Global Journal of Medical research
Diseases
Volume 13 Issue 2 Version 1.0 Year 2013
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals Inc. (USA)
Online ISSN: 2249-4618 & Print ISSN : 0975-5888

Assessment of Sexual Behavior, Unmet Reproductive Health Needs and Fertility Intention of People Living with HIV/AIDS, Jimma, South West of Ethiopia

By Kalkidan Hassen & Misra Abdullahi
Jimma University

Abstract - Providing effective reproductive health service to people living with HIV/AIDS requires understanding of their sexual behavior, fertility intention and unmet reproductive needs. Failure of having evidence based responses on gaps identified on these needs might bring an increased HIV incidence, unintended pregnancies, vertical transmission, stigma and discrimination. Facility based cross sectional study was conducted in southwest town of Jimma, Ethiopia. Quantitative data was collected 632 study participants from the ART. A structured interview administered questionnaire was used to collect the data. Verbal and written consent was obtained from each client and data was collected by nurses. Data was analysed by SPSS version16 windows software. Most of the respondents 341(54.0%) were females, with a mean age of 29.6 ± 7.98 years. Most 86.7% were sexually active, of which 499(80.0) were had a regular partner. Casual sex was reported to be 35 (6.4%). Unprotected sexual contact was found to be 16.2% among male and 4.4% among females. Disclosure of own sero-status to partner was 90.7% while knowledge of Sexual Partner HIV status was 91.4%. Only 385 (70.3%) used condom always the remaining 163 (29.7%) used condom sometimes.

GJMR-F Classification : WM611, WQ208

Strictly as per the compliance and regulations of:

Assessment of Sexual Behavior, Unmet Reproductive Health Needs and Fertility Intention of People Living with HIV/AIDS, Jimma, South West of Ethiopia

Kalkidan Hassen [α] & Misra Abdullahi [σ]

Abstract - Providing effective reproductive health service to people living with HIV/AIDS requires understanding of their sexual behavior, fertility intention and unmet reproductive needs. Failure of having evidence based responses on gaps identified on these needs might bring an increased HIV incidence, unintended pregnancies, vertical transmission, stigma and discrimination. Facility based cross sectional study was conducted in southwest town of Jimma, Ethiopia. Quantitative data was collected 632 study participants from the ART. A structured interview administered questionnaire was used to collect the data. Verbal and written consent was obtained from each client and data was collected by nurses. Data was analysed by SPSS version16 windows software. Most of the respondents 341(54.0%) were females, with a mean age of 29.6 ± 7.98 years. Most 86.7% were sexually active, of which 499(80.0) were had a regular partner. Casual sex was reported to be 35 (6.4%). Unprotected sexual contact was found to be 16.2% among male and 4.4% among females. Disclosure of own sero-status to partner was 90.7% while knowledge of Sexual Partner HIV status was 91.4%. Only 385 (70.3%) used condom always the remaining 163 (29.7%) used condom sometimes. Disclosure of own status to partner was 90.7% while STI after being diagnosed for HIV was nearly 12%. About quarter of the study population has expressed desire for fertility 149 (23.6%). Among the sexually active females, 229 (82.3%) used contraceptive. Methods used were injections 63 (27.5%), Pills 71 (31.0%), condom 84(36.7%) and IUD or implants 11(4.8%). More than 88% of women prefered integrated service of HIV care and Family planning service. Risky sexual behavior and fertility intention were high and need for integrated service was found the most wished for. Interventions should be made to assist people with HIV to make effective decisions on safe sex and fertility.

I. Introduction

The rise in prevalence of HIV/AIDS impedes the struggle health sector of developing nations towards achieving desired goals.[1] Adult HIV prevalence in Ethiopia is lower compared to sub-Saharan African countries. However, the sero-survey in late 2010 showed an estimated adult HIV prevalence of 2.4% (1,216,908 people) which formulate Ethiopia among the countries of largest HIV infected populations in the world. [2]

As antiretroviral therapy is more widely available, an emerging issue such as meeting the reproductive health needs of people living with HIV/AIDS who are living longer and healthier becomes a priority. Information about sexual behavior and reproductive health needs of people living with HIV/AIDS is essential to design intervention aimed at safer sexual practice and reproductive health among these people.[3] Unmet needs leads to a high level of unintended pregnancy, vertical transmission and rise in incidence of HIV infection. [4]

