



**Addis Ababa University
Collage of Health Science
School of Public Health**

***Status of family planning service Integration in Chronic HIV
Care Clinics for Women on Reproductive Age group in
selected health facilities in Dessie town, North East Ethiopia***

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Dedication

To all women living with HIV that suffered from unintended pregnancy and their infants exposed to HIV

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Acronym

AAU	Addis Ababa University
AIDS	Acquired Immuno- Deficiency Syndrome
ART	Anti Retroviral Treatment
AYRHS	Adolescent and Youth Reproductive Health Strategy
BMHO	Boru meda hospital
CHBC	Comprehensive Home Based Care
COR	crude odds ratio
DHC	Dessie health centre
DRHO	Dessie referral hospital
EDHS	Ethiopian Demographic Health Survey
FGAE	Family Guidance Association of Ethiopia
FHI	Family Health International
FMOH	Federal Ministry of Health
FP	Family Planning
HAPCO	Human Immuno Virus/ Acquired Immuno- Deficiency Syndrome Prevention and Control Office
HCT	HIV Counseling and Testing
HF	Health Facility
HIV	Human Immuno-Deficiency Virus
HSDP	Health Sector Development Programme
IUD	Intra Uterine Device
LAP	long acting and permanent
LWHA	Living with Human Immuno Virus/ Acquired Immuno- Deficiency Syndrome
MTCT	Mother to Child Transmission
NGO	Non Governmental Organization
PIHCT	Provider Initiative HIV Counseling and Testing
PLWHA	People Living with Human Immuno Virus/ Acquired Immuno- Deficiency Syndrome
PMTCT	Prevention of Mother to Child Transmission
PRE-ART	Pre- Anti Retroviral Treatment

RH	Reproductive Health
SNNPR	Southern Nation and Nationalities People Region
SPH	School of Public Health
STI	Sexually Transmitted Infection
TB	Tuberculosis
UNAID	United Nation Agency for International Development
UNFPA	United Nations Population Fund
UNICEF	United Nations International Children Education Fund
USAID	United States Agency for International Development
VCT	Voluntary Counseling and Testing
WHO	World Health Organization

Abstract

Introduction: Family planning is an important instrument to prevent unintended pregnancy. Integrating FP service in chronic HIV care clinics is facilitative intervention to preventing newborn from HIV by enabling interested women to prevent pregnancies.

Objective: The objective of this study was to assess the level of family planning service integration for women on reproductive age group in chronic HIV care clinics

Methodology: A cross sectional study was carried out from October 2010 to January 2011 in selected health facilities in Dessie town, North East Ethiopia. Women of reproductive age group that attended chronic HIV care were the study population. Single population proportion formula was employed to determine sample size. A total of 401 women attending the chronic HIV care were selected as study participants. Furthermore, nine chronic HIV care providers, facility HIV care service focal persons, and program managers at town and zonal level were included to provide qualitative information. Data were collected using clients exit interview by using case managers, and provider's interview and document review by the principal investigator.

Result: Four hundred one female clients who were attending chronic HIV care were interviewed. Of the total respondents, 393 (98 %) had ever heard about any family planning methods. From these ever heard, 238 (60.5%) of respondents reported as they have got counseling about FP in chronic HIV care clinics. Condom was the only FP method which is provided in chronic HIV care clinics. Thus, one hundred sixty eight (42.7%) respondents have been provided condom in the clinics. Among respondents who were provided condom, **108**(64.3%) received condom after counseling. Whereas, referral linkage between chronic HIV care clinics and FP units was not encouraging. In this study FP service integration was not satisfactory. Hence, Only 110 (27.98%) of respondents was provided with an integrated manner. Among respondents who ever heard about FP, 248 (63.1%) and 130(33.1%) clients were strongly support or support FP service integration in chronic HIV care clinics respectively. Different factors may affect service integration, provider's work load, and FP training gaps, shortage of space and supplies might be some of the factors.

Conclusion: Although, clients had demand for service integration, the level of integration was not encouraging. Training of health workers and supplies of logistics should be considered for better integration of FP service within the chronic HIV care clinics

1 Introduction

Family planning is a powerful and cost effective HIV prevention approach, enabling HIV-infected women to prevent unintended pregnancies (1). Integration (provision of FP counseling and services in chronic HIV care clinics or referred to FP units after counseling) is highly recommended in countries having generalized HIV epidemic level (2, 3). Studies from generalized (national pregnant women based HIV prevalence greater than 1%) epidemic settings in sub-Saharan Africa suggest that the rates of unintended pregnancy among women living with HIV may be higher than in the general population(4). besides, half million new children born from HIV infected mothers, among these 90% of mothers are from Sub Saharan Africa (5).

Studies shows that integrating the two services can reduce stigma and discrimination, reduce unintended pregnancies, mother-to-child transmission of HIV, improving ease in talking about sex and fertility desires reduce care-seeking burden improve adherence to ART and providing better worth of services(6). In addition, a 2006 study shows that with the same cost, voluntary family planning services can avert nearly 30% more HIV-positive births(7, 8). Study shows that integration is not only important for clients but also to the providers. in Uganda, chronic care Providers felt that the level of integration was appropriate in terms of cost of the services, Maximized productive use of scarce resources, Strengthened supervisory and staff skills; improved communication and problem-solving abilities to maintain quality services(8, 9).

FP service integration in chronic HIV care clinics may not without challenges, providers may overburden, require training, shortage of contraceptive, increase client waiting time and may inconvenience for sick clients (8, 10)

Ethiopia belongs to one of the countries with generalized epidemic of HIV and 3rd lowest income and 11th highest estimated numbers of pregnant women living with HIV among 20 low and middle income countries(11). moreover, the utilization of FP services is among the lowest in the world(12).

Assessing the level of FP service integration in chronic HIV care clinics and associated factors is very crucial for improving service provision in the study area. Thus, the purpose of this study is to assess how many female PLWHA in reproductive age needs integration of FP services, at what extent it was integrated and what factors determined the integration of these services.

2 LITERATURE REVIEW

2.1 Level of FP service Integration in chronic care clinics

A facility based study in Uganda shows that 92% of clients on chronic HIV care were counseled about FP during their clinic visits. Onsite training for chronic care providers was an important strategy to improve HIV counseling. Furthermore, among study sites, 84.6% of the clinics used job aids to remind staff to counsel on family planning and 53.8% of chronic care clinics had FP commodities in the clinics(13). Another health facilities study in this country shows that sustained improvement in counseling on FP methods and in FP use. About 98% of HIV-positive patients of reproductive age who were counseled about family planning at their last clinic visit and 81% used at least one FP methods during the study period (14). Likewise, Study in Kenya shows that about 55 percent of women were asked about FP use by comprehensive care providers. Moreover, 30% of women reported that they had discussed with contraceptive methods other than condoms(15).

In Ugandan evaluation study Majority (92%) of ART providers counseled their clients about FP. 87% of providers provided condom, oral contraception, injectable and 8% administered implants, IUDs, or sterilization(16). In the same country, Mbarara, other study shows that, among women on chronic HIV care, 85% of them reported that they used at least one contraceptive method during that time. Most contraceptive users (84%) had used condom, while 28% had used a hormonal method, mostly injectable. Ten percent of women reported that they had been sterilized. Moreover, 22% of them Used dual methods of FP (17). Similarly, Study in Kenyan one district shows that FP counseling and provision of contraceptive methods in chronic HIV care clinics was reported. The methods included male and female condoms, pills, injectable (Depo-Provera), implants. Moreover, multiple FP/HIV/MNCH services are recorded in the Mother & Child Health Booklet(18).

In Ethiopia, Health care providers previously initiated their chronic care clients to use condom. Through time they have adopted additional family planning methods for dual protection. In few health facilities" chronic care clinics, family planning methods were offered while in other clinics the clients were referred to FP units in the same health facilities for contraceptive(19). Moreover, study in Addis Ababa one health centre shows that all clients seeking HIV services are assessed for FP needs(18). Whereas, Very small,3.3%, of respondents on chronic HIV care in selected health facilities in SNNPR reported that their source of FP was ART units(20) . Moreover, study in Felege Hiwot hospital, Bahirdar shows that one third of respondents had got FP from chronic HIV care clinics and one fourth of clients were referred to FP units (21).

