ISSN: 2455-7587

Demand For Family Planning Among Women Of Voluntary Counseling And Testing Clients In Public Health Facilities, Dawuro Zone, South West Ethiopia

Bayu Begashaw¹, Thomas Tesfaye², Tegene Legese¹, Kinde Mitiku³, Abera kumalo³

¹Public Health Department, College of Health sciences, Mizan-Tepi University, Ethiopia.

²Dawuro Zone Health Department, Dawuro Zone, Ethiopia.

³Biomedical Sciences Department, College of Health sciences, Mizan-Tepi University, Ethiopia.

Corresponding Author: Bayu Begashaw

Received: 23/08/2016 | Revised: 01/09/2016 | Accepted: 01/09/2016

ABSTRACT

Background: The study was conducted to find out family planning utilization and associated factor among voluntary counseling and testing clients in Dawuro zone, south-west Ethiopia. Demand for family planning is affected by factors such as poor provider client relationships and pressure to have children. A great number of women in the world with an unmet need for family planning comprise women who are HIV positive and those at risk of HIV. In developing countries the provision of family planning services at voluntary counseling and testing settings is low. There is lack of information on demand for family planning and associated factors among women voluntary counseling and testing clients in the study area.

Objective: To assess demand for family planning among women voluntary counseling and testing clients in Dawuro zone, South West Ethiopia, in 2015.

Materials and Methods: The study was conducted by using mainly quantitative method supplemented by qualitative study method. Facility based cross sectional survey was conducted from February 20 to March 20, 2015. A total of 401 respondents were included in the study. Consecutive sampling technique was used to select samples. The data were also cleaned and checked for completeness and then entered in to EPI data 3.1 software and exported to SPSS 16.0 soft ware for analysis. Descriptive, bivariate and multivariable analyses were performed. Statistical significance was declared at a value of p < 0.05. Ethical clearance was taken from Jimma University and informed verbal consent was established with the participants before the interview.

Result: total of 401respondents participated in the study making a response rate of 98.5%. Demand for family planning among women voluntary counseling and testing clients was 71.5% in the study area. Marital status AOR= 0.17 95% CI; (0.04, 0.67), income level AOR= 2.44 95% CI; (1.34, 4.45) and live birth AOR= 3.27 95% CI; (1.35, 7.92) were significant predictors of demand for family planning.

Conclusions and Recommendations: The finding showed that majority of women voluntary counseling and testing clients had demand for family planning. Factors affecting demand for family planning and unmet need are related to the clients (women) and providers (health system). Hence providing family planning services continuously at VCT settings is recommended.

Key words: Demand, client, family planning, voluntary counseling and testing clients, HIV, Integration.

INTRODUCTION

Background

Human immune deficiency virus/acquired immune deficiency syndrome (HIV/AIDS) has become one of the global diseases causing a big trouble since the first cases were identified in the 1970s (Meda L. 2013). The process by which a person undergoes counseling which would enable him or her to make an informed choice about being tested for HIV is considered to be voluntary counseling and testing (VCT) (Korra A., Bejiga M., Tesfaye S., 2005, Julie A., Denison, George P. Schmid, E. Kennedy and Michael D. Sweat 2008). The

primary aim of the VCT service is preventive which is helping people to change their sexual behavior especially to avoid transmitting HIV to sexual partners if sero-positive, and to remain sero-negative if tested negative (Misganaw A, Melkamu Y. 2008).

demand The total for family planning is the sum of the percentage of women using family planning and the percentage of women with unmet need for family planning (United Nations. Department of Economic and Social Affairs, Population Division 2012). An individual's decision to approve a contraceptive method is based on whether they want a (another) child or not (UNFPA, PATH 2006). Both unintended pregnancy and HIV infection can be protected by a number of ways. These dual protection behaviors include abstinence, monogamous couples using effective contraception, and correct and consistent condom use. Access HIV/AIDS services without access to FP/SRH services and vice versa can have adverse effects on community health and stop the progress of advances made against HIV/AIDS, unmet FP need, and maternal mortality (Pathfinder International 2005). Although accomplishment of linkage of family planning and HIV/AIDS services may vary from one health facility to another, a continuum of possibilities exists for linking these services (Rose W., Erika M. 2004, USAID, Rapid Assessment on Policy and Operational Barriers to The Integration of FP/RH/HIV Services in Kenya 2009). HIV and family planning interventions have almost similar target audiences; for example, nearly half of HIV worldwide infected persons childbearing-aged women. Offering these services together may maximize use of scarce resources, improve client access, increase uptake for both service types (USAID 2012, Democratic Federal Republic of Ethiopia Ministry of Health 2011).