In a study done in Thailand showed 41% of the PLWHA were having sex with a regular partner of which 28% did not know partner's HIV status. [5] A study done in Tanzania showed more than half of the PLWHA (52%) said they have regular sex without having protection.[6] In a study done in Kenya, nearly half of the respondents had been sexually active and were engaged in risky sexual behavior such as multiple sexual partners, sex with casual partner, and inconsistent condom use. [1]

Family planning and HIV/AIDS prevention care, and treatment services are useful entry points for many types of services that people in their reproductive years need. No opportunity should be missed. Sub-Saharan Africa has particular needs for both HIV and family planning services.[4] Family planning offers HIV positive clients the opportunity to prevent unintended pregnancies, prevent mother to child transmission of the virus.[6] However, many reproductive health needs of HIV infected individuals are not met in many countries of the developing world.[7]

Family planning can help achieve HIV prevention goals and improve maternal and child health outcomes. Likewise, HIV services can help expand access to family planning services. Family planning and HIV/AIDS programs often serve similar populations, particularly in countries with generalized HIV epidemics driven by heterosexual transmission.[8]

Fertility intentions of HIV positive individuals are shaped by a number of conflicting considerations; societal expectation, stigma, and perceived negative caregivere attitude or positive influence of health workers, fear of giving birth to an infected child, having had an infected baby and socio-economic factors are the most important.[9] In a study done in Ghana over 64% of women living with HIV would like to have children in

the future, Two-third of the respondents had ever used a method to delay or avoid pregnancy. Among those who say wanting no children the main reasons are concern about own health or partners health, fear of transmitting the disease to their child and having enough children. [10] Hence this research is done with the objective of this study was to assess the sexual behavior, unmet reproductive health needs and fertility intention of HIV positive women and men on antiretroviral therapy in Jimma, Ethiopia.

II. Subjects and Methods

a) Study settings and participants

Facility based, cross-sectional quantitative study design was used. The study was conducted from December 2011 to April 2012 in Jimma University specialized Hospital, Jimma, South west Ethiopia. Jimma is one of the 17 Zones of the Ethiopian Region of Oromia. Based on the 2007 Census conducted, this Zone has a total population of 2,486,155, an increase of a population density of 159.690. While 137,668 or 11.31% are urban inhabitants, a further 858 or 0.03% are pastoralists. Our sample was taken from 632 PLWHA currently following ART at least for the last six month duration. Ethical clearance was reviewed and approved from Jimma University Collage research and publication committee. Written Informed consent was obtained from each Individual study subject.

b) Measurements

The dependent variables were Sexual risk behavior, unmet contraceptive need and Fertility intention for the last six months prior to the data collection. The independent variables include socio-demographic characteristics (age, sex, income, education, religion, marital status, occupation), sexual charactersitics (number of partner, duration of relationship, type of partner, HIV status of partner, disclousure of own and knowlage of partners HIV status) and service related issues (family planning methods and family planning service preferences).

Data were collected by a pre-tested questionnaire which was adopted from different studies. The questionnaire includes demographic, sexual risk behaviors, type of sexual partnership, partner sexual characteristics, disclosure status, disclosure barriers, disclosure outcomes, fertility intention and factors related to fertility.

c) Data analysis and processing

Data collectors and supervisors were trained prior to data collection. Questionnaires was checked daily for error or completeness, and corrective measure will be taken..Quantitative data was analyzed using SPSS version 17 windows based statistical software while qualitative data was analyzed by thematic framework analysis after gathering different data that appeared commonly and grouped under theme.

III. Results

a) Socio-demographic characters

Most of the respondents 351(54.0%) were males, with a mean age of 29.6 ± 7.98 years, Oromo by ethnicity, married and Orthodox Christians by religion. Majority of the respondents have completed a secondary education 350 (33.6%) and 170 (29.5%) have completed primary education while quarter of them 54(24.9%) finished college or university. Majority of respondents 99 (45.6) receive monthly salary below 1000 Birr or nearly 50 dollars. Most 355 (56.1) of the respondents have one or more children (Table 1).