2.2 Willingness of clients for FP service integration in chronic HIV care clinics

Evaluating FP-ART service integration study was conducted in Uganda in 2008. From that finding, 66% of clients were willing and received any FP methods from chronic HIV care clinics. Among these clients, 35% of Clients states that the comprehensive care service was improved in the clinics. Whereas, 41% of clients perceived no change in the service provision(16). Moreover, in Uganda, 88% PLHAs were much more comfortable with receiving FP services at their respective HIV/AIDS centers(22). Correspondingly, Study In Bahirdar also shows that 63%of clients would prefer to get FP service at FP unit and 34 % of clients want to be delivered at ART clinic (21). Other study in Addis Ababa in 2006 shows that 27% of respondents prefer chronic HIV care clinic for the source of FP service provision(23).

2.3 Factors that promote or hinder FP service integration in chronic HIV care clinics

Different factors may promote or hinders FP service in chronic HIV care clinics. These factors might be classified in to policy directions, providers" attitudes and clients related factors.

2.3.1 Policy and programme directions towards service integration

Current international policy support for linkages between FP and HIV/AIDS is substantial and continues to grow. Thus, at least seven international agencies have issued statements calling for stronger linkages between the two services(24).

Even though in Uganda did not have FP-HIV contents in the HIV policy up to 2005, health sectors in the country provided integrated services (22). Similarly, in Nigeria health facilities provided FP and HIV services in integrated manners during the study period. Moreover, the facilities had data collection tools, FP national register containing FP-HIV services integration data elements and they reported to higher level with integrated indicators(25).

Moreover, the Government of Ethiopia's support for FP/ HIV integration by expressed in their Sexual and Reproductive Health Strategy, as well as PMTCT and antiretroviral therapy national guidelines (18, 26-28). Other Studies in Ethiopia show that there is service integration across the health system. Respondents in the study felt that FP service integration have needed in Ethiopia in light of the country's HIV/AIDS crisis. Their arguments were FP can improve the health status of HIV-positive women(29).

On the other hand, studies show that, in developing world, health system was considered to be Fragility. Hence, Health providers poorly paid, vertical as well as weak supervision and inadequate supplies are the most common obstacles (30). Moreover, many chronic care clinics in the five African countries were organized to deliver only ART and they were not convenient to deliver FP. Added to these, commodities stock out are the most common challenges (31). Likewise, Studies in Uganda, Kenya and Ethiopia show that FP service integration in chronic HIV care clinics were not supported by monitoring and evaluation indicators. Data collection on FP services was also problematic, as the center's recordkeeping forms did not capture FP information and providers' improvised forms were inconsistent(8). documentation and evaluation of implementation experience were lacking (18, 32). And also it has not been included in Ethiopian routine health management information system(18, 32).

2.3.2 Providers' attitude towards service integration

Evaluation studies in Uganda shows that FP and ART service Integration was supported by majorities ART providers. About 62% of providers state that adding FP services did not adversely affect the provision of ART services. And they also stated that the level of integration was appropriate to the site, because clients were already receiving condoms for HIV prevention and were using FP from other sources(16). Similarly in Kenya, about 95% of providers said that providing FP in comprehensive care centers was very important, and about the same proportion reported that the provision of FP would have a positive effect on the quality the services(15). Furthermore, two third of ART providers in Kenya believed that integration of FP in ART clinics improve the services provision (31, 33). besides, the proportion of providers reporting that their facility had a written protocol or guideline for providing FP in their comprehensive HIV care centre, which is reported by 33% of providers(15).

Studies in Rwanda, South Africa and Kenya, shows that lack of providers knowledge and training had impacts on FP service integration. In Rwanda, fewer than half of the providers of HIV services had been trained in FP, and only about one quarter had been trained in FP services specifically for HIV-positive women. Many of the South African providers lacked re-service training in FP. Moreover, Kenyan providers also lacked training in the particular FP needs for PLWHA(34). This is similar with five African countries" study; insufficient training of providers was a major obstacle to the provision of FP in ART clinics. The studies found that about one-half of the providers in the study did not have the job aids and supportive supervision needed to facilitate service delivery(31).

A study shows that some misconceptions of the health providers about FP and HIV/AIDS service integration in Ethiopia and In Uganda. Eighteen percent of health providers believed that Providing FP services to HIV-positive women other than condom will encourage them to have sex and become pregnant in Uganda. And eleven percent of providers believed that PLWHA should be utilizing abstinence or condom as FP methods in Ethiopia (16, 29). These may be due to lack of awareness of WHO medical eligibility criteria for PLWHA (31, 35). However, providers" knowledge and perception about

contraceptive methods varies. According to the studies in Kenya, providers offered mostly condom while Rwandan providers offered injectable or condom(31).

2.3.3 Client related factors

A 2008 FP-HIV integrated service evaluation in Uganda showed that the majority of clients (76%) felt that adding FP did not adversely affect the provision of ART services(8). Study in Kenya indicates that approximately 42% of female clients agreed that their partner's opinion on FP affected their contraceptive use. And communication at least regarding HIV status, was challenging for these clients, 33% indicating that they did not know their partner's HIV status(15). Unable to disclose their HIV status to their partners were the most commonly affecting to use FP in Uganda (16, 22). From ART providers experience, Some female clients on ART, specially married and who had not disclosed their HIV status to their spouse were not use condom or other family planning due to fear of separation from marriage(19). Married and disclosed their HIV status to parents were more likely to use condoms in Kenya (36).

In Vietnam, 74.6% of induced abortion among HIV-positive women were due to fear of mother to child transmission(37). Awareness about MTCT of HIV was also high in Addis Ababa. According to this study 98.9% of respondents knew about mother to child transmission, of which 20.5 % be familiar with three ways (38). Moreover, Study participants in Felege Hiwot Hospital, Bahirdar, state that 94.3% of study participants were familiar with MTCT of HIV. The major source of information was mass media, health providers which accounts 83% and 72.7% respectively (39). Awareness towards way of transmission might vary. Thus, 37.2% and 30.2% of clients recognize during breast feeding and delivery respectively (21). Other study in Hosaana, SNNPR, shows that 65.1% of respondents aware about MTCT of HIV. From these, 89%,88% 83.7%, during Pregnancy, and Breast Feeding respectively(40)..

3 OBJECTIVES

3.1. General objective

To assess the level of family planning services integration in HIV chronic care clinics for women LWHAs on reproductive age group in Dessie town, Northeast Ethiopia

3.2 Specific objectives

- To assess the level of family planning service integration in chronic HIV care clinics
- To identify willingness of clients about integration of FP service in chronic HIV care clinics.
- To identify factors that promote or hinder integration of family planning services in HIV chronic care clinics

4 METHODOLOGY

4.1 Study area and period

The study was carried out in Dessie town; Amhara region, located 480 km East to Bahir Dar, which is the regional capital and 401 km North East to Addis Ababa. According to 2007 census The projected population in 2010 is 162,000(41). The town has 5 hospitals, from these three of them are private owned; 6 health centers, 7 private higher clinics; four (two NGO) middle level clinics, 14 junior private clinics. Two Governmental hospitals and one health center provide chronic HIV care services. So, the study was conducted in these health facilities between November 2010 and December 2010.

4.2 Study design:

A facility- based cross-sectional study design involving quantitative and qualitative methods was employed.

4.3 Study population: All women of reproductive age group living with HIV/AIDS who were on chronic HIV care in selected health facilities in Dessie town.

Inclusion criteria: These women LWHA on reproductive age group and on chronic HIV care follow up on outpatient bases in the clinics and willing to participate in the study.

Exclusion criteria: These women LWHA who were critically sick, inpatients and these who enrolled in the clinics for the first time during the study periods were not included as the study participants.

4.4 Sample size determination

Quantitative Component:

A single population proportion formula

$n = (Z_{\alpha/2})^2 p (1-p) / d^2$, was used to estimate the sample size of clients to be interviewed.

Where; n=the desired sample size

p= Prevalence of family planning utilization i.e. HIV positive women who uses FP methods in chronic HIV care clinics in Addis Ababa was 53.5% (38).

$Z_{\alpha/2}$ = critical value at 95% confidence level of certainty (1.96)

d= Margin of error between the sample and the population =5%, n = becomes 382

5%= non-response rate = 19. Thus, Actual sample size for the study was 401.

Qualitative component Nine ART service providers, 2 medical directors and 2 youth and maternal health officers from Dessie Town and South Wollo Zone Health Department were participated in the in-depth interview by using Semi structured questionnaire in order to explore factors that affecting service integration and triangulate the response with quantitative data. Relevant documents; HIV/AIDS policy; HIV/AIDS strategy; HSDP III, ART, PMTCT guidelines; RH strategy were reviewed by the principal investigator just in order to assess at what extent the documents support or not about integration of the two services.

