Contraceptive Use and Family Size Preferences among Married Women of Reproductive Age in Jimma Arjo District of Eastern Wellega Zone in Oromia, Ethiopia

Tadele Amente[1]*, Tariku Tesfaye[1] and Mesfin Addise[2]

[1]Department of Nursing and Midwifery, College of Medical and Health Sciences, Wollega University, Nekemte, Oromia, Ethiopia

[2]School of Public Health, College of Medical and Health Science, Addis Ababa University, Addis Ababa, Ethiopia

***For Correspondence:** Amente T, Wollega University, Nekemte Town, Western Ethiopia, Tel: +251910119548; E-mail: amentetadele7@gmail.com

Received date: 03/11/2016; **Accepted date:** 15/02/2017; **Published date:** 23/02/2017

Research Article

ABSTRACT

Background: Ethiopia is one of Sub-Saharan Africa countries in which high fertility (5.4 births per woman) is observed. Family planning programs have always been considered as the interventions of choice for slowing population growth and family size preference is useful in suggesting its demand.

Objective: The objective of this study was to assess contraceptive use and family size preferences among currently married women of reproductive age in Jimma Arjo district.

Methods: Community based cross sectional study design was conducted from January to February 2011. A total of five kebeles were selected by lottery method from 22 kebeles in Jimma Arjo district, Oromia, Ethiopia and a total of 475 married women were interviewed using systematic random sampling technique.

Results: The result indicated that 57.1% of married women were using modern contraceptive methods. Average number of children a woman had during the survey excluding current pregnancy was 3.8. In the logistic regression, women of age 35-49 years (AOR: 5.54 (1.8-17.04), 95% CI) and women who have had at least one child death (OR 0.45(0.3-0.67) 95% CI) were determinant factors for limiting child birth.

Conclusion: The use of long acting and permanent methods was seen to be very low and women those desired to limit child bearing in this study area are lower compared to other studies. As a result, any program aimed at promoting family planning in this area should look for ways and means of reducing the intension of having many children.

Keywords: Family size, Family size preference, Contraceptive use

INTRODUCTION

Fertility is one of the most important elements in population dynamics that has significant contribution towards changing population size and structure over time. On the other way, family planning (FP) is the right of individuals and couples to freely and responsibly decide the number and spacing of their children and to have the information, education and means to do so [1]. International health experts now believe that the healthiest interval between a woman's previous birth and her new pregnancy is at least two years and by preventing closely spaced births, family planning could save the lives of more than 2 million infants and children annually [2]. The reproductive behavior of women in a given community can be affected by factors like: age at entry into marriage, access to family planning services, ability to utilize these services, economic status of the household and cultural and traditional norms in which the woman lives. According to Caldwell et al. and Bongaart et al., high fertility in traditional African societies is associated with the economic benefits that children provide to their parents [3,4]. In addition, it is shown that fertility rate is the highest in sub-Saharan Africa

than any parts of the world, mainly due to strong kinship and high economic and social values attached to children. In developing countries where the contraceptive prevalence rate is low, observed fertility may not reflect the actual demand for children, but family size preferences would do [5,6]. On the other hand, evidence from Matlab and Bangladesh, indicated that family planning program does not decrease fertility preferences; however it crystallizes latent demand for fewer children [7].

Births those are too close together (less than 2-3 years apart) will decrease both the mother's and the infant's chances of survival.

Not meeting the need for family planning, combined with the occasional failure of contraceptive methods, causes millions of unintended pregnancies each year in sub-Saharan Africa [8]. Fertility has begun to decline in Ethiopia. Nevertheless, fertility remains high, even by sub-Saharan African standards which is 5.4 births compared to 5.1 births per woman in SSA [9].

Family planning has also a direct positive impact on reducing maternal deaths and preventing mother-to-child transmission of HIV in addition to reducing fertility (births per woman) [10].

For this reason, meeting the need for family planning in SSA particularly in Ethiopia can reduce population growth and make the MDGs more achievable. To make a plan for this achievement, information on fertility preference is needed to provide insight into married woman's attitude towards future child bearing, desired and completed family size and the current demand for contraception.