b) Sexual Behavior

Considering the sexual activity of the subjects in the past six months of study Period 548(86.7%) were active of which 499(80.0) were with regular partner and 78(14.2 of participant reported sex with two or more partner. Casual sex was reported to be 35 (6.4) (Table 2). Unprotected sexual contact was found to be 16.2% among male and 4.4% among females. Disclosure of own sero-status to partner was 90.7% while knowledge of Sexual Partner HIV status was 91.4% (Table 3) Among sexually active, condom use was 494 (90.14%), of which only 385 (70.3%) used condom always the remaining 163 (29.7%) used condom sometimes. The reason mentioned for not using condom always was partner dislike condom 77(14.0%), client/spouse needs to have child 92 (16.8%), partner positive 63(11.5%). Disclosure of own status to partner was 90.7% while STI after being dignosed for HIV was nearly 12%.

c) Family planning utilization and unmet needs of it

Among the sexually active females, 229 (82.3%) used contraceptive. The methods they used includes injectable 63(27.5%), Pills 71 (31.0%), condom 84(36.7%) and IUD or implants 11(4.8%). Personal experience (48.9%) was the common reason for current choice of contraceptive methods followed by health education given 31.4% and friends' advice/experience 19.7%. Study subjects who were not used contraception reasoned fertility intention 63.4%, abstinence from sex 33.0 %, fear of drugs 36.6 reaction% and other health related concern 42.9%. About 59.1% disclose their HIV status to family planning service provider. Fear of stigma 17%, fear of breach of confidentiality 34% and failure of knowing its important 56% were the major reason for not disclosing HIV status to the family planning service provider (Table 4) Most of the respondents prefer family planning care would have been provided in Art clinic (88.6%). The major reasons expressed were provider familiarity 32.6%, to reduce stigma 30.1% and to save time 72.6%. Majority of respondents know their right of reproduction 94.6%.

d) Fertility Intention

Most 389 (61.5%) of the study subjects had one or more child. About quarter of the study population has expressed desire for fertility 149 (23.6%). The major reason for desire for fertility were Child bring happiness, Societal, family and friends expectation, to leave something behind. Those who denied desire for fertility reasoned fear of mother to child transmission, to avoid orphaned kid, already had the desired children (Table 5). In the bivariate analysis, among the socio-demographic variables, sex, age, religion, marital status and having live spouse were found significantly associated with fertility decision (Table six)

IV. Disscussion

We assessed the sexual behavior, unmet reproductive health needs and fertility intention of HIV positive men and women on antiretroviral therapy in Jimma, south west of Ethiopia by using facility based cross-sectional study design during December to March 2011. Participants reported the about their sexual behavior they had in their past six months prior to data collection, fertility intention and unmet reproductive health needs.

Among the study subjects those who were sexually active for their last six months prior of study period were 86.7%, higher than the studies done Bahrdar town of Ethiopia (48.9%), South Africa (65 %), and Botswana (62%), but comparable Mexico (87%) [11-14]. In this study Most 80% reported having regular sexual partner, a similar steady partnership was the observed in a studies done in Addis Ababa (82%) and Botswana (80%) [15,16]. Those who reported multiple partners were 14.2, higher than the study done in Addis Ababa and other study done in South Africa[15, 17]. Differences are possibly attributable to the study setting and socio demographic determinants. Concomitantly, the variation also could be due to methodological heterogeneity.

Disclosure of own status to partner was 90.7%, comparable with a studies conducted in Uganda and South Africa which showed 97% and 90% of subjects had disclosed their serostatus [18,17]. However this is far higher than studies done in Illubabor zone of Ethiopia and Rwanda [19,20]. The difference might be attributed to the study period, awareness might increase in due time.

Unprotected sexual contact was found to be 9.8%, much less than the study done in Addis Ababa which revealed 36.9% of the respondents had condom-unprotected ('risky') sexual intercourse [15]. Similarly our finding is less than study reports from United States and the South Africa, where the prevalence of risky sex was 30% and 23%, respectively [21,22]. In other studies conducted in Brazil and Uganda, 25% and 35% of HIV positive people attending ART intentionally practiced high risk sex, respectively [23,24]. Variation of this can be socio-cultural issues related to sexual disclosure in the community where having multiple partners is seen with lots of odds and it might be related to the high reported intention to have a child in this study, and the fact that most of the respondents were in a marital relationship, unlike the other studies.