4.5 Sampling procedure

The total samples were divided proportional to the health facilities'' number of clients. Then, sampling fraction from each of the selected health facilities were determined proportional to the size of pre-ART and ART clients. In order to make the data collection inexpensive, quick, and convenient, consecutive study participants, apart from excluded clients, were taken until fulfilled calculated sample size.

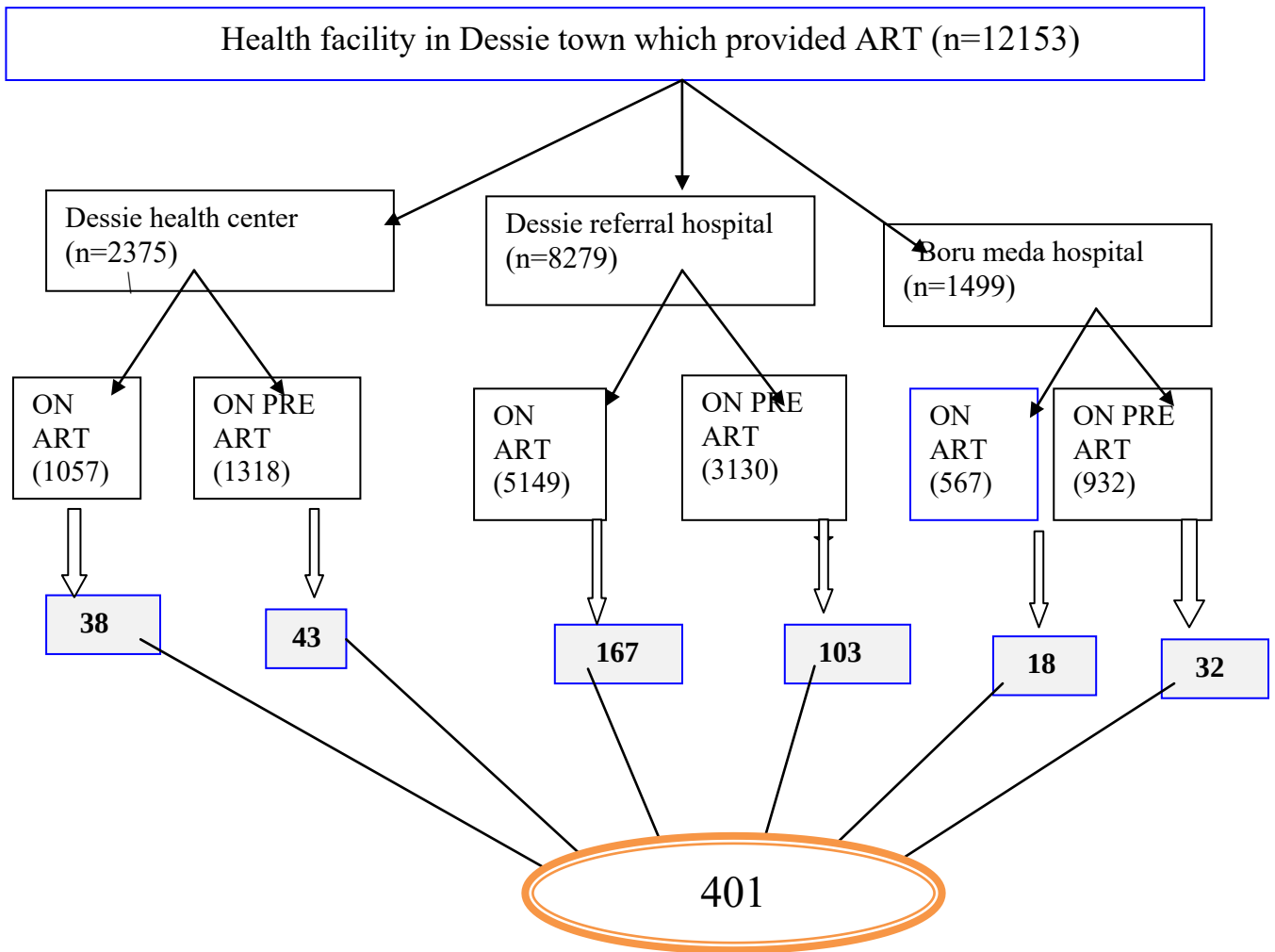


Figure-1 .Graphic demonstration of Sampling Procedure

4.6 Data Collection Procedures and Instruments

Questionnaire (both qualitative and quantitative) was adopted and modified reasonably from different literature conducted in elsewhere. Data on the study variables were gathered through face-to-face interview using structured questionnaire for quantitative data. While, in-depth interview, observation and document review were done by principal investigator. Six Case managers (non medical workers working in chronic care clinics) participated as data collector in order to avoid forced disclosure and two Supervisors (ART focal persons) were trained on the data collection tools for two days by the principal investigator. The questionnaire was pre-tested in Combolcha health center, which the clients had relatively similar characters. Based on the findings from the pre-testing the tools were modified. The tool was translated from English to Amharic language and then back to English to check its consistency.

4.7 Operational Definition

Integration: Providing FP counseling and services within chronic HIV care clinics by chronic care providers during the same visit, or referred to same health facilities“ FP units after counseling in the clinics with referral form or prescription during the same operating hours.

System: comprise of HIV/AIDS and FP related policies and strategies, guidelines, supplies and mode of providing FP methods

Dual Method: FP methods consist of condom and other modern contraceptive.

Good Health: clients who have current CD4 cell ≥ 350

Health seeking burden: unnecessary trip and visit (at one time for chronic HIV care and at another time for FP service) of the same or different health facilities

4.8 Data Analysis

Data were entered, cleaned and analyzed using Epi-Info. Mean/ median and standard deviation for continuous variables and frequencies for categorical variables were calculated. Odds ratio at 95% confidence interval were compute to assess the level of association and statistical significance. Findings were presented in tables.

In-depth interview was carried out by using tape recorder and good note taking, and then analyzed manually by the principal investigator. The summary part of the translated content was coded manually and analyzed. Some speech marks from the qualitative data that best explain the objective was acknowledged and presented by the respondents own words in parallel with the quantitative information to gave more insight for the study. Reviewing registration books were performed to check some discrepancy such as CD4 cell, date of PRE- ART/ART starting date.

4.9 Study variables

Dependant variable: Integration of FP services in chronic HIV care clinics

Independent variables: Socio-economic status, health status, duration on chronic care being on ART or pre-ART, and sexual activities of clients

4.10 Data quality management

In order to assure the quality of data, utmost effort was applied to reduce bias and errors by using clear questions, I recruited ART focal person as supervisors, using case managers (non professional worker assist ART service provision in the clinic) as data collection. Training of data collectors and supervisors as well as pre-testing of questionnaire was conducted. Reviewing filled questionnaire by supervisors and the principal investigator, daily monitoring of data were done. Transcription was applied as soon as in-depth interview completed.

4.11 Ethical Considerations

Ethical go-ahead was obtained from the school of public health (SPH), and Addis Ababa University, SPH also wrote a formal letter to South Wollo Zone Health Department. And zonal health department wrote letters to health facilities for co-operation.

Informed verbal Consent was obtained from the study Participants. The data collectors gave information why they were needed. Respondents were voluntary and even if they could withdraw from the study at any time without clarification of their reasons and without penalty or loss of benefit from the clinics. Privacy was guaranteed and no personal detail was documented in the study. For in-depth interview health providers, focal persons and program manager verbal informed consent was obtained individually for each participant.

5. Result

5.1 Socio-demographic characteristics

Four hundred one female clients who were attending chronic HIV care were interviewed. The Study participants were selected from three Health facilities i.e. one Health Centre, one District Hospital, and one Referral Hospital with the sample size of 81, 50 and 270 respectively. Most respondents, 223(55.6%), were on ART and the remaining 178(44.4%) were on pre- ART.

The mean age of the respondents was 29.9 year with the age range of 17 to 48 years. And the modal age group was 25-30 year which accounts 115 (28.70%). In the study, the most predominant religions were Muslim and orthodox Christian which constituent of 185(46.13%) and 181(45.13%) respectively. And the most common ethnic group was Amhara, which accounts 350(87.30%). With regard to marital status, married or cohabited women were more predominant, which accounts 222(55.40%) followed by Divorced and widowed 75(18.70%). Trade was more common source of revenue which consist of 102(25.50 %) in the study area (table 1).