Therefore, the purpose of this study were to assess the current status of contraceptive use and family size preferences and to generate information necessary for program and policy makers in the development of strategies for strengthening and improving the provision of quality family planning service in general and in the study areas specifically.

METHODS AND MATERIALS

Study Area and Period

The study was conducted in Jimma Arjo district from January to February 2011. Arjo is 48km away from Nekemte town and 379km from the capital city of the country, Addis Ababa. It is one of the 180 woredas in the Oromia Regional state located in the east Wellega Zone. It is bordered on the southwest by the Didessa River which separates it from the Ilu Ababor Zone, on the northwest by Diga Leka, on the northeast by Guto Wayu, and on the southeast by Nunu Kumba. The administrative center of this woreda is Arjo. This woreda has 22 kebeles and an estimated total population of 93,547, of whom 47,109 are men and 45,438 are women. In this woreda, there are 4 health centers and 20 health posts. It has served as a capital of the area for greater than 130 years.

Study Design and Sample

A community based cross sectional study design combining both qualitative and quantitative methods was used to assess contraceptive use and family size preferences among married women of reproductive age group in Arjo district. Sample of 475 married women of reproductive age group was calculated using the formula for a single population proportion with a 95% confidence level, 5% margin of error and 16.9% estimated contraceptive prevalence rate in Oromia region. A 10% non-response rate was considered.

To complement quantitative data, principal investigator has made three FGD sessions with service providers, married women other than those included in the study and religious leaders in 02 kebele of Arjo district. Accordingly, a total of 24 discussants each containing 6-9 discussants were participated in the discussion.

The district was stratified by place of residence, as urban and rural part. Then, four kebeles from 20 rural kebeles and one Kebele from the two urban kebeles were selected first by lottery method. Then, 475 households were selected proportionally from all selected kebeles by Systematic random sampling technique. Accordingly, 119 women were selected from urban area and the other 356 were selected proportionally and systematically from rural areas namely: Seka, Jimate, W/Qumba and H/Qumba kebeles. In case, where there was no eligible woman in selected HH during data collection, the next nearest HH was included in the study. When selected HH is closed during data collection, interviewers have revisited that HH three times at different time intervals and if failed to get again, that HH was then replaced by other nearest household.

Data Collection

In the quantitative part, pre-test is made and data was collected by 10 Diploma Nurses supervised by 3 B.Sc. Graduates by interviewing married women using a structured, standardized and interviewer administered questionnaire. The questionnaire contains questions addressing contraceptive use, family size preferences and factors affecting family

size preferences among married women in the study area. It has been prepared in English and translated to Afan Oromo. Then Afan Oromo was retranslated to English to ensure consistency.

In the qualitative one, three sessions of focus group discussions were carried out among married women who are not included in the study, with religious persons and service providers separately. Individuals of similar backgrounds: age group, educational status, occupation, and residents of the study area for more than six months have been included in the same group. All the discussions were moderated by principal investigator with one trained recorder and one note taker. Semi-structured, open ended questionnaire has been used to initiate discussion and all the discussions were undertaken in Afan Oromo which is local language of discussants.

Data Processing and Analysis

After data collection, data entry was done using EPI INFO version 3.5 statistical packages. Frequency output has been used to check missing values and outliers. Descriptive statistics and summary measures were employed to the data and cleaning was done using original code number. Using odds ratio (OR) with 95% limit of confidence interval, the association of dependent and independent variables was assessed and their degree of associations was computed. Potential confounding variables were controlled by using Logistic regression using SPSS version 16 statistical packages. The three focus group discussions were first read and reviewed and categorized into primary themes. Then it was pooled into broader concepts. Besides, quotes of participants that exemplify key concepts were used directly during analysis. Finally, the concepts were developed in to major themes under each discussion guides.

Ethical Clearance

Ethical clearance was obtained from the Research Ethics Committee of School of Public Health, Addis Ababa University before data collection is initiated. Then, written/verbal consent was obtained from each Kebele administrators and verbal consent was taken from each eligible woman. Study subjects have been informed that the study will not have any risks. In addition, the objective and benefits of the study were explained to them. Personal information (like: name, phone number, etc.) was excluded from the questionnaire to ensure privacy and confidentiality. The right of individual not to participate in the study was also respected.