Use of Condom was 90.14%, of which only 70.3% used condom always. The remaining 163 29.7% used condom sometimes. Comparable finding was observed in the study done in Hosana of Ethiopia, and contributes a lot for expansion of AIDS and other sexually transmitted illness doubling the burden[25]. This indicates that the need for establishment of effective safe sex practices and condom use behavior among PLWHAs. The reason mentioned for not using condom were identified, partner dislike condom, fertility intention and partner positive were noted nearly with equal proportion. The same classical reasons were mentioned in different proportion in studies conducted in the Hong conk and Dominican Republic [26,27]. Casual sex was reported to be 35 (6.4), much less than the study done in Botswana which reported 79 (32%) of had casual partner [16]. Almost 42% respondents did not disclose their HIV status to their family planning service provider. Unlike the study conducted in Addis Ababa the most common reason identified in this study was "I didn't thought its important" [29].

Family planning use is important for HIV positive individuals like any HIV negative people to space & limit birth and to prevent unintended pregnancy irrespective of their fertility desire [3-5]. Furthermore, avoiding unintended pregnancy among HIV positive is one way of vertical transmission reduction [2]. Most contraceptives are safe and effective for use by people with asymptomatic HIV infection as well as people who developed HIV/AIDS disease [5]. Among the sexually active females most (82.3%) used contraceptive. The most common preferred and currently used family planning methods were condom followed by hormonal. Our result agreed with Studies conducted in Kenya, Zimbabwe and a worldwide review by Mitchell and Stephens [28-30].

Desire for children takes many forms, including how many, when, how, with whom, that vary greatly from one context to another. However, despite complex all are the priority reproductive health concern. Among respondents, nearly quarter of the study population has expressed their desire for fertility (23.6%). This finding is lower than the studies done in north eastern region of south wollo (36.4%) and southern part of Ethiopia 33.9% [31, 32]. The study also revealed that current fertility decision is lower than a study conducted in Zimbabwe, and Nigeria[29,33]. Difference in the desire for fertility intention among the above studies could be attributed to difference in study setting, socio-economic variables and the fact that fertility intention is determined by health status, being a phenomenon that is dynamic rather than fixed over time. The major reason expressed in this

study were "Child bring happiness", Societal, family and friends expectation, "to leave something behind" and were almost reasoned by the above all studies with different proportion.

More than 88% of women living with HIV responded their choice of integrated service of HIV care and Family planning service. The way in which a health care providing system approaches may affect a woman's relative comfort in interacting with the broader health care system. This is evidenced by the major reasoned expressed from respondents was familiarity and belongingness. The integration of FP services into HIV care has been identified as a promising strategy to reduce unmet reproductive health needs of contraception among women living with HIV, and our finding affirm its necessity. Like much of sub Sahara African countries our data was in favor of integrating HIV and family planning services to create a meaningful solutions which may require a fundamental reconsideration of HIV support structures and service delivery paradigms, which might challenge our poor economic settings [34].

Nearly 95% of the study subject knew their reproductive health highlights as international and national expert consultations on HIV highlights the right of HIV-positive people to decide on freely and responsibly on all aspects of their sexuality, including protecting and promoting their sexual health, be free from discrimination, coercion or violence in their sexual lives and in all sexual decisions, expect and demand equality, full consent, mutual respect and shared responsibility in sexual relationships [9].

a) Abbreviations

AIDS: Acquired Immune deficiently syndrome
ART: Anti retro viral therapy
IUD: Intra uterine Derive
OCP: Oral contraceptive pills
PLWHA: People living with HIV,/or manifestations of AIDS
SPSS: statistical package for social sciences
STI: Sexually transmitted infections
WHO: world health organization

Acknowledgment

We acknowledge Jimma University for funding of this project.