Ethiopia is the second most populous country in Africa next to Nigeria having a population of nearly 88 million in 2014. Women of reproductive age make up about 45% of the female population and one-fifth of the total population of the country. Women in the country characterized by high fertility - 4.1 children per woman. The population policy of the country aims to achieve a Total Fertility Rate (TFR) of 4 children per woman by 2015. One of the targets of the Ministry of Health of Ethiopia, with respect to improving maternal and child health, is to increase the contraceptive prevalence rate (CPR) to 66 percent by 2015 (UNFPA December 2012, CSA, MOH July 2014). The HIV/AIDS policy and guidelines for voluntary counseling and testing for HIV in Ethiopia recommend that basic FP information and services should incorporated into the VCT services for all clients regardless of their HIV sero status (Federal Democratic Republic of Ethiopia Ministry of Health 2011). The Health Sector Development Program (HSDP) IV of the country also recommends integration, in particular FP-HIV prevention linkages through common messages and protection (Federal Democratic Republic of Ethiopia Ministry of Health October 2010).

The percentage of fecund women exposed to the risk of pregnancy who say that they want to wait at least two years for another birth (spacing) or do not want any more children (limiting) but are not currently using a method of contraception are said to be women with unmet need for family planning. Unmet need measures the gap between women's stated fertility desires and their contraceptive behavior (United Nations, Department of Economic and Social Affairs, Population Division 2012). Even though some attempts made to integrate family planning with HIV/AIDS services, programs continue to be vertical and treat them as different areas intervention. More than 200 million women in the world with an unmet need for family planning comprise women who are HIV positive and those at risk of HIV (Karin R., Marissa Y., Jame S., Er I., Sara S. 2009). Both family planning (FP) and its integration with HIV programs have been overshadowed by donor emphasis on other urgent health issues, namely HIV, malaria and tuberculosis. This is especially true in sub-Saharan Africa where the HIV epidemic is most acute, fertility rates are high and modern contraceptive use is low (Strachen M., Agarwal K. January 2004).

The unmet need for family planning and the HIV epidemic are driven by similar root causes, including poverty and poor access to healthcare ((IAWG [Internet]. Interagency Working Group for SRH and HIV Linkages. Top-. frequently asked questions. IAWG 2010). Male partner's influence, religion, pressure to have children and poor provider client relationships are among the factors those reduce demand for family planning (Egzeabher, S.G., Bishaw, M.A., Tegegne, T.K. and Boneya, D.J. 2015). Study of family planning and HIV integrated services in five countries (Ethiopia, South Africa, Rwanda, Kenya and Uganda) by USAID and FHI showed in most countries except for clients in South Africa, fewer than 40 percent of women in VCT services indicated that they discussed contraceptive methods other than condoms, and very few clients reported having received or being referred elsewhere for a (Family method Health International, USAID 2010). A study in Uganda found that 75% of HIV positive women and 34% of HIV negative women had an unmet need for family planning (Jhangri G., Heys J., Alibhai A., Rubaale T., Kipp W. 2012).

In Ethiopia the epidemic of HIV/ AIDS placed substantial demand on the country's already strained resources. The prevalence is significantly higher in women than in men which are 1.9% for women and 1.0% for men. Though the policy environment is quite favorable integrating family planning into VCT, major challenges remain, and the most difficult barrier to effective service integration is a lack of resources. Donors have been very generous in supporting the country's HIV/AIDS program, especially the United States which provided \$852 million in four consecutive years from 2008 to 2011 under the President's Emergency Plan for AIDS Relief (PEPFAR). External funding for family planning, however, has approached this level, and PEPFAR, the principal funder of VCT services, did not fund family planning (PEPFAR 2011, Central Statistical Agency, **ICF** International 2012).

According to EDHS 2011 twenty five percent of currently married women have an unmet need for family planning 16% for spacing and 9% for limiting in Ethiopia (Central Statistical Agency, ICF International 2012). Even though the contraceptive prevalence of the country among currently married women increased from 29% in 2011 to 42% in 2014, the FP service remains among the lowest in the According to Ethiopia Demographic and Health Survey (EMDHS) 2014 in SNNP fertility levels are higher than the national average which is 4.4 children per woman and the use of any FP methods is low in which only 39% of married women were current users of the methods in the region(CSA, MOH July 2014). A study done in Dessie town, north east Ethiopia showed that total demand for family planning among women VCT clients was 86 % and both HIV positive and HIV negative VCT clients have high unmet need for FP which was 62% and respectively (Engender Health Ethiopia November 2009).

In Dawuro zone the contraceptive acceptance rate is described as low coverage which was only 57% in the year 2006 Ethiopian fiscal year and 53,201 clients were tested for HIV services voluntarily among them 87 (0.16%) clients were found to be HIV positive. The zonal report showed that those women at risk for HIV and

unwanted pregnancy are reluctant to get the VCT services because of fear of stigma and discrimination. Besides this in the study area Gilgel Gibe three hydro electric power is on construction process which hosts more than 10,000 workers who are at risk for HIV infection due to behavioral problems and they are also in contact with the community members (Dawuro zone health department 2014). Even though providing family planning services in the VCT settings has benefits, insufficient information exists to describe the extent of demand for family planning in VCT settings. This study was intended to address the gaps in demand for and unmet need for family planning among VCT clients in the study area. Additionally demand for family planning among women VCT clients at VCT settings in the zone was not identified.