The mean and median duration of follow up on chronic HIV care of respondents were 2.5 and 2 years respectively. Thus, 155 (38.6%) follow chronic HIV care for more than two years. Among the total study participants, 281(70%) were sexually active during six months prior to the date of data collection, (of which 238(59.4%) within three months). Most respondents, 290 (72.3%) had one or more children.

Table 1: Background characteristics of the study participants attending chronic HIV care clinics of selected health facilities Dessie, North east Ethiopia, 2010

Socio-demographic characteristics	Frequency	Percent
Age groups(N=401)		
17 - 20	34	8.50%
21 - 25	85	21.20%
26 - 30	115	28.70%
31 - 35	81	20.20%
36 - 40	55	13.70%
41 - 45	29	7.20%
46 - 49	2	0.50%
Educational status(N=401)		
Elementary school	111	27.70%
High school and above	192	47.90%
Unable to read and write	98	24.40%
Religion(N=401)		
Muslim	185	46.13%
orthodox	181	45.13%
other Christian	35	8.70%
Ethnic group(N=401)		
Amhara	350	87.30%
Others	51	12.70%
Marital status(N=401)		
Married/cohabited	222	55.40%
Non married partner	36	9.00%
Divorced and widowed	75	18.70%
Singles	68	16.90%
Monthly income(N=401)		
1-1000	93	23.20%
>1000	37	9.20%
Don't Know	139	34.70%
Reported as no income	132	32.90%
Occupational status (N=400)		
Daily laborer/house maid/CSW	52	13.00%
Gov/private employee	75	18.75%
unemployed/student	130	32.50%
Merchant	102	25.50%
farmer	41	10.25%
Current resident(N=400)		
Dessie	254	63.30%
Outside Dessie town	147	36.70%

5.2 Level of FP service integration in Chronic HIV care clinics

Out of the total respondents, 393 (98 %) had ever heard about any family planning methods. From these ever heard, 238 (60.5%) of respondents reported as they have got counseling about FP in chronic HIV care clinics. Along with these who have been counseled, 228(95.8%) respondents counseled about condom. 21(8.9%) counseled about pills and injectable and 5(3.5%) about long term FP. And only 30(12.6%) of respondents were counseled about dual methods of FP in chronic HIV care clinics. Among those who received FP counseling, 145(60.9%) were on ART and the remaining 93(39.1%) on pre-ART. proportion of women received FP counseling was higher in Dessie Referral Hospital (79.8%) compared to Boru Meda Hospital (16.4%) and (3.8%) in Dessie Health Centre.

Condom was the only FP method which has been provided in chronic HIV care clinics. Thus, one hundred sixty eight (42.7%) respondents have been provided condom in the clinics. Among respondents who were provided condom, **108**(64.3%) received condom after counseling. The remaining 60(35.7%) of respondents were provided without counseling. Ninety nine (58.2%) of respondents who were provided Condom were on ART in the clinics. And majorities, 98.8% of them were familiar with MTCT of HIV.

Referral linkage with referral form or prescription was not encouraging. Only five individuals were referred to FP units in the same health facilities. Among these only **two** respondents were referred after counseling.

Respondents, who were provided condom with counseling in the clinics or referred to the same health facilities“ FP units after counseling was conducted, were considered as having integrated service. Nevertheless, in this study FP service integration was not satisfactory. Hence, Only 110 (27.98%) of respondents was provided with an integrated manner. Among respondents who have got integrated service, 71(64.5%) were on ART. And provision of integrated service was found better in Dessie referral hospital (82.7%) as compared in Boru Meda hospital (14.5%) and Dessie health centre (2.7%).(Fig 1)

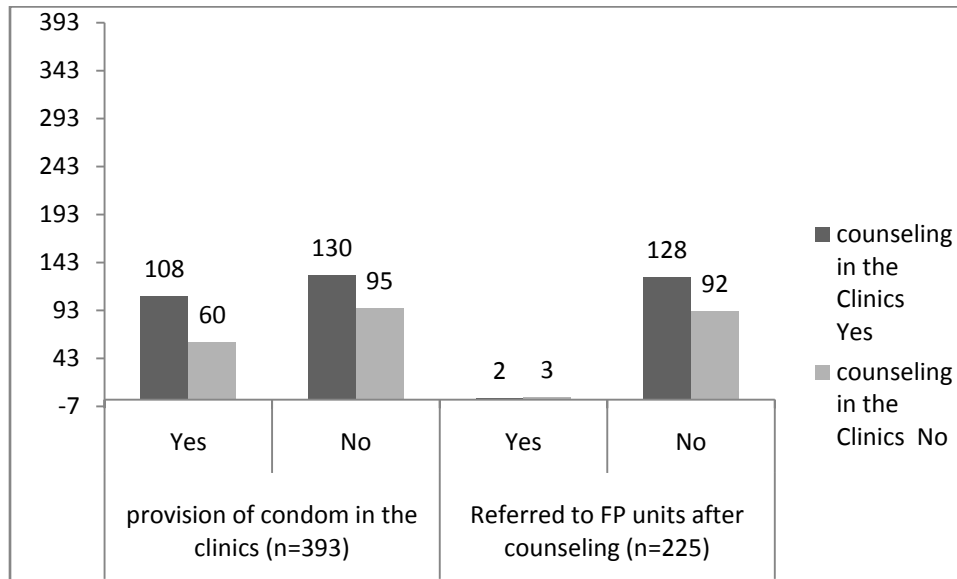


Figure 1: Distribution of counseling and provision of condom or referral linkage for women of reproductive age groups on chronic HIV care in selected health Facilities, Dessie, North east Ethiopia, 2010

In multivariate analysis, single or widowed or divorced were little served with integrated FP service as compared to those women who were living with their sexual partners with [AOR (95%CI=0.27(0.16, 0.48)]. In contrast, age, religion, Educational status and resident did not have significant association in terms of receiving integrated FP service (table 2).

Table 2: Analysis clients' demographic related factors to FP service integration for women of reproductive age groups on chronic HIV care in selected health Facilities, Dessie, North east Ethiopia, 2010

Socio Demographic variables	FP services integration		COR(95%CI)	AOR(95%CI)	P-Value
	Yes	No			
Age groups					
30-49	40	125	0.75(0.48,1.18)	0.63(0.39,1.03)	0.0643
15-30	70	164	1.00	1.00	
Religion					
Muslim	48	137	0.87(0.56,1.35)	0.77(0.48,1.26)	0.3014
All Christian	62	154	1.00	1.00	
Marital status					
single/widowed/divorced	21	122	0.33(0.19,0.56)	0.27(0.16,0.48)	0.000
married/cohabited/non married partner	89	169	1.00	1.00	
Educational status					
Illiterate and elementary	60	149	1.14(0.85,2.31)	1.12(0.68,1.83)	0.6578
High school and above	50	142	1.00	1.00	
Resident					
out of Dessie	44	103	1.22(0.78, 1.91)	1.09(0.66,1.77)	0.7449
Dessie	66	188	1.00	1.00	
Ethnicity					
others	5	46	0.25(0.09,0.66)	0.19(0.07,0.52)	0.001
Amhara	105	245	1.00	1.00	

Moreover, Clients who were on ART and these who were sexually active within three months of data collection had got more integrated service with [OR (95%CI=1.66(1.05, 2.62)] and [COR (95%CI =5.99(3.36.10.68)] respectively. But duration of follow up and health status did not have significant association between FP service integration (table 3).

Table 3: analysis of health status, duration and clinical follow up to FP service integration for women of reproductive age group, on chronic HIV care in selected health Facilities in Dessie town December, 2010

variable	FP services integration		COR(95%CI)
	Yes	No	
Health status of the clients(n=393)			
Good health status(CD4>=350)	79	191	1.4(0.85,2.31)
Not good health status(CD4<350)	28	95	1.00
Duration of Follow up(n=401)			
>2 years	50	105	1.53(0.96,2.35)
<=2 years	60	186	1.00
purpose of follow up(n=401)			
For ART	71	152	1.66(1.05,2.62)
For pre-ART	39	139	1.00
sexual activities within three months(n=401)			
Yes	94	144	5.99(3.36,10.68)
No	16	147	1.00

5.3 Willingness of clients towards Family planning service integration

Among respondents who ever heard about FP, 248 (63.1%) and 130(33.1%) clients were strongly support or support FP service integration in chronic HIV care clinics respectively. The remaining 11(2.8%) and 4(1%) individuals were neutral and against integration respectively. Respondents who support or strongly support service integration gave their own reason that the importance of service integration.