References Références Referencias

1. Federal Ministry of Health-Federal HAPCO: Single Point HIV Prevalence Estimate, June 2007
2. Ethiopian Health and Nutrition Research Institute, Preliminary data from AIDS in Ethiopia, 7th Edition, March 2010.
3. Myer L. Morroni C. Rebe K. Prevalence and determinants of fertility intentions of HIV-infected women and men receiving antiretroviral therapy in South Africa. AIDS Patient Care STDS.2007;21:278–285.
4. UNAIDS/WHO (2004). AIDS epidemic update. Geneva, http://www.unaids.org/wad2004/report.html; [Accessed May28, 2011]
5. Oberdorter, P., Thiapinta, D., Suwantherangoon J. Change in sexual behavior of people living with HIV after 12 month antiretroviral therapy experience from Thailand. *AIDS* 2006 - XVI International AIDS Conference Abstract no. WEPE0824
6. World Health Organization. Prevention of mother-to-child transmission of HIV generic training package. 2004. Available at www.cdc.gov/globalaids/Resources/pmtct-care
7. Morrison, J., Fleischman J. Integrating reproductive health and HIV/AIDS programs. Strategic opportunities for PEPFAR. 2006. A report of CSIS task force on HIV/AIDSp 6-7
8. Bruyn, M. 2006. HIV/AIDS and reproductive health, sensitive and neglected issues: http://www.ipas.org [Accessed Sept 2, 2011]
9. Mpangile, G., Sima, M., Praag, E., Mmbaga V. 2006. Sexual and child bearing needs of people on ART: The forgotten agenda. Liking reproductive health and family planning with HIV/AIDS program in Africa. http://www.jhsp.edu/gatesinstitute/cr/fp/_hiv [Accessed Sept 2, 2011]
10. Adamchak SE, Janowitz B, Grey T, Otterness C. Introducing family planning services into an ART treatment program in Ghana: results of a pilot intervention. Durham (NC): Family Health International; 2007. Available at http://www.jhsp.edu/gatesinstitute/cr/fp/_hiv[Accessed Sept 2, 2011]
11. Estifanos Y., Desalegn T., Solomon M. Patterns of condom use and associated factors among adult HIV positive clients in North Western Ethiopia: a comparative cross sectional study, BMC Public Health 2012, 12:308 doi:10.1186/1471-2458-12-308
12. B.O. Olley, A.G. Sunmola et al. Changes in sexual activity and condom use among patients living with HIV in South Africa. AIDS Conference. /WWW.aids2004.org/
13. Seth C Kalichman, Dolly Ntseane, Keitseope Nthomang, Mosarwa Segwabe, Odireleng Phorano, and Leickness C Simbayi. Recent multiple sexual partners and HIV transmission risks among people living with HIV/AIDS in Botswana. Sex Transm Infect. 2007 August; 83(5): 371–375.
14. S.C. Trevino, G. Tecuapetia et al, Influence of diagnosis on the sexual activity of HIV infected Mexican patients, Abstract book. Vol 2, 4th, XVIII International AIDS Conference July 18-23 2010. Vienna, Austria. www.aids2010.org
15. Dessie Y, Gerbaba M, Bedru A, Davey G: Risky sexual practices and related factors among ART