Incorporating FP into existing VCT services will have an important role in offering contraception as an integral part of comprehensive, client-centered HIV services, particularly during post test counseling depending on the client's receptivity in the study area. It will also offer options for preventing unintended pregnancies to VCT clients. The integration of both services provides preconception counseling to optimize positive health outcomes.

MATERIALS AND METHODS

The study was conducted by using mainly quantitative method supplemented by qualitative study method. Facility based cross sectional survey was conducted from February 20 to March 20, 2015. A total of 401 respondents were included in the study. Consecutive sampling technique was used to select samples. The data were also cleaned and checked for completeness and then entered in to EPI data 3.1 software and exported to SPSS 16.0 soft ware for analysis. Descriptive, bivariate and multivariable analyses were performed. Statistical significance was declared at a value of p < 0.05.

RESULTS

Table 1: Socio demographic characteristics of women VCT clients, Dawuro zone, March 2015 (n= 401)

Variables	Frequency	Percent					
Age (years)	1						
15-24	215	53.6					
25-34	127	39.2					
>=35	29	7.2					
Religion							
Orthodox	181	45.1					
Protestant	197	49.2					
Catholic	23	5.7					
Ethnicity							
Dawuro	383	95.5					
Amhara	9	2.2					
Wolayita, konta & others	9	2.2					
Educational status	-	· · · · · · · · · · · · · · · · · · ·					
Literate	321	80					
Illiterate	80	20					
Residence							
Rural	256	63.8					
Urban	145	36.2					
Marital status							
Married	172	42.9					
Unmarried	195	48.6					
Widowed	11	2.7					
Divorced	23	5.7					
Work status							
Unemployed	57	14.2					
Student	81	20.2					
Government employee	71	17.7					
Merchant	26	6.5					
Farmer	23	5.7					
Daily laborer	49	12.2					
House wife	94	23.4					
Family income/month							
<500	192	47.9					
500-1500	153	38.2					
>1500	56	14					
Radio in HH							
Yes	263	65.6					
No	138	34.4					
Television in HH							
Yes	103	25.7					
No	298	74.3					

Of 407 women eligible for the study information was obtained from 401 women making a response rate of 98.5%. The mean age for women was 24.88 with SD of ± 5.93 ranging from 15 to 49 years. Majority of the respondents 215 (53.6%) are within the age group of 15 to 24 years as shown below in Table 1. Most VCT service providers and health facility managers from in depth interview reported that most of their VCT clients were young. According to one health facility manager in depth interview response "...Most of the clients were young with age greater than 20 years and below 30 years old and partners visiting for pre-marriage service".

Health Service Related Factors

Only 50 (12.5%) respondents were counseled for family planning methods by health professionals at the VCT settings. From these 17 (34%) counseled for condom, 15 (30%) counseled for injectables, 9 (18%) for implant and the rest counseled for others among which 48 (96%) were HIV negative and the rest 2 were HIV positive. Most of the VCT councilors from in depth interview stated that if clients are in need to get the family planning services, referral is made to the maternal and child health unit in the facility so that they can be counseled and provided the FP methods based on informed choice. One clinical nurse councilor during in depth interview said, "...If our VCT clients request to get family planning services, most of the time rather than counseling at VCT settings, intra facility referral to maternal and child health unit is made.'

One health facility manager from in depth interview also said,

"... The FP information could be provided by councilors but the service to be provided by FP provider".

One of the VCT counselors from in depth interview explained,

"...Our facility was providing short term FP methods such as pills and condoms for VCT clients at VCT room but no longer integration currently because the ongoing new construction in our compound made the former room in which the services were provided to be detached from the old building and currently we do not have enough rooms to provide the services jointly".

Most of the counselors and managers from in depth interview said that it is possible to integrate both FP and VCT services. But practically the integration was weak due to inadequacy of rooms, VCT service providing rooms being far from FP service providing rooms, shortage of trained man power to deliver the services and most of the logistics for FP were found at MCH units rather than being available at VCT

settings. Even though the organizational policy supports integration of FP with VCT services, it was weakly practiced in the facilities. The integration of the two services was rarely practiced in cases in which clients ask to get the FP service intra facility referral made. But the service providers by themselves were not ready to deliver the services through integration rather they prefer the service provision separately. In some facilities where the youth friendly services were provided clients particularly the youth prefer the provision of the services in one room because they fear not to be seen by others in FP clinics. The have councilors different concerning counseling for FP services at VCT settings in which among those agreed the service provision some of them said that the counseling to be made during post test counseling, the others said that the counseling to be made during pretest or both of the time. One counselor also stated, "...It is better to provide FP service during post test and during chronic follow up period for HIV positive clients".

Contrary to this one counselor said, "...It is better to provide the service of FP during pre test so that to reduce the emotional feeling discomfort of post test".

Concerning access to health facilities 323 (80.5%) clients live within 5 km distance from the health facilities. The main source of information about the VCT services for 248 (61.8%) respondents was health facilities.