Table 4: perceived reasons of FP service integration among female PLWHA in HIV chronic care clinics Dessie North East Ethiopia 2010

Perceived importance of integration(n=378)	Frequency	Percent
Reduce health seeking burden for clients	208	55.0%
Having Open discussion B/n clients & providers	126	33.3%
Reduce any form of stigma perceived by clients	123	32.5%
Keep confidentiality of services	84	22.2%

The sum may exceed „n“ because of multiple responses

Respondents who want service integration were also asked about which „modality“ of integration (providing both counseling and offering FP methods in the clinics or counseling then refer to FP units). Most respondents, 323 (85.4%) preferred that both services within the clinics. While, 55(14.6%) of them preferred counseling in the clinics then refer to FP units in the same health facilities. Condom and injectable were the most commonly preferred methods of family planning, 286 (71%) and 184 (46%) respectively. In contrast, no one preferred long term and permanent type of FP. Respondents preferred nurses as good providers followed by physician that accounts 215(57%), and 137(36%) respectively. Most respondents did not want to discriminate by age and sex of providers, 211(55.83%), and 247(65.35%) of respondents wanted the service irrespective of age and sex of providers respectively (table 5).

Table 5: respondent’s preference towards sex and age of providers in chronic HIV care clinics in the selected health facilities Dessie North East Ethiopia 2010

Preferred sex and age of providers (n=378)	Frequency	Percent
Preferred sex of providers		
Either male or female providers	247	65.35%
Female providers	77	20.37%
Male providers	54	14.28%
Preferred age of providers		
Adult providers	89	23.54%
Youth providers	78	20.63%
Providers belongs to any age	211	55.83%

Ninety three point four percent of respondents who were willing for FP service integration were familiar with MTCT of HIV with [COR (95%CI =13.38(2.98.57.43)]. Of which, 372(97.13%) clients knew at least one way of MTCT, 320(83.55%) clients two ways and 222(57.96%) clients three ways.

5.4 Facilitating and hindering conditions for service Integration

5.4.1 Providers attitude and health facilities readiness for service integration

Result from an in-depth interview shows that all interviewee perceived that reproductive age PLWHA of need FP counselling and service within the chronic HIV care clinics or referred to FP units. They agreed that it has been possible to counsel in chronic HIV care clinics and/or refer to FP units in the same health facilities. Moreover, two-third of the ART providers in the health facilities believed that condom was the best method for PLWHA and they advocated it, where the remaining recommend condom with other modern (dual methods) form of FP. Most providers perceived that FP integration can improves quality of care, facilitates prevention of unintended pregnancy, reduces health seeking burden for the clients, decreases burdens of transportation and other expense, keeps privacy and reduces any form of stigma for PLWHAs.

All providers reported that they were asked by their clients about provision FP methods in the clinics. Thus, they counselled about any FP methods and provided condom only and then referred to FP unit for other FP methods.

“Although I have seen many patient cards per day, I raise many issues for my clients including FP use, some clients ask me about long term FP method. However, I provided them with condom and referred to FP units for other FP service” (ART providers from one hospital).

Among ART providers majorities, (7of 9) did not receive FP training in the last two years. Moreover, among those providers who took basic and comprehensive ART training majority (4 of 6) and (2 of 3) did not remember FP session during training period respectively.

Misconception about contraception for PLWHA was also reported by some health providers. Few of ART providers perceived that condom has been the only method of FP for PLWHAs. Even some, think that utilization of other contraceptives might lead to become hesitate to use condom. And also they believed that Hormonal contraceptive may not good for PLWHAs on ART due to drug-contraceptive interaction

Providers reported that shortage of working space, lack of training on FP; shortage of supplies, weak as well as vertical supervision and provider workloads have been the main bottle necks to provide integrated service. Providers' workload, which was agreed by two-third of ART providers, was the most common obstacle for service integration.

"we were only five ART provides, I have seen more than 40 patients, sometimes up to 70 per day/provider, I re-fill the ART drugs and tell the next follow up date, so that I have been so tired and sometimes I fill bad by the work itself". (A provider from one hospital)

Shortage of space has also been acknowledged by ART providers in the clinics. And, overcrowded clients have been observed within the clinics. Moreover, within a single room more than two clients served at the same time. *"ART rooms in this clinic were just like supermarket, three clients serve at the same time in one room by three providers, no privacy of clients, we might not heard with each other sometimes, simply we re-fill the drug and I do not believe that we are providing quality services".* (One ART providers from one hospital)

Shortages of supplies have been also another problem mentioned to integrate the services; Providers in six ART rooms were observed. There was incomplete logistics to provide services (Table 6).

Table 6: Availabilities of FP supplies in chronic HIV care clinics in selected health facilities
Dessie, North East Ethiopia, 2010

Availability of Materials in chronic care clinics	Frequency(n=6)
Basic Equipments	
BP apparatus	3
Stethoscope	3
Thermometer	0
Supplies & Consumable	
Running water in rooms	3
Disposable syringes and needles	2
Contraceptives	
Male Condom	4
safety box	2
Any oral contraceptive	0
Injectable	0
IUDs	0
Norplant	0
IEC materials on FP	
Poster	0
Flip charts	0
Brochure	0
Pamphlet	0
Demonstrating materials	
Penile model	2
pills	0
Condom	4
Other materials	
PMTCT guideline	0
ART guideline /SOP/	2
Registration books	6
Report format	0

In the clinics, there are pre-ART and ART follow up format having a column containing methods of FP use. Incomplete filling was also observed during record review. Moreover, there was no report format, which contains elements FP, in the health facilities. According to program officers in the town and zonal health department, they have collected the report from HF about number of

ever enrolled and currently on pre-ART and ART. Moreover, they reported that FP element did not incorporated in the supervision check list and they did not asked about FP integration in chronic HIV clinics during Supervision. The ART providers support the idea of officers, the officers and program managers have discussed with the ART service providers about HIV related issues only in the clinics.

“periodically different professionals and program managers come to us in ART clinics, they supervised us, asked about number of pre-ART, ART, pregnant women and PMTCT frequently, but no one asked about family planning counselling and service provision or referral system in the clinics”. (A provider from health centre)

A director from health centre stated that *“We had quarterly catchment and biannual review meeting. We reported our performance in line with the report format which contains pre-ART, ART, PMTCT, STI, and PIHCT. FP counselling and service provision activities did not support by the report format and did not talk about it”.*

5.4.2 Supporting documents for service integration

This part analyzes how Ethiopian HIV/AIDS policy and PMTCT and ART guidelines, and RH have addressed FP in Ethiopia.

5.4.2.1 The National HIV/AIDS policy

The national HIV/AIDS policy endorsed in August, 1998, highlights family planning and places reproductive health services to be considered as human rights. *“The Government of the Federal Democratic Republic of Ethiopia hereby demonstrates its commitment to the prevention and control of HIV/AIDS and has issued this national policy on HIV/AIDS . . . , To aware the need for women, including PLWHA to have access to information and services regarding HIV/AIDS and family planning that help them to make reproductive health choices and decisions.”*

Even though the HIV/AIDS policy highlights family planning in the introduction part, the policy does not point out explicitly in its objectives, and general strategies of the policy.

5.4.2.2 The National HSDP III

The third national Health Sector Development Programme (HSDP III) was planned to be implemented between 2005 and 2009. In the plan, both HIV/AIDS and FP issue were addressed in its objective separately. All hospitals and Health Centers provide VCT service. While PMTCT

service will be provided by all hospitals and 70% of HC at the end of 2009. Increasing Family planning service coverage to 60% from baseline, 25% is also another objective of the plan. However, Service integration is not considered as general direction of the plan.

5.4.2.3 Guidelines for Prevention of Mother-to-Child Transmission of HIV in Ethiopia

The guideline revised by FMOH in 2007. It has adopted the WHO/UNICEF/UNAIDS 4-pronged PMTCT strategy as a key entry point to HIV care for women, men and families. Prevention of unintended pregnancies among HIV infected women was one of the four prong PMTCT strategy. The guideline support FP service integration. It addresses by its objectives and strategic directions. Like *“Provide in depth family planning counselling integrated into all potential PMTCT and VCT service sites) and Provide condoms wherever possible and refer clients to a convenient affordable source, particularly long term FP”*(28).

5.4.2.4 Guidelines for implementation of the antiretroviral therapy programme in Ethiopia

Ethiopian ART guideline was revised in 2007. One of the guiding principles of the guideline was *“The programme will be implemented as an integral part of comprehensive HIV care, including HCT, PMTCT, TB/HIV, STI prevention and treatment, Family planning and palliative care including CHBC, HIV prevention”* The guideline also indicates referral linkage among different services at health facility level.