attendees in Addis Ababa public hospitals, Ethiopia: A cross sectional study. BMC Public Health 2011, 11:422
16. Kalichman SC, Ntseane D, Nthomang K, Segwabe M, Phorano O, CSimbayi L: Recent multiple sexual partners and HIV transmission risks among people living with HIV/AIDS in Botswana. Sex Transm Infect 2007, 83:371-375.
17. Nachega JB, Lehman DA: HIV/AIDS and antiretroviral treatment knowledge, attitudes, beliefs, and practices in HIV-infected adults in Soweto, South Africa J Acquir Immune Defic Syndr 2005, 38:196-201.
18. Nakayiwa S: Disclosure Experiences among HIV-Infected Persons Taking Anti-Retroviral Therapy in Rural Uganda [Abstract]. Abstract number. 509. The President's Emergency Plan for AIDS Relief Annual Meeting. The 2006 HIV/AIDS Implementers' Meeting Building on Success: Ensuring Long-Term Solutions June 12–15, 2006, Durban, South Africa
19. Kebede D., Wassie L., Yismaw D. Determinants and outcomes of disclosing HIV-sero positive status to sexual partners among women in Mettu and Gore towns, Illubabor Zone southwest Ethiopia. Ethiop.J.Health Dev. 2005;19(2)
20. Keogh P, Allen S, Almedal C, Temahagili B. The social impact of HIV infection on women in Kigali, Rwanda. A prospective study. Social Science and Medicine 1994; 38:1047-53
21. Kozal MJ, Amico KR, Chiarella J, Schreibman T, Cornman D, Fisher W, Fisher J, Friedland G: Antiretroviral resistance and high-risk transmission behavior among HIV- positive patients clinical care. AIDS Care 2004, 18(16):2185-2189.
22. Kiene S, Christie S, Cornman D, Fisher W, Paul A, Pillay S, Friedland S, Fisher J: Sexual risk behavior among HIV-positive individuals in clinical care in urban KwaZulu-Natal, South Africa. AIDS 2006, 20(13):1781-1784.
23. M.D.C. Guimaraes, P.V. Chin-Hong. Prevalence & determinants of high risk sexual behavior among HIV-infected men& their male or female partners in Brazil. The XV International AIDS Conference, Abstract no. WePeC6067. Available at http://www.iasociety.org/Abstracts/A2171181.aspx
24. M.H. Bategagya, C. Kityo et al. Sexual behavior of HIV-positive patients attending an urban HIV/AIDS Clinic-Joint Clinical Research Center. Kampala, Uganda, Abstract Book, 2:458-1412 available at http://www.iasociety.org/Abstracts/A2171491.aspx
25. Tuloro T, Deressa W, Ali A, Davey G. The role of men in contraceptive use and fertility preference in Hossana Town, Southern Ethiopia. Ethiop J Health Dev 2006; 20(3): 2-8.
26. A S M Abdullah1, R Fielding1, A J Hedley1, S H Ebrahim2, Y K Luk1. Reasons for not using condoms among the Hong Kong Chinese population: implications for HIV and STD prevention, Sex Transm Infect 2002;78:180-184
27. Sears D, Cabrera C, Ortiz F, Anderson B, Stein M. Sexual risk behavior among HIV-positive patients at an urban clinic in Santiago, Dominican Republic. AIDS Care. 2011 Dec;23(12):1637-43.
28. Sara Jeannette Newmann1, Craig R. Cohen1, Maricianah Onono2, Rachel Steinfeld1, Elizabeth A. Bukusi, Cinthia Blat, Katie Doolan, Starley B. Shade, Harriet Sande, Wanjiku G. Wanjiku2, Goretty A Ong'udi2, Daniel Grossman3. Contraceptive practices and receptivity to integrating family planning services into HIV care and treatment among HIV-infected women and men attending HIV care clinics in Nyanza Province, Kenya. Conference peceeding FP Conference 2011. Uganda. Available at https://www.conftool.com/fpconference2011/index.php?page=browseSessions&abstracts=show&form_session=53
29. Rayah F. Carolin M. Sefer. Sex and Reproductive choice: Findings from "positive women voices & choices" in Zimbabwe. HIV/AIDS, Sexual, & Reproductive health, Vol.11, No.22, May 2003
30. H S Mitchell 1E Stephens2 Contraception choice for HIV positive women Review Sex Transm Infect 2004;80:167-173
31. M Getachew, F Alemseged, M Abera, A Deribew Factors affecting fertility decisions of married men and women living with HIV in South Wollo Zone, Northeast Ethiopia. Ethiopian Journal of Health Development. 2010; 24: 3
32. EPHA. Distribution of PLWHA attending ART service by fertility desire in SNNPR, Extract No 5, Addis Ababa, ETHIOPIA. 2008
33. Oladopo, Daniel O, Odusoga, and Ayoola-Sotubo O. Fertility Desire and HIV Positive patients at a Suburban specialist center, Dece 2005, 97 (12) 1672-1681
34. Wilcher, R. and Cates, W., 2009. Reproductive choices for women with HIV. Bulletin of the World Health Organization, 87(11), 833-9.

Table 1 : Basic socio-demographic characteristics of the respondents, Jimma University Specialized Hospital, March 2007

Variable	N	%
Sex		
Male	291	46.0
Female	341	54.0
Age (years)		
< 20	23	3.6
21–25	139	22.0
26–35	288	45.5
> 36	182	28.8
Education		
Illiterate	55	14.3
Primary education	170	29.5
Secondary education	350	33.6
Collage/university education	35	22.6
missing	10	
Ethnicity		
Oromo	296	48.4
Amhara	190	34.8
Dawro	70	7.2
Keffa	28	4.3
Tigre	17	2.1
Guraghe	22	1.6
Others	17	1.7
Religion		
Orthodox	444	70.3
Muslim	128	20.3
Protestant	47	7.3
0thers	11	1.7
Place of residence		
Urban	490	77.5
Rural	142	13.5
Employment		
Employed	378	59.8
Not employed	254	41.2
Marital status		
Married	341	57.1
single	71	11.2
widowed	45	7.1
divorced/separated	175	27.6
Family income ETB*		
<1000	385	60.9
>1000	247	39.1

*Exchange rate 1 USD = 18.30 Ethiopian Birr (ETB)