Table 2: Health service related factors among women VCT clients, Dawuro zone, March 2015

Variables	Frequency	Percent
Counseling on FP methods		
Yes	50	12.5
No	351	87.5
Distance of the facility from home		
≤ 5 km	323	80.5
> 5km	78	19.5
Partner HIV tested		
Yes	166	47.2
No	186	52.8
Know partner's HIV status		
Yes	164	46.3
No	190	53.7
Reasons for visiting VCT centers		
To know HIV status	288	72
In time of illness	11	2.8
Pre-marriage	48	12
In doubt	44	11
Other	9	2.2

Demand and Utilization of Family Planning Methods

Table 3: Demand and Utilization of FP methods of respondents, Dawuro zone, March 2015

Variables	Frequency	Percent
Ever heard of FP methods		
Yes	363	90.5
No	38	9.5
Demand for FP methods		
Yes	206	71.5
No	82	28.5
Ever used FP methods		
Yes	217	54.1
No	184	45.9
Current users of FP methods		
Yes	113	28.2
No	288	71.8

Among the respondents 363 (90.5%) have ever heard about any family planning methods and the source of information for majority 238 (65.6%) of them was from public health sector. Three hundred fifteen (86.8%) heard about injectables, (79.1%) about pills, 228 (62.8%) about P implants, 199 (54.8%) about condoms and 56 (15.4%) ever heard about IUD as a method of contraceptives. Among current non users of FP methods two hundred six (71.5%) had demand for family planning methods. From the total respondents 217 (54.1%) had ever used any FP methods, 1113 (28.2%) were current users of any FP methods. Table 4 below shows demand for and use of FP methods.

Among current users of FP methods majority of the respondents 52 (46%) were current users of injectable and 27 (23.8%) of them were users of condoms. Most of the councilors and health facility managers from in depth interview also stated that those with demand for FP mostly needed short term FP methods and were users of these methods.

Result from in depth interview by one health facility manager explained as follows,

"...Most of our VCT clients needed short term FP methods. Most of the VCT clients need to have a Depo-Provera. Some of them particularly the married ones prefer to have long term FP methods like implants. If the clients needed FP services they did not get from VCT setting but referrals made to MCH case team. Women of reproductive age group mostly within the age group of 18 to 25 years seek to get the FP services".

From five HIV positive women two of them (40%) were users of implants and IUD. Most of the VCT service providers during in depth interview stated that HIV positive clients were mostly users of long term FP methods in addition to condom. One health facility manger from in depth interview also expressed as, "... Most of HIV positive clients prefer long term FP methods in addition to condom". One of the clinical nurse counselors stated during in depth interview as follows, " ... Concerning the sexual activity of HIV positive woman using condom is better to both couples to prevent transmission of STIs and different HIV strains".

All of the health service managers said that the extent of unmet reproductive health need of the clients was high. Most of the health service managers and counselors expressed they planned to integrate the VCT and FP services, but practically the integration was weak due to inadequacy of rooms, VCT service providing rooms being far from FP service providing rooms, shortage of trained man power to deliver the services and most of the logistics for FP were found at MCH units rather than being available at VCT settings. Findings from indepth interview by one health facility manager"...Advantages of offering FP services to VCT clients are: making easily accessible clients to use FP services and addresses the need of clients. opportunities in linking the two services were presence of both services in the facilities and presence of supporting guidelines to integrate both services. The obstacles in linking the two services were poor intra facility referral and lack of attention from provider side".

Among HIV positive women 10 (62.5%) of them had ever used any FP methods and 5 (31.2%) were current users of FP methods. Among HIV negative women 207 (53.8%) had ever used FP

methods and 108 (35.6%) were current users of FP methods. The unmet need for FP among women VCT clients was 206 (64.6%), for HIV positive women it was 11 (68.2%) and for HIV negative women it was 195 (64.4%). Thirty two (10%) of women with demand for FP had unmet need for limiting whereas 174 (54.6%) of them had

unmet need for spacing. The unmet need for FP among married women was 80 (50.6%) and for unmarried ones were 103 (76.9%). Demand for FP was 158 (91.9%) for married respondents, 138 (68.7%) for unmarried, 6 (54.5%) for widowed and 21 (91.3%) for divorced ones.

Factors Associated with Demand for Family Planning

Table 4: Logistic regression of selected explanatory variables affecting demand for family planning in Dawuro zone (n= 288)

· ·	Demand for FP			
Variables	Yes	No	COR 95% CI	AOR 95% CI
Marital status	N (%)	N (%)		
Unmarried	103(62.8%)	61(37.2%)	0.29(0.15, 0.56)**	0.62(0.25, 1.50)
Widowed	6(54.5%)	5(45.5%)	0.21(0.05, 0.78)*	0.17(0.04, 0.67)**
Divorced	17(89.5%)	2(10.5%)	1.48(0.30, 7.15)	1.34(0.26, 6.73)
Married	80(85.1%)	14(14.9%)	1.00	1.00
Age				
15-24 year	115(64.6%)	63(35.4%)	1.00	1.00
25-34	80(85.1%)	14(14.9%)	3.13(1.64, 5.97)**	1.72(0.72, 4.11)
>35	11(68.8%)	5(31.2%)	1.20(0.40, 3.62)	0.66(0.14, 3.77)
Income		D.		
500-1500 ETB	92(80%)	323(20%)	2.21(1.25, 3.92)**	2.44(1.34, 4.45)**
>1500	22(73.3%)	8(26.7%)	1.52(0.63, 3.67)	1.37(0.53, 3.50)
< 500	92(64.3%)	51(35.7%)	1.00	1.00
Ever given live birth	6.0	9	611 8	
Yes	105(85.4%)	18(14.6%)	3.69(2.04, 6.66)**	3.27(1.35, 7.92)**
No	101(61.2%)	64(38.8%)	1.00	1.00
Future child desire	-	12/1/2/		
Yes	172(71.7%)	68(28.3%)	1.00	1.00
No	32(76.2%)	10(23.8%)	1.26(0.59, 2.71)	0.83(0.32, 2.18)
Don't know	2(33.3%)	4(66.7%)	0.19(0.03, 1.10)	0.13(0.01, 1.02)