The Operational Definitions Used Were

1. **Actual family size:** the number of biological children a woman has (alive) at the time of the study excluding other persons and relatives, living in the house.
2. **Current contraceptive users:** women who are currently using any method of modern contraceptives during the period of data collection.
3. **Ideal family size:** the number of children a woman would like to have in her reproductive age.
4. **Non-users:** those who are not currently using any method of modern contraception during the period of data collection.
5. **Currently married women:** women of reproductive age group (15-49 years) who were married before one year by any means and in union during data collection.
6. **Service providers:** health workers (Community Health Workers) those involved in direct provision of family planning service in the study area.
7. **Previous child death:** death of biological child that encountered a woman previously.

RESULTS

Quantitative Results

Socio-demographic characteristics

Out of the total respondents, 119 were from urban area and the other 356 were from rural areas. Regarding age distribution of respondents, this result shows that majority 315 (66.3%) of participants were in the age group of 20-39 with mean age of 29.8 years and median age of 29 years. Additionally it indicated that about half 239 (50.3%) of respondents were Protestants followed by Orthodox 223 (47%) and Muslims 13 (2.7%), respectively. Most 455 (95.8%) of respondents were Oromo followed by Amhara 17 (3.6%) and only three women were from other ethnic groups. Regarding educational status, majority 298 (62.7%) of women were illiterate and the other have attended at least grade one and most 308 (64.8%) are housewives.

On the other way, more than half 287 (60.4%) of their husbands are literates and 315 (66.3%) are farmers, followed by government employees 87 (18.3%) and other occupations 73 (15.3%).

Concerning reproductive health histories of respondents the result indicated that minimum age at first marriage was 13 years and the maximum age was 27 with mean age of 18.7 ± 2.24 years and the median is 18 years. Concerning age of women at first birth, mean age at first birth was 20.03 years with SD ± 2.32 and median of 20 years. Data on current number of children indicated that about half of respondents had 1-3 children (47.4%) and maximum number of children a woman had was 10. Average number of children they had during the survey excluding current pregnancy was 3.8 and out of the total respondents, 142 (29.9%) had history of child death **(Table 1)**.

Table 1. Reproductive health characteristics of currently married women in Jimma Arjo district, 2011.

Variables	Frequency (n=475)		Percent
Age at first marriage (years)			
<15	4		0.8
15-18	269		56.6
19-21	149		31.4
>21 years	53		11.2
Mean ± SD	18.7 ± 2.24		
Age at first birth (years)			
<15	1		0.22
15-18	103		22.3
19-21	258		56
22 and more	99		21.5
Mean ± SD	20 ± 2.3		
No. of children alive			
None	16		3.4
1-3	225		47.4
4-6	192		40.4
7 and above	42		8.8
History of child death			
Yes	142		29.9
No	333		70.1

Contraceptive use

Out of 475 currently married women most 409 (86.1%) have heard about family planning. Out of these, media, HEWs and other health professionals at the health center account 111 (27.13%), 103 (25.13%) and 65 (15.9%) respectively. About one third of women in the study area got information from other sources (husband, neighbours, relatives, etc.). Most 372 (90.95%) of them defined family planning as spacing births. About 316 (66.5%) of respondents have used modern contraceptive methods at least once in their life time. Out of these, majority 148 (46.83%) of women were using injectable followed by oral contraceptives 119 (37.66%) and Norplant 25 (7.9%), respectively.

The least method ever used by respondents is sterilization (tubal ligation) that only one woman was using it. More than three fourth, 241 (76.27%) of those who have ever used modern methods of contraceptives were obtaining the method from health center followed by health post 36 (11.39%). Only one woman mentioned that she obtained from private pharmacy.

Regarding information dissemination during contraceptive utilization, about half 149 (47.15%) of those received family planning advice from health professionals at the health center when the other 107 (33.86%) are those who have been advised by health extension workers. There are also recently added local persons trained on family planning to facilitate its utilization who advised about 18 (5.7%) women. Out of these, 12 (66.67%) are those who are using Norplant and it accounts about one third (31.5%) from those using Norplant in the general study subjects.