5.4.2.5 The National Reproductive Health Strategy (2005-2015)

Federal democratic republic of Ethiopia, MOH issued National RH strategy on March 2006. The document sets six priority areas. Family planning; and HIV/AIDS put explicitly from the large scope of service under RH umbrella as intervention. *“Reducing unwanted pregnancies reduce HIV infection and improve the quality of life of those living with the disease by optimizing the synergies between RH and HIV/AIDS initiatives”* The document also put the target about the FP integration in HIV chronic care clinics.

By 2015 *“All ART clients should be counselled and referred for FP services”* for implementation we capitalize on opportunities to transfer knowledge and best practices across RH and HIV/AIDS.

6 Discussion

This study assessed the extent of FP service integration in HIV chronic care clinics as well as willingness of clients towards integration of the service within the clinics in selected health facilities in Dessie, Northeast Ethiopia. It also reviewed policy and other documents whether the documents support or not for integration.

In this study, counseling about FP in chronic HIV care clinics, 60.5%, this is much less as compared with study in Uganda. Hence, a health facility based Study in Uganda shows that about 92% of clients on chronic HIV care were counseled about FP in the clinics(13). Moreover, other study in the same country shows that 98% of clients were counseled in the clinics (14). But, it was better as compared with study in Kenya, 55% of respondents have got counseling in the clinics(15). Condom was the predominant methods of FP counseled in Uganda, as well as in this study. 87% and 95.8% of clients were counseled about condom respectively.

In the study, only FP methods provided in chronic HIV care clinics was condom with 42.7% occurrence. Whereas, a study in Uganda shows that 28% of clients have been provided hormonal contraceptives from their chronic care clinics. which is still much less than study in Uganda, 85% of clients provided condom(16). The finding of the study was better as compared with study in selected hospitals in SNNPR and Felege Hiwot Hospital in Bahirdar. Hence, 3.3% and 33% of clients had got FP from ART clinics respectively(20, 21).

In the study, referral linkage between chronic care clinics and FP units of the same health facilities was not practiced. Surprisingly only five respondents reported as they were referred to FP units with referral form or prescription. This finding much less than study in Felege Hiwot Hospital, 25% of respondents referred to FP units(21).

To say FP service was integrated in to chronic HIV care clinics, there should have FP counseling and provision in the clinics or referred to FP unit after counseling. In this study service integration was not as encouraging. Only 27.98% of clients have been provided. which is not as intention of Ethiopian national reproductive health strategy(27).

Recent global policy support for linkages between FP and HIV/AIDS is extensive. Thus, at least seven international agencies have issued statements calling for stronger linkages between the two services(24). Moreover, in Ethiopia, updated National documents (national ART, PMTCT guidelines and reproductive health strategy) explicitly indicate FP service integration in chronic care clinics(26-28).

The low prevalence of integrated service might not be due to lack of supporting national documents, Rather, may be due to providers workloads, lack of training (four-fifth of chronic care providers lack FP training), weak and inconsistent supervisory of programmers which is consistent with a qualitative study from five African countries(31), and lack national integrated indicators, and not reported to national level, which is inconsistent with study in Nigeria(25). Moreover, lack of supplies (no contraceptive logistics other than condom in the clinics), shortage of space for provision, lacks of educational material in the clinics and Misconception of providers

were the possible causes for inhibiting FP service integration in chronic HIV care clinics. In general, chronic HIV care clinics were found to be poorly equipped to rendering FP service.

On the other hand, in this finding, majorities of respondents reported as they are willing for FP service integration in the clinics. Thus, 96.2% of respondents support or strongly support FP service integration with their own reasons. This may be due to awareness regarding to MTCT of HIV (57.96% of clients aware on three ways of MTCT), presence of home based care providers may increase clients Knowledge, presence sexual activities (70% of clients sexually active within six months) fear of stigmatization, seeking comprehensive service, seeking confidentiality or preference of long stay with their chronic care providers. It was more prevalent than studies in Uganda, 66% and 88% of respondents were interested if FP service provision was in chronic care clinics in Mbale, and national evaluation study respectively (16, 22). Moreover, it was much more as compared to local studies like Felege Hiwot Hospital and selected hospitals in Addis Ababa. 34% and 27% of respondents prefer chronic HIV care clinics as a source of FP respectively. In this study 14.6% of respondents were preferred FP units in the same health facilities. Which is inconsistent with study in Felege Hiwot Hospital, 34% of respondents were preferred FP units in the same Health facilities(21, 23).

7 Strengths and Limitations of the study

Strength of the study

This study used both quantitative and qualitative method to gathered information from different sources such as clients, providers, program mangers and policy documents.

Limitation of the study

1. Sample selection bias –Study participants recruited for exit interview were PLWHAs on HIV chronic care in the selected health facilities. More adherent for the follow up dates is more likely to be participated in interview and also some PLWHAs may not be enrolled in the health facilities or enrolled out of town. Thus the result might have limitation to generalize for all PLWHAs in the town. In addition sample selection was not randomized; this may be having limitation to generalize. There was also lack of literatures to compare results of the study.
2. Social desirability bias is unavoidable in this study. Case managers in the selected HIV chronic care clinics were trained and recruited as data collector to ensure confidentiality of the study subjects or avoid forced disclosure. Even though the case managers were trained appropriately on confidentiality and respondent's right and also the data collectors explained well to the respondents the study has no link with the service provided, the clients might have fear to say 'NO' for some questions.
3. Since in patients, critically ill clients and these who come for the first time were excluded, it might have limitation for generalization. study also focus of clients perception, provider and system related factors were not discuss explicitly, thus the study had limitation to explore factors affecting integration of FP in HIV chronic care clinics.

8 Conclusion

The results of this study revealed important points with regard to FP service integration in HIV chronic care clinics

- ✓ Significant number of female LWHAs on HIV chronic care desire to get service within an integrated manner.
- ✓ FP service integration in chronic care clinics was not satisfactory.
- ✓ Condom was the only provided and the most counselled FP method by chronic care providers in chronic care clinics
- ✓ The referral linkage from HIV chronic care clinics to FP units was very weak.

9 Recommendation

Based on conclusion I recommend the following:

1. The HIV chronic care clinics should be adequately responsive to the high level of family planning needs of their clients by counselling and providing family planning services in the clinics or establishing strong referral linkages with FP units of the same health facilities.
2. Provision of contraceptive logistics and trainings to the providers as well as reorientation of WHO Medical eligibility criteria to facilitate integration of services
3. Attention should be given to development of M&E indicators and reporting format and incorporate in routine HMIS.
4. Strong advocacy to policy makers and program managers and providers towards implementation of FP service integration in chronic care clinics.

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11 Annexes

Annex I. Study Information Sheet

Good morning? My name is working as data collector in this study. The objective of the study is to assess integration of Family planning in your ART clinic. The study will take place in Dessie referral and Boru meda District Hospitals and Dessie health center from November to December 2010. This study will help to get appropriate information about service provision may assist you and the Government in improving services quality. To do this you were selected to participate in this study just by chance. I will also be asking you about your previous family planning utilization and future needs. The information you provide me is extremely essential and important, as it will help the Government and the health facilities involved in ART service provision to improve formulation of policy and the delivery of services. It will take about 25 minutes. I would like to assure you that the information you provide me is completely not to be disclose. And it is not being shared with anyone else. It is only used for research purpose. Your name or any identifying information will not be recorded. You may refuse to answer any question and choose to stop the interview at any time. There is no problem in your service provision.

Do you have any questions?

If you have any question you can contact the principal investigator at any time by using the following address.

Name: Wassye Yitagess Phone number: 0911-82-88-51

Address: Addis Ababa, Ethiopia E-mail: wasyeyitages@yahoo.com

Are you willing to participate in the study?

1- Yes

2 - No

If the answer is yes, thanks! Conduct the interview.

If the answer is no, Thanks! Proceed to the next eligible client

Annex II Consent Form

I, the selected participant, heard the information in the study information sheet and realized the benefit, purpose and what is required from me and what happen to me if I participate in the Study. I understood that all the information concerning me, like name and all answers given by me must not be transferred to the third party and confidential .I also understand that I can decide whether or not to take part in the study or even withdraw from the study at any time. So I approved by my signature.