Table 2 : Sexual activity among women and men on ART in Jimma, Dec., 2011

Sexual Activity	Male N (%)	Female N (%)	Total N (%)
Sexually active	270 (92.8)	278 (81.5)	548(86.7)
Sex with regular partner	230 (79)	269 (78.9)	499(80.0)
Sex with two or more partner	50 (17)	18 (5)	78(14.2)
Sex with casual partner	23 (8.5)	12(4.3)	35(6.4)

Table 3 : Frequency of unprotected sexual practice, partner sero-status and disclosure among women and men on ART in Jimma. Dec., 2011

Variables	N (%)
Unprotected sexual contact	
Male	47 (16.2)
Female	15(4.4)
Sexual Partner HIV status	
HIV positive	489(89.2)
HIV negative	12(2.2)
Don't Know	47(8.6)
Disclosure of own status to partner	
Yes	497(90.7)
No	45(9.3)
History of Sexually transmitted illness after diagnosed for HIV	
Yes	76(11.9)
No	557(90.1

Table 4 : Distribution of contraceptive use and its factors after initiation of ART in Jimma. December, 2011

Variables	N	%
Current family planning use n=229		
• OCP	71	31.0
• Condom	84	36.7
• Injectables	63	27.5
• IUD	7	3.1
• Implants	4	1.7
Reasons for current choice of contraceptive methods n=229	72	31.4
• health education given	45	19.7
• From friends' advice/experience	112	48.9
• Personal experience	63	27.5
• Dual protection		
Reason for not to using contraceptive method all females (n=112)		
• Fertility intention	41	36.6
• Abstinence from sex	71	63.4
• Fear of drugs reaction	37	33.0
• Health concern	48	42.9
Disclose of HIV status to your FP service provider (n=229)		
• Yes	133	59.1
• No	96	41.9

Reason for not disclosing HIVstatus to FP service provider (n=96)		
• Fear of stigma	17	17.7
• Fear of breach of confidentiality	34	35.4
• Don't think that it is important	56	58.3
• Don't know	4	4.1
Do you like ART and FP service to be given at one service delivery site (632)		
1. Yes	434	68.7
2. No	136	21.5
3. Don't know	62	9.8
Location of FP counseling and service		
• In the family planning clinic	72	11.4
• Within the ART clinic	560	88.6
Reason for preferring ART clinic for FP service		
• The ART providers are familiar		
• To reduce stigma	206	32.6
• To save time	190	30.1
	459	72.6
Do HIV positive people have the right of reproduction		
• Yes		
• No	598	94.6
• Don't know	27	4.3
	7	1.1

Table 5 : Fertility intention and its determinant among women and men on ART in Jimma. December, 2011

Variables	N	%
Number of live child/ children (n=632)		
• I have	389	61.5
• I don't have	243	38.5
Fertility intention (n=632)		
• Yes	149	23.6
• No	483	76.4
Reason for fertility intention (n=149)		
• Child bring happiness	75	50.3
• Societal, family and friends expectation.	66	44.3
• Partner's desire.	21	14.1
• To leave something behind	27	18.1
• To avoid stigma from not having child	9	6.1
Reason for not having fertility desire (n=483)		
• Fear of transmission of the virus to the child	236	48.9
• Had a desired number of children?	98	20.3
• fear of leaving AIDS orphan	177	36.6
• health concern	56	11.6
• Economical reason	78	16.5

Table 6 : Factors associated with fertility decisions of study participants, ART in Jimma. December, 2011

Characteristics	Fertility Intention		Odds Ratio	
	Yes	No	COR (Lower -Upper limit)	AOR (Lower -Upper limit)
sex				
Male	82	209	0.62 (0.44-0.91)	0.51 (0.31-0.87)*
Female	67	274	1	
Religion				
Christians	90	401	2.95 (1.94-4.48)	2.74 (1.56-4.21)**
Muslims	51	77	1	
Marital status				
Married	58	283	2.22 (1.52-3.23)	2.29 (1.23, 4.26)**
Un married	91	200	1	
Age (in years)				
15-34	85	40	0.25 (0.16-0.41)	0.21 (0.219, 0.52)***
35-54	64	118	1	
Live child				
Yes	47	342	1	
No	102	141	5.26 (3.54-7.83)	7.33 (3.56-11.2)*

Note: ***P<0.001, **P<0.01 and *P<0.05