Currently 271 (57.1%) married women are using modern contraceptive methods. Among these, more than half (54.6%) of current contraceptive users were using injectable, whereas pills and Norplant account 82 (30.26%) and 38 (14%) correspondingly. Two women were using IUCD whereas only one person is using female sterilization. Regarding future intention for contraceptives, this data indicates that 362 (76.2%) of total respondents. Among these, more than half 184 (50.8%) planned to use injectable followed by pills 104 (28.7%) and Norplant 48 (13.3%), respectively **(Figure 1)**.

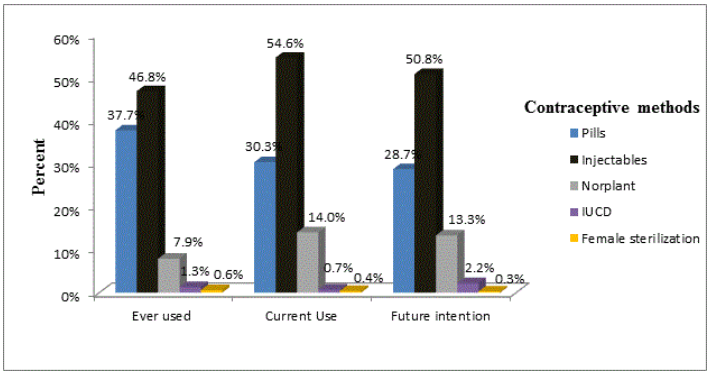

Figure 1. Ever used, current use and future intention of contraceptive methods by type among currently married women in Jimma Arjo district 2011, *percents are not added together as they are different variables.

Concerning reasons for not using contraceptives the result indicated that 49 (24%) are those who want a child soon and 38 (18.63%) were pregnant during data collection. About 47 (23%) of them reported breast feeding for not using any method of contraceptives where 12 (5.9%) were those preferred natural method as family planning. Ten (4.9%) women mentioned side effects for not using modern contraceptives and in significant number of respondents mentioned religion, husband refusal and unawareness as a reason for not using.

Fertility intention of currently married women

Out of the total women interviewed in the study, 41 (8.6%) were pregnant during data collection period and all of them were intended as mentioned by respondents.

Regarding fertility intention of currently married women analysis of the result showed that 129 (27.15%) of currently marred women wanted a child within two years, 125 (26.31%) of them wanted a child after two years and about 175 (36.84%) of them wanted no more child. The median and mean period to wait before the birth of intended child was 2 and 5.1 years, respectively **(Figure 2)**.

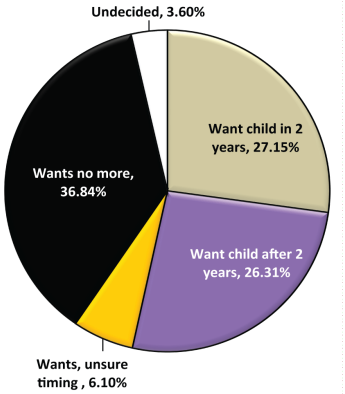

Figure 2. Fertility intentions of currently married women, Jimma Arjo district, Oromia, 2011.

Additionally, out of the total study subjects, 403 (84.8%) have stated the number of children they would have in their life time and among these, majorities, 307 (64.6%) need to have 4-6 children with average number of 4.09 ± 1.38 children **(Table 2)**. About 43% of married women stated the number of children less than their current family size. Respondents those provided non-numeric responses to fertility intention questions account 15.2%. On the other hand

women were interviewed whether having large family size is good and the result indicated that 17 (3.6%) supported that having large family size is good. Among these, 9 (52.9%) mentioned support during old age and 'child is wealth' as a reason for supporting large family size. Only one woman mentioned religion support for having large family size.

Table 2. Actual and ideal family size preferences among contraceptive users and non-users in Jimma Arjo district, 2011.