Statistically significant, **p<0.01, *p<0.05

On bivariate analysis factors became candidate for multivariable logistic regression analysis were: marital status, live birth, future child desire, age and income level. Variables like marital status in which widowed women compared to married ones and unmarried women compared to married ones, women whose family monthly income was between 500 and 1500 ETB compared to those with income less than 500 ETB, women in the age group of 25 to 34 year compared to those in 15 to 24 age group and women had ever given live birth compared to women who did not give ever live birth were found statistically significant in the bivariate analysis. Variables such as HIV sero status, education level, access to mass media, access to health facility and FP counseling were not associated with demand for FP. Also none of the explanatory

variables were associated with HIV sero status. Table 6below shows bivariate analysis of some of the variables affecting demand for FP.

In multivariable logistic regression factors significantly affecting demand for FP were marital status, income and live birth. Widowed women were less likely to have demand for FP than the married ones AOR 0.17 95% CI; (0.04, 0.67). Women whose family monthly income was between 500 and 1500 ETB were two times more likely to have demand for FP than those with monthly income less than 500 ETB AOR 2.44 95% CI; (1.34, 4.45). Those women who had ever given live birth were three times more likely to have demand for FP than those who did not give ever live birth AOR 3.27 95% CI; (1.35, 7.92).

DISCUSSION

This facility based study used information from women of reproductive age voluntary counseling and testing clients to determine demand for family planning, unmet need for family planning and attempted to assess factors associated with demand for FP and unmet need of FP in Dawuro zone. In addition this information was obtained from VCT service providers and managers of the health facilities to supplement the information obtained from clients. Consequently factors influencing demand for FP and unmet need for FP were identified in the zone.

In our study the HIV prevalence was 4% which is lower than the finding of studies done in Kenya in which 8% of women VCT clients were HIV positive (Bayoum A., Beati M., Florence T., Zubeda N. 2012). The inconsistency between the \mathbb{R}^2 findings of VCT clients might be due to the differences in exposure to risky behaviors including unsafe sexual practices. In our finding among the HIV-negative women, desire for a (another) child was higher for the unmarried which was 93.2% compared to the married 79%. Among the HIVpositive, desire for a (another) child was higher for the married (70%) compared to the unmarried, 66.7%. This finding is consistent with a study done in Uganda (Fredrick M., Gertrude N., Tom L., Joseph K.i, Joseph K., Joseph S., Absalom S., et al 2010). The possible explanation for this might be that since most of unmarried HIV negative women do not have a child, their desire to have a child is higher than that of married counterparts. Whereas unmarried HIV positive women fear the risk of transmission of HIV to their infant when they become pregnant and give birth since they fear stigma and discrimination, and do not get proper care from male partners. However married HIV positive women along with their husband they can properly take the anti retroviral drugs and other necessary cares to give birth to healthy infant and help his or her growth.

Our finding showed that among the respondents 90.5% have ever heard about any family planning method which is lower than the finding of EDHS 2011 in which 97% of women ever heard of a modern contraceptive method (Central Statistical Agency, ICF International 2012). This difference might be due to the difference in information, education and communication dissemination. In our study demand for family planning among women voluntary counseling and testing clients was found to be 71.5%. This finding is higher than the study done in Tanzania which showed that 60% of women VCT clients needed to get family planning services at health facilities but it is lower than the study done in North east Ethiopia which was 86% (Engender Health Ethiopia November 2009, Bayoum A., Beati M., Florence T., Zubeda N. 2012). The differences might be due to the fact that socio cultural factors, health facility factors and differences in the study setting. In our finding demand for FP among married women was 91.9%, which is found to be higher than those of unmarried women (68.7%), and higher than the finding of studies done in Sudan in which demand for FP among married women was 71%, also higher than finding of studies done in Ethiopia which was 54% (Central Statistical Agency, ICF International 2012, Ali A. and Okud A. 2013). The possible explanation for this might be that married women have better information and awareness about family planning methods whereas unmarried women are with less support from their partners. The difference in demand for FP between this study and the other studies might be due to socio cultural difference and difference in reference population.

