHIV who used condom during their most recent sex with a spouse/live-in partner (last year)	76.0	59
% <u>female</u> PLHIV who used condom during their most recent sex with a spouse/live-in partner (last year)	64.3	42
% <u>male</u> PLHIV who used condom every time they had sex with a spouse/live-in partner (last year)	47.5	59
% <u>male</u> PLHIV who used condom every time they had sex with a spouse/live-in partner (last year)	36.7	42
% <u>male</u> PLHIV who used condom during their most recent sex with a non-regular partner (last year)	75.6	33
% <u>female</u> PLHIV who used condom during their most recent sex with a non-regular partner (last year)	61.1	18
% <u>male</u> PLHIV who used condom every time they had sex with non-regular partners (last year)	46.9	33
% <u>female</u> PLHIV who used condom every time they had sex with non-regular partners (last year)	30.0	18
% <u>male</u> PLHIV who used condom during the most recent sex with a commercial sex workers (last year)	77.3	22
% <u>male</u> PLHIV who used condom every time they had sex with sex workers (last year)	33.3	22
% PLHIV (both sexes) who used condom during the most recent sex with a sero-negative partner (last year)	47.3	57
% PLHIV (both sexes) who used condom every time they had sex with sero-negative partner (last year)	31.6	57
Access to counseling and support services:		
% PLHIV who received ART (last year)	86.6	224
% PLHIV who received psycho-social counseling services (last year)	74.1	224
% PLHIV who received nutritional counseling services (last year)	65.6	224
% PLHIV who received IGA support services (last year)	36.2	224
% PLHIV who participated in peer-support group (last year)	42.0	224
% PLHIV who received food/nutrition support (last year)	47.8	224

ANNEX II. QUESTIONNAIRE

TransACTION Program Baseline Survey Self-administered Questionnaire for use with PLHIV

Questionnaire # _____

INFORMED CONSENT FORM

DEAR (RESPONDENT):

The TransACTION program in Ethiopia, which is a collaborative program of the Save the Children Federation, Inc. (SC/US) and its partners, aims to reach out to the most at risk population (MARP) and PLHIVs in 120 towns of Ethiopia through HIV/STI prevention, care and support intervention activities. The TransACTION strategic objectives envisages at preventing new HIV infections among at risk population and strengthening linkage to care and support services to PLHIVs in towns and commercial hotspots along or linked to with major transportation corridors.

Integrating prevention, care and support activities to prevent secondary infection for PLHIV is among the primary activities of the TransACTION program in Ethiopia. To this end, the program will work with PLHIV associations and support groups in a number of towns including this town.

In order to design appropriate intervention activities, the TransACTION program needs to understand attitudes and practices of those we are trying to help, in relation to HIV status disclosure, discordances, and pregnancy/fertility preferences, including their sexual behaviors and condom use. This study also attempts to obtain information about access to key services including care and support, psychosocial, counseling, peer-support group, among others. We are asking these questions of people who are living with HIV as well as those who are felt to be at risk.

We would appreciate it if you would take about 15 minutes to respond to this questionnaire. We will get similar information from others. Your responses, together with others, will be combined and used for statistical summaries only. Your participation in this study is voluntary and you may refuse to answer any question. Special precautions will be taken to protect the confidentiality of your responses. Your name will not be written on the questionnaire. There are no foreseeable risks to you as a participant in this study; nor are there any direct benefits. However, your participation is extremely valued.

If you have any questions about the study, please contact Mela Research PLC at PO BOX 34422; Tel: +251118601442; E-mail at melainfo@melaresearch.com.

Thank you for your help. We appreciate your cooperation.