Family size	Contraceptive users		Non-users	
	Frequency	Percent	Frequency	Percent
Actual no. of children				
None	1	0.53	15	5.3
1-3	124	43.5	101	53.2
4-6	121	42.5	71	37.4
7+	25	8.8	17	8.95
Ideal no. of children				
None	10	5.8	7	3.04
1-3	48	20.9	21	12.14
4-6	170	73.9	137	79.2
7+	5	2.2	5	2.9
Child death				
Yes	73	26.9	69	33.8
No	198	73.1	135	66.2

Factors affecting family size preferences

This result indicates that those women with no education are about three times higher to desire having more than four children [OR: 2.9 (1.9, 4.5) 95% CI]. In addition, women of ages between 20-34 years have shown significant association in that they are less likely in intending to have many children (more than four) compared to those of older ones.

In the logistic regression, the main factors associated with the desire to stop childbearing are age of women, education, number of living sons and daughters. Women of 35-49 years are more than five times more likely than women of 15-24 years to limit child bearing [OR (95% CI=5.54 (1.8,17.04)]. Women of 15-24 years and those between 25-34 years did not show significant difference in the odds of intending to stop child bearing. With regard to child mortality, it is observed that women who have had at least one child death are less likely to intend to limit childbearing as compared to those who have not experienced any child death (OR 0.45). However, it did not show statistically significant relationship after confounders are excluded.

Most women with intention to limit childbearing are older (ages 35-49) 105 (56.45%), have 4 or more living children 149 (80.12%), have no formal education 127 (68.28%) and live in rural areas 141 (75.8%) **(Table 3)**.

Table 3. Factors associated with women's desire to limit child bearing, in Jimma Arjo district, Oromia, 2011.

Variables	Want more child	Want no more child	COR (95%CI)	AOR (95%CI)
Age				
15-24	71	8	1	1
25-34	189	73	3.43 (1.57, 7.42)	0.93 (0.36, 2.43)
35-49	29	105	32.13 (13.89, 74.33)	5.54 (1.8, 17.04)*
Educational status				

Illiterate	171	127	1	1
Primary	82	48	0.79 (0.52, 1.2)	1.85 (0.9, 3.8)
Secondary and above	36	11	0.41 (0.2, 0.84)	2.27 (0.75, 6.9)
Place of residence				
Urban	74	45	1	1
Rural	215	141	0.93 (0.6, 1.42)	1.13 (0.26, 5)
No of living son				
1	117	26	0.05 (0.022, 0.116)	0.05 (0.017, 0.142)*
2	78	57	0.164 (0.074, 0.366)	0.199 (0.072, 0.55)*
3	25	52	0.468 (0.197, 1.113)	0.335 (0.114, 0.98)*
4+	9	40	1	1
No. of living daughter				
1	108	33	0.075 (0.36, 0.16)	0.074 (0.03, 0.19)*
2	59	49	0.203 (0.097, 0.425)	0.22 (0.09, 0.55)*
3	35	48	0.336 (0.156, 0.723)	0.26 (0.1, 0.69)*
4+	12	49	1	1
Previous child death				
Yes	67	75	0.45 (0.3, 0.67)	0.73 (0.42, 1.26)
No	222	111	1	1
Current contraceptive use				
Yes	157 (54.3)	114 (45.7)	0.75 (0.52, 1.1)	1.00 (0.58, 1.75)
[1]No	132	72	1	1

QUALITATIVE RESULTS

General Description of the FGD Conducted

A total of 24 discussants participated in three FGDs; each FGD containing 8 discussants on average. The FGDs were conducted separately for community members (women of reproductive age), religious leaders and service providers in the study area. The purpose and the content of FGDs were explained first and participants were participated voluntarily. The FGDs took 1-2 h and all were tape recorded. The data collected from FGDs was transcribed to Afan Oromo on daily basis and translated to English for further processing.

Knowledge of Family Planning

Discussants' knowledge concerning contraceptives in general was high. Majority of the participants expressed that most of them and other community members have knowledge about family planning and most participants agreed that the use of contraceptives is good for the health of children, mothers and family. Moreover, most of participants knew pills, Norplant, Depo-Provera and female sterilization as modern methods of contraceptives and only one participant mentioned male sterilization as a contraceptive method.

[1] =Reference category

Factors Affecting Family Size Preferences

Ideas of the FGDs discussants on factors affecting family size preferences were categorized and organized into the following themes.