In our finding also all of HIV positive women participated in the study had demand for FP whereas 78.7% of HIV negative women were with demand for FP methods. This difference might be due to the fact that HIV positive women fear the risk of pregnancy to prevent the transmission of the virus to their child and

for promoting their own health. Our study showed that the demand for FP among women who had ever given live birth was 91.3% which is higher than those women who did not ever give live birth, which was 67%. The possible explanation for this might be due to the reason that women who had ever given live birth want to space or limit their birth because they are with better experiences and awareness about family planning methods.

In our finding few numbers of unmarried or divorced women were using contraceptives whereas 49.4% married ones were using contraceptives. This finding came to be higher than the finding of mini EDHS of Ethiopia in which the contraceptive prevalence of the country among married women was 42% and in SNNP 39% of married women were current users of FP methods in 2014 (CSA, MOH] July 2014). The possible explanation for this might be that married women get information on FP methods through free discussions made with their friends, neighbours, partners and their readiness to visit health facilities. Also the married women are with high incidences of sexual activities compared to unmarried women or divorced women. The difference with the finding of the EDHS report might be due to difference in reference population.

Our study found that among HIV positive women only 31.2% were current users of FP methods which is higher than the finding of studies done in Kenya in which 26% of HIV positive women were using contraceptives, also higher than the finding of studies done in Malawi, 19% (Fredrick M., Gertrude N., Tom L., Joseph K.i, Joseph K., Joseph S., Absalom S., et al 2010). The unmet need for FP among HIV positive women was 68.2% which is lower than the findings obtained from studies done in Uganda, 75%, but higher than studies conducted in north east Ethiopia, 62% (Jhangri G., Heys J., Alibhai A., Rubaale T., Kipp W. 2012, Engender Health Ethiopia November 2009). These differences might be due to the fact that differences in socio cultural and health service related factors. Our finding showed that the unmet need for FP among HIV negative women was 64.4% which is high compared to studies conducted in Uganda (34%) and north east Ethiopia (53%) (Jhangri G., Heys J., Alibhai A., Rubaale T., Kipp W. 2012, Engender Health Ethiopia November 2009). This difference might be due to the fact that the difference in health service related factors particularly counseling and provision of FP service being low in the study area.

Our finding showed that injectables were used by 46% of contraceptive users which is consistent with studies done in Ethiopia, South Africa and Rwanda (Family Health International, USAID 2010). This idea was also supplemented by health service providers and managers during in depth interview that most of the VCT clients prefer to use short term FP methods. This might be due to the fact that most women prefer the short term FP methods because they think the long term methods are with more side effects than the short term methods. In this study 84% of the respondents supported the presence of FP services at VCT settings but only 12.5% of the clients were counseled for FP methods at VCT settings which is much lower than a study done in Tanzania in which 67.3% were counselled (Bayoum A., Beati M., Florence T., Zubeda N. 2012). This might be due to the fact that focus to integrate both services was being lower and provision of the two services being separate.

In our finding women with family monthly income between 500 ETB and 1500 ETB were two times more likely to have demand for FP than those with family monthly income less than 500 ETB. This finding is consistent with findings obtained from studies conducted in Rwanda in which women from the wealthiest households and women who were married to craftsmen or men with mid-level salaries were more likely than women from poorer households to have a demand for family planning

(Dieudonné M., Annelet B., Pieter H. 2009). The possible explanation for this might be that women with higher family income strive to work hard so that they try to increase their house hold income by limiting the number of children to be born. In our study widowed women were less likely to have demand for FP than the married ones. This might be due to the fact that they consider with low risk to be pregnant and with low family support. In our finding women who had ever given live birth were three times more likely to have demand for FP than those who did not give ever live birth. The possible explanation for this might be that mothers who gave birth want to space or limit child bearing because of their child desire satisfaction or fear the probability of unwanted pregnancy happening whereas those who did not give live birth mostly have the desire to have a child.

CONCLUSIONS AND RECOMMENDATIONS

This study revealed the demand for family planning and how much of this demand was met by the respondents. In this finding majority of women VCT clients had demand for FP. Marital status; income level and live birth were found to be important predictors for demand for family planning. Even though majority of the respondents needed the FP service to be provided at VCT settings, very few of them got the service through intra facility referral. Although most of service providers and health facility managers supported the integration of FP and VCT services, they were not ready to provide the services simultaneously. The FP services provision and need continuously follow the provision of the services at VCT settings and technical support in the availability of youth friendly services at each health facilities so that integrated HIV and FP services can be provided particularly to young unmarried clients.

Competing interests: We, authors have no competing interests.

ACKNOWLEDGEMENT

We would like to appreciate and thank Jimma University college of Health sciences. We would like to thank our data collectors and the supervisors for their important effort. Our deep gratitude also goes to our study participants and facility managers who volunteered and took their time to give us all the relevant information for the study.