Do you want to participate in this study? Yes [] No []

SECTION 0: AREA IDENTIFICATION

01	Questionnaire # (to be given by the research team)	
02	Name of Town	
03	Town code (to be given by the research team)	[]
04	Name of PLHIV association	
05	Date and time	Date _____ Time _____

SECTION 1: BACKGROUND CHARACTERISTICS

101.	Sex	Male.....1 Female.....2
102.	How old are you?	Age in completed years.....[]
103.	What is your marital status?	Never married/single.....1 Currently married.....2 Widowed.....3 Divorced.....4 Live-in partner (but not legally married).....5 Other, specify _____
104.	If divorced, when did you divorce? [IN ETHIOPIAN CALANDAR]	Date _____ Month _____ Year _____
105.	Can you read and/or write?	Yes.....1 No.....2
106	What is the highest grade you have completed?	_____
107	Are you currently engaged in any income generating activity?	Yes.....1 No.....2
108	If you are currently engaged in any income generating activity, how do you earn your livelihood?	Government/NGOs employee.....1 Trading.....2 Daily laborer.....3 Handicraft.....4 Commercial sex work.....5 Farmer.....6 Work in the PLHIV association.....7 Home based care worker (paid).....8 Counselor (paid).....9 Others specify _____
109	For how long have you been engaged on your current work?	Number of months (if less than a year)... [] Number of years (If a year or more).... []

SECTION 2: DISCLOSURE OF HIV STATUS

201	When did you learn that you have HIV (for the first time)?	Date _____ Month _____ Year _____
202	Did you inform your spouse (or long term partner) that you have HIV ?	Yes.....1 No.....2 Do not have spouse.....8
203	Did you inform your children that you have HIV?	Yes.....1 No.....2 Do not have children.....8
204	Did you inform that you have HIV to your <u>mother</u> ?	Yes.....1 No.....2 Mother away /not alive.....8
205	Did you inform that you have HIV to your <u>father</u> ?	Yes.....1 No.....2 Father away /not alive.....8
206	Did you inform that you have HIV to your <u>siblings</u> ?	Yes.....1 No.....2 Have no siblings/away/not alive.....8
207	Did you inform that you have HIV to your <u>friend(s)</u> ?	Yes.....1 No.....2 Have no friend.....8
208	Did you inform that you have HIV to your <u>relative(s)</u> ?	Yes.....1 No.....2 Have no relative/away/not alive.....8
209	Apart from the people mentioned above, to whom did you inform that you have HIV?	_____ _____ _____
210	How comfortable are you in talking to your family and friends about your HIV status?	Not Comfortable at all.....1 Somehow Comfortable2 Unsure3 Comfortable4 Very Comfortable5

SECTION 3: DISCORDANCE HIV STATUS

301	IF CURRENTLY MARRIED Is your spouse or long term partner HIV positive?	Yes, he/she is HIV positive.....1 No, he/she is not HIV positive.....2 Do not know his/her HIV status.....8
302	IF DIVORCED /SEPARATED / WIDOWED Was your spouse HIV positive?	Yes, he/she was HIV positive.....1 No, he/she was not HIV positive.....2 Do not know his/her HIV status.....8
303	IF CURRENTLY NOT LEGALLY MARRIED BUT LIVING WITH A MAN: Is your partner HIV positive?	Yes, he/she is HIV positive.....1 No, he/she is not HIV positive.....2 Do not know his/her HIV status.....8
304	Did any of your current partners(s) get tested for HIV in the last 6 months?	Yes.....1 No2
305	Did any of your past partners(s) get tested for HIV in the last 6 months?	Yes.....1 No2
306	Did you encourage any of your partner(s) to get tested for HIV?	Yes.....1 No2
307	IF YOUR PARTNER IS NOT TESTED FOR HIV: Do you advise him/her to test for HIV?	Yes.....1 No2 Unsure.....3
308	What measures should discordant couples take to prevent possible HIV transmission from one to the other? please explain	_____ _____ _____

SECTION 4: PREGNANCY AND FERTILITY PREFERENCES

401	Have you ever given birth to any live born child?	Yes.....1 No2
402	Total number of Children ever born?	Boys ____ Girls ____ Total ____
403	When did you give birth to your youngest child? [IN ETHIOPIAN CALANDAR]	Day ____ Month ____ Year ____
404	FOR FEMALE RESPONDENTS: Are you pregnant now? FOR MALE RESPONDENTS: Is your wife/partner pregnant now?	Yes..... 1 No..... 2 Unsure.....3
405	NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE: IF YOU ALREADY HAVE CHILDREN OR PREGNANT: Would you like to have another child, Or would you prefer Not to have any more children?	I want to have (another) child.....1 No more/none.....2 Undecided/unsure3 Do not know/up to God.....8
406	IF YOU DO NOT HAVE ANY CHILD: Would you like to have a child or would you prefer not to have any children?	I want to have (another) child1 No more/none.....2 Undecided3 Do not know/up to God.....8
407	What measures should a HIV positive couple do to prevent pregnancy and child birth?	_____ _____ _____