Husband dominance

In order to have small family size, majority of participants prefer short acting methods to permanent methods fearing of husband disapproval. One of the participants, (female, 27, Protestant expressed her neighbour's experience saying:

"Some husbands are not ready to take responsibility of determining their family health. My friend is family planning client even if her husband does not support. They are always in conflict for the reason that her husband suspects that she has other mate that enforces her to use contraceptives. So education is needed not only for females but also for males."

Misconceptions

Almost all the participants (women of reproductive age) said that having more than five children is said to be large family except the couples can satisfy all the needs of their children. Hence they expect having this much children is small and still they see family size preference in the perspective of economical status rather than other health risks. In addition, community health workers were asked to define family planning and they defined it as having the number of children fit with the economical status of the family. Furthermore, most women fear of side effects (unable to do household works after taking some contraceptives). Concerning this, one religious leader from protestant (Meserete Kiristos) explained his idea saying:

"Families should be told not to use contraceptives before first birth as it may lead to some complications like unable to bear a child (infertility)."

In relation to this, religious leader from Orthodox Christian said:

"Information on family planning should be given for those currently married because; others have already large family size and it is not this much good to discuss about this idea for them."

Religious disapproval

Almost all religious leaders explained that family planning is good to space births, to bear a child depending up on own capacity (economy, health and other facilities). However, they have a fear that using contraceptives especially condom may promote having sex with many partners.

On the other hand, some religious leaders do not agree with the idea that one can determine the number of children. One religious leader from Muslim explained his belief saying:

"In Muslim community, there are pre-requisites before one's marriage. Thus, enough facilities (economical, material, and etc) should be fulfilled first and then family size is determined by husband depending on the capacity of the couples. However, there is religious principle promoting large family size. In addition unless government body told to do so, it is too difficult to limit the number of children one needs to have and it is up to Allah to determine the number of his creatures."

Another discussant from protestant (Full Gospel) while expressing his views said:

"There is no clear guidance neither to promote nor to prohibit family planning program and as a religious person, it is difficult to say something on this issue since there is no biblical evidence. However, having more than eight children is not good."

Information gap

Result from discussion with community health workers indicated that contraceptive utilization in the area is good. They mentioned that they usually advise on type, side effects, how to take and other precautions. However, they have never told family planning clients about family size preferences. Concerning family size in the area, religious leaders said that large family size is observed in their community. Moreover, they said that family planning advice should be given without any discrimination except for children and elder people with special attention to those in marriage. In relation to this, a Muslim religious leader said:

"Both girls and boys must have this information as they are going to form a family. But, there is no enough information disseminated to us as religious person and this should be improved first to transmit to our religious communities."

Besides, encouraging ideas regarding topic under consideration have been discussed and one religious leader from protestant (Mekaneyesus) stated:

"There is no religious principle prohibiting contraceptive use and promoting large family size. However there is an article saying, "Bear a child and fill the earth!" which means have a child and through generations your children will fill the earth not at once. In addition, he said, 'Ijoollee guddisuu hin dandeenye godhachuun cubbuudha!' to mean that bearing a child that one could not feed is rather sin and it is not mandatory to have many children at once to fill the earth."

As well, religious leader from Christian (Meserete Kiristos) explained his idea saying:

"God says, 'Akka ta'utti jiraadhaa!' to mean live adjustable (stable) life and you cannot lead stable life unless you have few children."

Almost all religious leaders said having six or more children is said to be large family and they mentioned that both husband and wife should discuss and determine the actual number of children they will have in their life time.

DISCUSSION

This study has attempted to assess contraceptive use and family size preferences among married women of reproductive age in Jimma Arjo district. A total of 475 participants have been involved in the interview and 24 discussants were participated in FGDs.

This research showed that most 409 (86.1%) of currently married women have heard about family planning out of which 372 (90.95%) defined family planning as spacing births and other 37 (9%) defined it as avoiding birth and having small family size. This is less than that of the national level of 2005 which shows that 88% of currently married women have heard of at least one method of contraception [11,12]. More than 97% of those heard information in this survey defined family planning as they have been told by service providers. This indicates how much the information given during the service can affect understandings of the users percentage of married women who defined family planning as 'spacing' were much higher compared to study done in Dembia district, north- west Ethiopia which was 69.6 [13].