The participant Sign_____

Interviewer Name: _____ Sign: _____

Investigator Name: Wassye Yitagess Sign: _____

Contact address: AAU, Ethiopia E-mail: wasyeyitages@yahoo.com

: Mobil phone 09 1182 88 51

Annex III Questionnaires for exit interview

School of public Health

Collage of health science

Addis Ababa University

Structured questionnaire on family planning integration in chronic HIV care clinics among Women on reproductive age group in Dessie town, 2010

001. Code Number _____

002. Town _Dessie

005. Name of ART clinic _____

004 type of services pre-ART.....

005 “ ART.....

007. Interviewer Name _____

008. Date of Interview ____/____/____

dd / mm / yyyy

Checked by Investigator: Signature _____ Date ____/____/____

PART I – Socio - Demographic characteristics

Let us start our discussion now I will ask about Socio – Demographic aspect of your status

NO	Question	Categories	skip
101	How old are you?	----- Years (age in completed years)	
102	What is your religion?	Orthodox ----- 1 Muslim ----- 2 Catholic ----- 3 Protestant ----- 4 Others (specify)..... ----- 89	
103	What is the highest Educational Level you completed?	Un able to read & right----- 1 1 to 8 grade-----2 9 to 12 grade-----3 >12 grade-----4 Other specify -----89	
104	What Ethnic group do you belong to?	Amhara-----1 Tigre -----2 Oromo.-----3 Afar-----4 Other (Specify) -----89	
105	What is your Current Marital/ Relationship status?	Married/cohabited ----- 1 Single ----- 2 Widowed ----- 3 Divorced ----- 5 Non married partner ----- 6 No response -----99	
106	What is your total Monthly income?	Your own income----- Eth.Birr Husbands income----- Eth.Birr Other sources income ----- Eth.Birr No income ----- 1 Don't know ----- 2 No response ----- 99 Other (specify)-----89	
107	What is your current Occupation?	Unemployed ----- 1 Student ----- 2 House maid ----- 3 Daily laborer ----- 4 Merchant ----- 5 Government employ ----- 6 Private employ ----- 7 commercial Sex worker -----8 Other (specify)----- 89	

108	Where is your resident now?	Dessie town.....1 Around Dessie (Tehulderie, Dessie zuria, kutaber, kombolch, Kallu)---.....2 West Wollo.....3 Afar.....4 Oromia spatial zone.....5 Other(specify).....89	
-----	-----------------------------	--	--

PART II- Information on Child Desire

Now I would like to talk with you about Child Desire

201	How many alive children do you have now?	-----children no child at all ----- 97 No response ---- 99	
202	Did you get alive children after knowing your HIV status	Yes.....1 No2 No response99	
203	(Only for on ART) Did you get alive children after starting ART?	Yes..... No..... No response.....	
204	Are you pregnant now?	Yes ----- 1 No ----- 2 Don't know ----- 3 No response ----- 99	If no go to Q 206
205	If Answer for Q204 yes , is the pregnancy	Intended.....1 Mistimed.....2 Unwanted.....3 No response.....99	
206	Would you like to have children in the future?	Yes ----- 1 No ----- 2 Don't know ----- 3 No response ----- 99 Other (specify) -----89	
207	Would your partner like to have children in the future?	Yes ----- 1 No ----- 2 Don't know ----- 3 No response ----- 99 Other (specify) -----89	
208	If yes for 206, when do you want	Within two years1 After two years2 I do not decided.....3	

PART III –Information on Family planning counseling, utilization, and choice

Now I would like to talk with you about family planning - the various ways or methods that you can use to delay or avoid a pregnancy.

301	Did you heard about family planning?	Yes ----- 1 No ----- 2	if No go to Q 314
302	If yes for Q 301 specify the methods you know? (More than one answer can be possible) Do not read	Condom ----- 1 Pill (Ocp) ----- 2 Injectable ----- 3 IUD ----- 4 Implants ----- 5 Tuba legation /Vasectomy ----6 Breast feeding7 Withdrawal method.....8 Rhythm method.....9 Condom &others(dual methods).....10 Other (specify) -----89	
303	Have you (your partner) ever used family planning method before you know your HIV status?	Yes ----- 1 No ----- 2 Don't remember ----- 3 Don't know ----- 4 No response ----- 99	
304	If yes for Q303 specify the method you /your partner used? (More than one answer can be possible) Do not read	Condom ----- 1 Pill (Ocp) ----- 2 Injectable ----- 3 IUD ----- 4 Implants ----- 5 Tuba legation /Vasectomy ----6 Breast feeding7 Withdrawal method.....8 Rhythm method.....9 Other (specify) -----89	
305	Are you/your partner/ using Family planning method currently (during the Study period)?	Yes ----- 1 No ----- 2 No response ----- 99	If no go to 317
306	If yes for question 305, specify the method you are using? (More than one answer can be possible) Do not read	Condom ----- 1 Pill (Ocp) ----- 2 Injectable ----- 3 IUD ----- 4 Implants ----- 5 Tuba legation /Vasectomy ----6 Breast feeding7 Withdrawal method.....8 Rhythm method.....9 Condom &others(dual methods).....10 No response -----99	

		Other (specify) -----89	
307	If yes for Q 305 Where did you get the family planning methods	From other health facilities.....1 From the same health facility FP clinic.....2 From ART clinic.....3 From market/private pharmacy.....4 Other specify.....5	
308	If yes for Q 305 Who choice the methods you used Do not read	I myself.....1 My partner and me together2 My partner.....3. Health providers.....4 I don't know.....5 No response.....99	
309	Did you get counseling service about family Planning in the ART clinic by ART providers today?	Yes-----1 No-----2 I don't remember-----3 No response-----99	
310	If Yes, for Q 309, What type of methods have you been counseled? More than one answer is possible Do not read	condom-----1 Pills -----2 injectable-----3 Norplant.....4 IUD.....5 Female sterilization.....6 Condom & other (dual methods)-----7 Others (specify).....89	
311	have you satisfied with FP counseling & service at ART clinic	Yes.....1 No.....2 No response.....99	
312	Had you been provided FP methods in the ART clinic within three months?	Yes.....1 No.....2 No response.....99	If no go to 314
313	IF yes for Q 312, what FP methods have you been offered? Do not read	Condoms.....1 Pills.....2 Injectable.....3 Norplant.....4 IUD.....5 Condom and pills or injectable or Norplant 6 Others (specify).....89	
314	If no for Q 312, Had you been referred to use FP methods to other clinics within three months?	Yes.....1 No.....2 No response...99	If no go to 317
315	If yes for Q 314, Where had you been referred?	FP clinic in the same facility.....1 FP clinic in another clinic.....2 Others Specify.....99	
316	By your perception, how was the service delivery in referred	Very good-----1 Good -----2	

	clinics?	Neutral-----3 Bad -----4 Very bad-----5	
317	If no for Q 305 , would you like to use family planning method in the future?	Yes ----- 1 No ----- 2 Don't know ----- 3 No response ----- 99	
318	If yes for Q 317, specify the method you intend to use? (More than one answer can be possible) Do not read	Condom ----- 1 Pill (Ocp) ----- 2 Injectable ----- 3 IUD ----- 4 Implants ----- 5 Tuba ligation /Vasectomy -----6 Breast feeding7 Withdrawal method.....8 Rhythm method.....9 Condom &other (dual methods)-----10 No response -----99 Other (specify) -----89	
319	If no for Q 305 , why don't you want to use family planning?	Want to have a child within two years ----- 1 fear drugs Interaction(FP and ART) ----- 2 I abstained from sex -----3 Fear of infertility.....4 .Preferred method is not available.....5 Little perceived risk of pregnancy.....6 . Unacceptable in my culture.....7 8, Religion prohibition.....8 Other specify.....9	
320	How was the relation between you and your ART providers	Good.....1 Neutral2 Bad.....3 Difficult to tell since more than one...4 No response -----99	
321	How many counselors do you know by name?		
322	Do you know Mobil /cell phone of your counselors/ART providers	I don't know -----1 I know one provider's address.....2 I know two providers' address3 I know three or more providers' address.....4 I do not remember.....5	
323	Did you call/sent message/contact without follow up date to the providers there was health related problem	Yes-----1 No.....2 I don't remember-----3	
324	It is possible to provide o FP counseling and services	Strongly support.....1 Support.....2	

	provision in ART clinic.	neutral3 Do not support.....4 Strongly oppose.....5	
325	If strongly support or support for Q 324, which providers do you prefer to take it?	ART counselors/nurses1 ART physician2 ART pharmacist.....3 Community volunteers.....4 Other specify -----89	
326	Which room/unit do you prefer	Counseling room-----1 Physician room-----2 Pharmacy room-----3 FP unit in the HF-----4 Other specify-----89	
327	What is the benefit of counseling and service provision of FP in ART clinic	More convenience and less time needed ...-----1 More privacy2 Empowerment to make informed choices-----3 Decrease health seeking burden of clients-----4 Reduce stigma &discrimination for clients-----5 Other specify-----89	
328	If you support which FP services should provided	Condom.....1 Pills.....2 Injectable.....3 IUD.....4 Implant.....5 Other specify.....89	
329	Which service is more supported by you?	Counseling then refer to FP unit in the same HF.--1 Counseling then refer to other Health facility to get FP--2 Both counseling and provision in ART clinic---3	
330	Advantage of dual methods use	Reduces Risk of unintended pregnancy---1 Reduces Transmission of HIV between partners---2 Reduces Risk of acquiring or transmitting other STIs.-----3 Other specify.....89	
331	Do you support with Dual methods of FP services in ART clinics	Yes-----1 No -----2 I don't know---3	
332	If not support integration why?	I don't isolate from other users.....1 Fear of decrease interest of providers.....2 May increase waiting time in the clinics-----3	