REFERENCES

- Family Health International. "Integrating Family Planning and Voluntary Counseling and Testing Services in Ghana: A Rapid Programmatic Assessment." October 2004.
- Federal HIV/AIDS Prevention and Control Office Federal Ministry of Health. Guidelines for HIV Counseling and Testing in Ethiopia. July 2007.
- Korra A., Bejiga M., Tesfaye S., . "Socio demographic profile and prevalence of HIV infection among VCT clients in Addis Ababa." Ethiop. J. Health 19, no. 2 (2005).
- Meda L. "Assessing factors influencing university students to uptake VCT of HIV/AIDS." Journal of AIDS and HIV Research 5, no. 6 (June 2013).
- Pathfinder International. Integrating SRH and HIV/AIDS Services. Pathfinder Internationa's Experience Synergizing Health Initiatives, 2005.
- (IAWG [Internet]. Interagency Working Group for SRH and HIV Linkages. Top ¬. Frequently asked questions. IAWG. 2010. (Accessed December 17, 2014).
- Alemu Sufa, Muluemebet Abera and Bitiya Admasu. "Utilization of Family Planning Methods and Associated Factors among Women Living with HIV Attending ART Clinics in Nekemte Public Health Facilities, East Wollega Zone, Ethiopia." Science, Technology and Arts Research Journal 2, no. 4 (Oct-Dec 2013).
- Ali A. and Okud A. "Factors affecting unmet need for family planning in Eastern Sudan." BMC Public Health 13, no. 102 (2013).
- Ann D., Stacey H., Athena P., Naomi R., Denise J. "Integrating family planning and prevention of mother-to-child HIV transmission in resource-limited settings." Lancet, no. 366 (2005): 261-63.
- Bayoum A., Beati M., Florence T., Zubeda N. "Assessing the need and capacity for integration of Family Planning and HIV counseling and testing in Tanzania." Pan African Medical Journal 13(Supp 1), no. 6 (2012).

- Central Statistical Agency, ICF International. Ethiopia Demographic and Health Survey 2011. Addis Ababa, Ethiopia, Calverton, Maryland, USA, 2012.
- Charlie G. "Women's Education and Modern Contraceptive Use in Ethiopia." International Journal of Education 3, no. 1 (2011).
- CSA, MOH. Ethiopia Mini Demographic Health Survey. Addis Ababa, July 2014.
- Dawuro zone health department. "Dawuro zone health sector annual performance report of EFY 2006." Tarcha, 2014.
- Dieudonné M., Annelet B., Pieter H.
 "Demand and Unmet Need for Means of Family Limitation in Rwanda." International Perspectives on Sexual and Reproductive Health 35, no. 3 (Sep. 2009): 122-130.
- Duff G., Heather B., Metiku W., Aklilu K., Sabrina K. "Integrating family planning into Ethiopian voluntary testing and counselling programmes." Bull World Health Organ 87 (2009): 866-870.
- Egzeabher, S.G., Bishaw, M.A., Tegegne, T.K. and Boneya, D.J. "Modern Family Planning Utilization and Associated Factors among HIV Positive Reproductive Age Women in Debre Markos Referal Hospital North West Ethiopia, 2014 G.C." Open Journal of Epidemiology 5, no. 1 (2015): 32-40.
- Elise D. Berlan, Andrea M. Ireland, Suzanne Morton, Sepheen C.Byron, Benjamin D. Canan, and Kelly J. Kellehe. "Variations in Measurement of Sexual Activity Based on Electronic Health Record Definition." PEDIATRICS 133, no. 5 (May 2014).
- Engender Health Ethiopia. "Demand for family planning among women VCT clients in Northeast Ethiopia: The Need for Integration, International conference on Family Planning: Research and Best Practices." Kampala, Uganda, November 2009.
- Family Health International, USAID. "Study of Family Planning and HIV Integrated Services in Five Countries Final Report." 2010.
- Family Health International. "Integrating Family Planning and Voluntary Counseling and Testing Services in Ghana: A Rapid Programmatic Assessment, Family." October 2004.
- Family health international working paper series. Family Planning and the Prevention of Mother-to-Child Transmission of HIV, A Review. April 2004.

- Federal Democratic Republic of Ethiopia Ministry of Health. "Health Sector Development Program IV 2010/11-2014/15 FINAL DRAFT." October 2010.
- National Guideline for Family Planning Services in Ethiopia. 2011.
- Fredrick M., Gertrude N., Tom L., Joseph K. i, Joseph K., Joseph S., Absalom S., et al. "Use of HIV-Related Services and Modern Contraception among Women of Reproductive Age, Rakai Uganda." African Journal of Reproductive Health 14, no. 4 (December 2010): 91-102.
- Jhangri G., Heys J., Alibhai A., Rubaale T., Kipp W. "Unmet need for effective family planning in HIV-infected individuals: results from a survey in rural Uganda." J Fam Plann Reprod Health Care 38 (2012): 23-29.
- Johriaan B. "Expanding Access to HIV Counselling and Testing at Schools-The Manguzi Experience." The South African Journal of HIV Medicine, 2011.
- Julie A., Denison, George P. Schmid, E.
 Kennedy and Michael D. Sweat. "HIV Voluntary Counselling and Testing and Behavioral Risk Reduction in Developing Countries: A Meta-analysis, 1990-2005."
 AIDS Behav 12 (2008): 363-373.
- Julius A. "Accessibilty of Rural Dwellers to Health Care Facilities in Rural Nigeria: The Owo Egion Experience." Pakistan Journal of Social Sciences 4, no. 1 (2007).
- Karin R., Marissa Y., Jame S., Er I., Sara S.
 "Supporting the Integration of Family Planning and HIV Services, Policy Brief." Population Reference Bureau, 2009.
- Kiersten B., Priscilla A., Shea O., Stan B. "Fertility preferences and the need for contraception among women living with HIV: the basis for a joint action agenda." AIDS 23, no. suppl 1 (2009): S7-S17.
- M.S. Kulkarni. "Exposure to Mass Media and its Impact on the Use of Family Planning Methods by Women in Goa." Health and Population -Perspectives and Issues 26, no. 2 (2003): 87-93.
- Mengistu Asnake, Lakachew Walie and Yilma Melkamu. "Improving the range of contraceptive choices in rural Ethiopia." Ethiop. J. Health Dev. 20, no. 2 (2006).
- Misganaw A, Melkamu Y. "Linkage between VCT and reproductive health services (FP, ANC and delivery) in two public facilities of rural Ethiopia." Ethiop.J.Health Dev. 22, no. 2 (2008): 158-166.
- Ogo Chukwujekwu. "Integrating Reproductive Health and HIV Indicators