This study has also indicated that 66.5% of currently married women have used modern contraceptive methods at least once in their life time and currently 271 (57.7%) are using those methods. Among these, more than 98% of them are using short acting contraceptives out of which injectable account more than half.

Only two women were using IUCD where as one person was using female sterilization. Its utilization was about four times higher in this study area when compared to UN Population Division (2008) and EDHS 2005 [11,12]. However, this discrepancy might come due to sample size difference than its practice since this study has covered only small portion of the population. In addition, though contraceptive use was high, the use of long and permanent acting methods still remained very low. It has also indicated that almost all of modern contraceptive users obtained those methods from public health sectors except one woman who replied that she obtained from private pharmacy.

Furthermore, its utilization by married women was most common in women ages 24-35 (69.5%), and least common at young ages (age 18-23) and older ages (36-49). This is compatible with the findings from Oromia and Amhara regions 2000 demographic and health survey which indicated that its utilization is most common in women ages 25-34 (13%), and least common at young ages (age 15-24) and older ages (35-49) in Oromia [9]. Even though many factors could affect these two results, there is an indication that trend of contraceptive use along the age groups is still similar to that of the 2000 EDHS [12].

Contraceptive utilization was high as whole in this study when compared to the results of other studies [13,14]. However, the gap of utilization between urban and rural areas is still existed and even widened. Hence, 82.35% of currently married women in urban areas of Jimma Arjo district were using contraception, compared to 48.6% in rural areas. It was 5.5 times more practiced in urban compared to that of rural areas. This indicates relatively higher gap between urban and rural when compared to study conducted on proximal determinants of fertility in Oromia region in 2003 which showed that 31.6% of currently married women in urban areas of Oromia Region were using contraception, compared to 3.5% in rural areas [14]. In addition, Study conducted in Dembia district showed that urban dwellers were 3.6 times contraceptive users than rural dwellers [13]. However, no difference was observed between government employees and house wives in using contraception unlike that of Dembia district in which government employee women were 3.4 times contraceptive users than house wives. This might be resulted from small number of government employees in this study area.

In addition, this survey indicated that rural residents, 15-19 and 45-49 age groups were found to be a higher risk of not using contraceptives and average number of children they want to have in their life time was 4.09.Research done around Gonder town revealed the same thing except that average number of children they want to have in their life time was five [15]. This indicates that most of family planning clients started using contraceptives after they have achieved maximum number of children they intend to have which makes birth spacing difficult to start at the beginning. Additionally, the

result has shown that some women stopped using contraceptives and others did not intend to use at the later ages (45-49) considering that they could not get pregnant.

This study showed that 42.1% of women who wanted no more children were those using contraceptives which is almost more than double when compared to data source from EDHS 2005 which indicated that 16.9% of women who desired to limit child bearing in Oromia region were those using contraceptives [16]. However, there is no indication that intention to limit child bearing is related with contraceptive use. The use of short acting contraceptive methods might be responsible for the inconsistency in the relationship between contraceptive use and fertility intention.

Desired family size is smaller than actual family size in almost every country in the developing world, regardless of religion and culture [11]. Unlikely, the result of this survey indicated that only 43.4% of women stated an ideal family size smaller than actual family size. It also indicated that women had mean ideal number of 4.09 children (3.9 for urban and 4.2 for rural) which is relatively lower compared to that of study conducted in rural Ethiopia which revealed that women had mean ideal number of 5.9 children [17]. Furthermore, mean ideal number of children in this study area was higher than actual number of children they had in average (3.8).This might be resulted from the fact that majority of respondents were in the age group 25-29 who have not achieved the desired number of children. Therefore, statements on the ideal number of children might have been equal or higher than actual number of children.

Regard to fertility intention of women, this survey showed that 36.84% of currently married women in Jimma Arjo district wanted no more children and 18.8% of married women with three children would like to stop childbearing, as would 48.8% of women with four children. However, findings from Oromia and Amhara regions demographic and health survey have shown that close to 40% of married women with three children have desire to stop childbearing, as would close to 45% of women with four children and roughly 44% of married women in East Wellega want no more children [9]. This indicates that percentage age of women those desired to limit child bearing in this study area were much less than other studies and this might be due to difference in sample size, methods used and other factors.