SECTION 5: COUNSELING AND SUPPORT SERVICES

501	Have you ever received Psycho-social counseling service in the last 12 months (<i>since Hamle 2001</i>)?	Yes.....1 No2
502	Have you ever received Nutrition-counseling service in the last 12 months (<i>since Hamle 2001</i>)?	Yes.....1 No2
503	Have you ever received Food/nutrition support service (rationing or therapeutic) in the last 12 months (<i>since Hamle 2001</i>)?	Yes.....1 No2
504	Have you ever received ART in the last 12 months (<i>since Hamle 2001</i>)?	Yes.....1 No2
505	Are you currently taking ART?	Yes.....1 No2
506	Have you ever received IGA service in the last 12 months (<i>since Hamle 2001</i>)?	Yes.....1 No2
507	Have you ever participated in a peer support group in the last 12 months (<i>since Hamle 2001</i>)? <u>CLARIFICATION TO THE RESPONDENT</u> /PEER SUPPORT GROUPS ARE GROUPS WHERE PEOPLE WITH A COMMON GOAL OR SIMILAR PROBLEM MEET TOGETHER. THE ORGANIZER OF THE GROUP WILL PROVIDE INFORMATION AND OFFER COUNSELING SO THAT GROUP MEMBERS ARE BETTER ABLE TO ACHIEVE A GOAL OR OVERCOME A PROBLEM. BY MEETING IN A GROUP, GROUP MEMBERS ARE ABLE TO ENCOURAGE AND SUPPORT EACH OTHERS EFFORTS]	Yes.....1 No2

SECTION 6: SEXUAL EXPERIENCE AND CONDOM USE

6.1. Sexual Experience

[QUESTIONS 601-605 WILL BE APPLIED TO ALL RESPONDENTS]

601	Have you ever had sexual intercourse?	Yes 1 No..... 2
602	Have you ever had sexual intercourse_in the last 12 months (<i>since Hamle 2001</i>)?	Yes 1 No..... 2
603	How many sexual partners did you have in the last 12 months (<i>since Nebase 2001</i>)?	_____
604	Have you ever had sexual intercourse in the last 1 month?	Yes 1 No..... 2
605	How many sexual partners did you have in the last 1?	

6.2. Condom Use with Spouse OR Live-In Partner

[QUESTIONS 606-608 WILL BE APPLIED TO ONLY THE MARRIED RESOPNDENTS]

606	Have you ever had sexual intercourse with <u>your spouse</u> in the last 12 months (<i>since Nebase 2001</i>)?	Yes 1 No..... 2 If the answer is NOGo to question # 609
607	THINK ABOUT YOUR MOST RECENT SEX WITH YOUR SPOUSE OR LIVE-IN PARTNER. The last time you had sex with your spouse/live-in, did you use a condom?	Yes 1 No..... 2
608	Think about ALL your sexual intercourse with your spouse OR Live-In Partner LAST YEAR. With what <i>frequency</i> did you; and your SPOUSE/LIVE-IN use condom last year?	Every time..... 1 Almost every time2 Sometimes3 Never4

6.3. Condom Use with Non-Regular Sexual Partners

[QUESTIONS 609-612 WILL BE APPLIED TO ALL RESPONDENTS]

609	Have you ever had sexual intercourse with <u>A NON-REGULAR SEXUAL PARTNER</u> in the last 12 months (<i>since Nebase 2001</i>)?	Yes 1 No..... 2 If the answer is NOGo to question # 613
610	How many <u>NON-REGULAR SEXUAL PARTNER</u> did you have in the last 12 months (<i>i.e since last Nebase</i>)?	_____
611	THINK ABOUT YOUR MOST RECENT SEX WITH YOUR <u>A NON-REGULAR SEXUAL PARTNER.</u> The last time you had sex with this <u>NON-REGULAR SEXUAL PARTNER</u> , did you use a condom?	Yes 1 No..... 2
612	Think about ALL your sexual intercourses with the <u>NON-REGULAR SEXUAL PARTNER.</u> With what <i>frequency</i> did you and all your <u>NON-REGULAR SEXUAL PARTNER</u> use condom last year(<i>since Nebase 2001</i>)?	Every time..... 1 Almost every time2 Sometimes3 Never4