- into the Nigerian Health System-Building Evidence Base for Action." (Ogo Chukwujekwu, Integrating Reproductive Health and HIV Indicators into the Nigerian Health Sys African Journal of Reproductive Health 14, no. 1 (March 2010).
- Path finder International, John Hopkins Bloomberg School of public health. "The Voluntary HIV Counseling and Testing Integrated with Contraceptive Services Study in Ethiopia: Executive Summary." Miz-Hasab research centre, Addis Ababa, Ethiopia, 2009.
- Pathfinder International. Addressing Unmet Need for Contraception among HIV Positive Women: End Line Survey Results and Comparison with the Baseline. April 2014.
- Paul L Hutchinson, Mai D and Sohail Agha.
 "Measuring client satisfaction and the quality of family planning services: A comparative analysis of public and private health facilities in Tanzania, Kenya and Ghana." BMC Health Services Research 2011 11, no. 203 (2011).
- PEPFAR. "Ethiopia operational plan report." 2011.
- Rabbi F. "Mass Media Exposure and its Impact on Fertility: Current Scenario of Bangladesh." J. Science. Res. 4, no. 2: 383-95 (2012).
- Ranajit Chakraborty, Anirban Majumdar.
 "Measuring Consumer Satisfaction in Health Care Sector: The Applicability of Servqual." Journal of Arts, Science & Commerce-II, no.-4 (Oct. 2011).
- Rose W., Erika M. "Integrating Family Planning and Voluntary Counselling and Testing Services in Ghana." A Rapid Programmatic Assessment, Family Health International, 2004.
- Rutestein So. "Evidence from the Demographic and Health Surveys." 2008.
- Strachen M., Agarwal K. "Analysis of Family Planning Content in HIV/AIDS, VCT, and PMTCT Policies in 16 Countries." January 2004.
- Sufa A., Abera M., Admasu B. "Utilization of Family Planning Methods and Associated Factors among Women Living with HIV Attending ART Clinics in Nekemte Public Health Facilities, East Wollega Zone,

- Ethiopia." Science, Technology and Art 2, no. 4 (Oct-Dec 2013): 71-77.
- Takele A., Degu G., Yitayal M. "Demand for long acting and permanent methods of contraceptives and factors for non-use among married women of Goba Town, Bale Zone, South East Ethiopia." Reproductive Health 9, no. 26 (2012).
- UNFPA. "A Decade of Change in Contraceptive Use in Ethiopia: In Depth Analysis of the EDHS 2000-2011." Addis Ababa, December 2012.
- UNFPA, PATH. "Meeting the need, strengthening family planning programs." 2006.
- United Nations, Department of Economic and Social Affairs, Population Division.
 "World Contraceptive Use (POP/DB/CP/Rev2012)." 2012.
- Usaid. "Rapid Assessment on Policy and Operational Barriers to the Integration of Fp/Rh/Hiv Services in Kenya." 2009.
- Integration of HIV and Family Planning Health Services in Sub-Saharan Africa: A Review of the Literature, Current Recommendations, and Evidence from the Service Provision Assessment Health Facility Surveys. Maryland, USA: ICF International Calverton, 2012.
- Integration of HIV and FP Health Services in Sub Saharan Africa: A Review of the Literature, Current Recommendations, and Evidence from the Service Provision Assessment Health Facility Surveys. September 2012.
- USAID. "Study of the Integration of Family Planning and VCT/PMTCT/ART Programs in Uganda." December 2005.
- Yohannes Dibaba. "Factors Influencing Women's Intention to Limit Child Bearing in Oromia, Ethiopia." Ethiop. J. Health Dev. 23, no. 1 (2009).

How to cite this article: Begashaw B, Tesfaye T, Legese T et al. Demand for family planning among women of voluntary counseling and testing clients in public health facilities, Dawuro zone, south west Ethiopia. International Journal of Science & Healthcare Research. 2016; 1(3): 35-46.