		May decrease counseling time for HIV care --4 Other specify-----89	
--	--	---	--

Part IV. HIV, ART status and related issues

Now I need to ask you some questions about HIV, ART status. Any information you give us is completely confidential. No one will ever be able to link your responses with you. It's really important that we get honest answers so that we can address your health needs adequately.

No.	Question	Coding Classification	
401	When did you know your HIV status	month/.....years before	
402	When did you enrolled in HIV care	month/.....years before	
403	When did you start ART treatment	month/.....years before	
414	CD4 cell count done after six months/resent count? Check in the registration book	<2001 200 to 350.....2 >350.....3 Not recorded.....5	
405	What is the frequency your of visit?	Monthly-----1 Every two month-----2 Every three month-----3 every six month-----4 Other.....89	
406	Why do you choice this facility	Nearest1 Already registered here -----2 Good Provider.....3. Other.....89	
407	Did you disclose your HIV status to your partner?	Yes.....1 No2 No response99	
408	Did your partner know his HIV status?	Yes.....1 No-----2 I don't know.....3 No response99	
409	Did you know your partner's HIV status?	Yes.....1 I don't know.....2 No response99	
410	If yes for Q 408 what is the HIV statue of your partner?	Positive1 Negative2 No response.....99	
411	Does HIV transmit from mother to Child?	Yes ----- 1 No ----- 2 Don't know ----- 3 No response ----- 99	

412	If yes for Q411 when dose HIV transmissions occur from mother to child?	During pregnancy ----- 1 During labor ----- 2 Through breastfeeding ----- 3 I don't know ----- 4 No response ----- 99	
413	By your perception, your current health status as compare with the past?	worse.....1 The same.....2 Good.....3 better -----4	
414	Have you had sexual intercourse in the past Three months?	Yes-----1 No-----2 No response-----99	
415	Have you had sexual intercourse in the past Six months?	Yes-----1 No-----2 No response-----99	

Thank you for participation

Annex IV. Guideline for Health providers/program managers In-depth interview

I am MPH student from AAU. I investigate about FP needs and integration of FP in ART clinic. Today, the purpose of my visit is to discuss with you about the issues of family planning in light of HIV/ AIDS particularly ART clinic. This will enable quality service provision. Program planners and policymakers will find suitable ways of delivery of FP services in the area of HIV services.

1. What is your Profession..... position _____
2. For how long have you worked as ART provider/as officer.....years.
3. Do you have Trainings on

No	Name of training	In service(	Pre-service (school)	Is the training have FP content (yes/no/ I don't remember)
1	Basic ART			
2	PMTCT			
3	VCT			
4	STI			
5	FP			
6	PIHCT			
7	Comprehensive ART			

- 2 What type of reproductive health services provide in your ART clinic? **(for providers)**
- 3 Do you think that HIV positive client need FP methods? Yes . no . why?
.....
- 4 Do you provide FP counseling in your ART clinic? **(for providers)**
Yes no if no why.....
- 5 Do you distribute FP commodities in your ART clinic for your clients(**for providers**) yes no If no why -----
- 6 Do you refer your client to FP services **(for providers)** yes. no. if yes ,where?
.....
- 7 Do you have internal referral form yes no **(for providers?)**
- 8 it is possible to offering of FP services in ART clinic.
Strongly agree agree neutral disagree strongly disagree,
➤ If you are strongly agree or agree. Where does it be preferable?
.....

➤ If Disagree or strongly disagree what is your reason?

.....

9 do you know Ethiopian

No	Item	yes	No	Is there FP content		
				yes	No	I don't know
1	HIV POLICY					
2	HIV strategy					
3	RH strategy					
4	PMTCT guideline					
5	VCT guideline					
6	ART guideline					

10 Do you think that Ethiopian HIV/AIDS and RH policies and guidelines properly address integration of FP in ART clinic? Yes.....no **(for provider and managers)**

.....

...

11 How far do your organizational policy support integration of family planning and ART services?**(for managers)**

.....
If yes for Q 10, who shall give the service? Counselor/nurses pharmacy other.....

12 Can you tell me the advantages of offering FP services in ART clinic? **(for both)**

.....
13 Disadvantages**(for provider and managers)**

.....
14 What could be the potential opportunities in linking the two services? **(for provider and managers)**

.....
15 obstacles**(for provider and managers)**_____

16 Are there women asking you for FP methods?.yes no I don't remember ? if yes ,what is your response? (For providers).....

...

17 What FP methods do you recommend to HIV positive women? **(for providers)**

.....
18 Did you report to the higher level about FP counseling /provision in ART clinic .yes No , if no

Why? **(for provider and managers)**

.....

- 19 Did you think that FP/ART services incorporate in annual plan (**for provider and managers**)
.....
- 20 What is the current definition of dual methods use? (**for provider and managers**)
.....
- 21 What is the current definition of dual protection? (**for provider and managers**)
.....
- 22 At what extent do you express the following Barriers to FP/ART Integration in your health facility/office/Department/case team/

No	problem	strongly agree	agree	neutral	disagree	strongly disagree
1	have no clear policies	5	4	3	2	1
2	no services guideline	5	4	3	2	1
3	shortage of staff	5	4	3	2	1
4	shortage of budget	5	4	3	2	1
5	limited training opportunity	5	4	3	2	1
6	shortage of commodities	5	4	3	2	1
7	shortage of space	5	4	3	2	1
8	parallel/vertical supervision	5	4	3	2	1
9	no feedback mechanism	5	4	3	2	1
10	lack of staff motivation	5	4	3	2	1
11	no monitoring and evaluation indicators	5	4	3	2	1

23 Knowledge and attitudes of providers on FP for PLWHA

NO		agree	disagree	Don't know
1	Using hormonal methods will make HIV- positive women sicker			
2	condom is the only methods for HIV-positive women should use			
3	Best methods for HIV-positive women to use			
	• Condom			
	• Pills			
	• Injectable			
	• Implants			
	• What women wants			
	• others			
4	Adding other contraceptives hesitate to use condom			

Thank you for their participation

Annex V. List of National papers were reviewed

1. Policy on HIV/AIDS of the Federal Democratic Republic of Ethiopia,
2. Guidelines for prevention of mother-to-child transmission of HIV In Ethiopia
3. Guidelines for implementation of the antiretroviral therapy program in Ethiopia
4. The National Health Sector Development Programme (HSDP)
5. The National Reproductive Health Strategy

Annex VI. Check list for facility observation in ART clinic

Accessibility of necessary equipments, materials, and contraceptives for family planning services in ART clinic,

Materials	Present	Absent
Basic Equipments		
BP apparatus		
Stethoscope		
Thermometer		
Supplies & Consumable		
Running water in rooms		
Disposable syringes and needles		
Contraceptives		
Male Condom		
safety box		
Any oral contraceptive		
Injectable		
IUDs		
Norplant		
IEC materials on FP		
Poster		
Flip charts		
Brochure		
Pamphlet		
Demonstrating materials		
Penile model		
pills		
condom		
others		

Annex VII Declaration

I, the under signed, declared that this thesis is my original work, and has not been presented for a degree in any other University and that all sources of material used for this thesis and all people and institution that gave support for this have been duly acknowledge.

Name: Wassye Yitages Mengste

Signature _____

Place: Addis Ababa

Date of submission: July 25 2011

This Thesis work has been submitted with my approval as University Advisor

Advisor's Name _____

Signature

Dr. Ayele Belachew