6.4. [Only For Men] Condom Use with Sex Workers

[QUESTIONS 613-615 WILL BE APPLIED TO ONLY THE MALE RESPONDENTS]

613	ONLY FOR MALES Have you ever had sexual intercourse with a commercial sex worker last year (<i>since Nebase 2001</i>)?	Yes 1 No..... 2
614	Think about your most recent sex with a COMMERCIAL SEX WORKER The last time you had sex with this commercial sex worker , did you use a condom?	Yes1 No 2
615	With what <i>frequency</i> did you use condom with all the COMMERCIAL SEX PARTNERS last year(<i>since Nebase 2001</i>)?	Every time..... 1 Almost every time2 Sometimes3 Never4

SECTION 7. ATTITUDE ABOUT DISCLOSURE, PREGNANCY AND CONDOM

701	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A person living with HIV should inform that he/she has HIV to spouse"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
702	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV should inform that he/she has HIV to his/her children"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
703	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV should inform that that he/she has HIV to family"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
704	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV should inform that that he/she has HIV to friends"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
705	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "If one partner is HIV positive and the other is HIV negative such couples/partners should be separated/divorced"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
706	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV should avoid pregnancy in order to avoid giving birth to HIV infected child"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
707	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "I don't need to use a condom if I am HIV positive"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
708	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT:	Strongly disagree.....1 Disagree.....2

	"A PLHIV has a responsibility NOT to pass the virus to others"	Unsure3 Agree4 Strongly agree5
709	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A person living with HIV should use condom with ANY sexual partner in order to reduce the chance of passing of the virus to others"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
710	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: A PLHIV shouldn't bother about passing the virus to others because no body protected him/her from getting infected	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
711	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "There is no need to use condom if both partners are HIV positive"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
712	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV should use condom with SPOUSE even if both are HIV positive in order to reduce the chance of getting infected with another type of HIV strain"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
713	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A person living with HIV should use condom with ANY sexual partner including spouses in order to reduce the chance of getting infected with another type of HIV strain"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
714	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "HIV positive couples should use condom in order to prevent pregnancy"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
715	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "HIV positive couples do NOT need to use condom if they are using other contraceptive methods to prevent pregnancy"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
716	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV is LESS likely to pass the virus to others if he/she is NOT sick "	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
717	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV is LESS likely to pass the virus if he/she is taking ART"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
718	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT: "A PLHIV who is NOT sick do not need to use condom because he/she is LESS likely to pass the virus"	Strongly disagree.....1 Disagree.....2 Unsure3 Agree4 Strongly agree5
719	DO YOU AGREE OR DISAGREE WITH THIS STATEMENT:	Strongly disagree.....1 Disagree.....2

	"A PLHIV taking ART do NOT need to use condom because he/she is LESS likely to pass the virus"	Unsure3 Agree4 Strongly agree5
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SECTION 8 PERCEPTION OF THE RELEVANCE OF DIFFERENT SERVICES TO PLHIV

801	How important is it to you to participate in a peer support group?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5
802	How important is it to you to receive Psycho-social counseling?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5
803	How important is it to you to receive Food/nutrition support services (rationing or therapeutic)?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5
804	How important is it to you to receive Nutrition–counseling services?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5
805	How important is it to you to receive couple counseling services?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5 Not married.....8
806	How important is it to you to participate in an in-come generating activity?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5
807	How important is it to you to receive Home–based Care services?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5
808	<u>ONLY FOR FEMALES:</u> How important is it to you to receive reproductive health services (such as pregnancy, antenatal care, etc)?	Not at all.....1 A little.....2 Moderately.....3 Very much.....4 Extremely.....5

THANK YOU FOR YOUR TIME

END