With regards to the factors associated with the desire to limit childbearing the result from FGDs showed that most of participants preferred short acting methods to permanent methods. Similarly, data from 108 DHS assembled for 41 developing countries indicated that most women in Sub-Saharan Africa who practice contraception do so to space rather than to limit births [18]. Likewise, this study showed that illiterate women were more likely to prefer large family size compared to those educated which is compatible to study conducted in Pakistan [6]. However, this might be resulted from large number of illiterates in the study area.

Moreover, this finding revealed that later ages at first marriage and first birth showed lower number of children ever born alive which is similar to study conducted on differentials of fertility in rural Butajira [19]. This is an indication that delaying first marriage and first birth along with contraceptive use may help to reduce the large family size observed in the community.

CONCLUSION

More than half of married women in the study area were using modern contraceptives and highly significant gap was seen among rural and urban residents of the district are very low. Most of women aged 45-49 years were not using contraceptives considering that they could not get pregnant which may make them get extra child birth at later ages. No difference was observed between contraceptive users and non-users in fertility intention. On average, actual family size was seen to be smaller than desired family size in this study area and women who desired to limit child bearing in this study area were lower compared to other studies.

Therefore, any program aimed at promoting family planning at national level should look for ways and means of reducing the intension of having many children. Service providers in the district should provide necessary information regarding reproductive behaviors to minimize misconceptions among women 45-49 in the area. In addition, women should also be told how having many children can affect the health of the mother, child and family as whole in addition to economic crisis. Program planners at the district level should also give due attention to rural residents in order to minimize the gap of contraceptive utilization.

At last, further study is needed to identify relationship of family planning and family size preferences.

ACKNOWLEDGEMENT

We would like to acknowledge UNFPA in collaboration with Addis Ababa University for sponsoring this study and Jimma Arjo woreda administrators and other kebele leaders for their cooperation during data collection.

COMPETING INTEREST

The authors declare they have no competing interest.

REFERENCES

1. Wakbulcho M. KAP study on natural family planning method and service providers among service providers at primary level of health care. EJHD. 1993;7:85-91.
2. Smith R, et al. Family planning saves. 2009;6-14.
3. Caldwell JC, et al. The cultural context of high fertility in Sub-Saharan Africa. Popul Dev Rev. 1987;16:409-437.
4. Bongaarts J. Fertility decline in the developed World: Where will it end? 1999;89.
5. Shah NM and Palmore JA. Desired family size and contraceptive use in Pakistan. International family planning perspective. 1979;5:143-150.
6. Ali SM and Rukanuddin AR. Family size preferences. Pakistan demographic and health survey. 1992;2:97-109.
7. Freedman R. Do family planning programs affect fertility preferences? Studies in family planning. 1997;28:1-13
8. Bernstein S. Public choices, private decisions: Sexual and reproductive health and the Millennium Development Goals. 2006;78.
9. JU. Findings from the Amhara and Oromia demographic surveys: Childbearing and family planning. 2001:1-8.
10. Gribble J, et al. Reproductive health Sub-Saharan Africa. 2008;1-4.
11. United Nations Population Division. World Contraceptive use 2007, Wallchart, New York, United Nations. 2008.
12. Ethiopian Demographic and Health Survey. 2005;47-74.
13. Kebede Y. Contraceptive prevalence in Dembia district, north-west Ethiopia. Ethiopian Journal of Health Development. 2006;20:32-38.
14. Ghebreselasie R. Magnitude and determinants of unmet need and barriers of family planning (among wives, husbands and couples) in Enderta district, Tigray region, unpublished thesis. 2006;48-50.
15. Kebede Y. Contraceptive prevalence and factors associated with usage of contraceptives around Gonder town. Ethiopian Journal of Health Development. 2000;14:327-34.
16. Population Studies and training center. Proximate determinants of fertility in Oromia region, Ethiopia: An application of the Bongaarts Model. 2003;1-6.
17. Tesfaye B, et al. Preference for sex and number of children and contraceptive use in rural Ethiopia. Population Study Research Center. 2008.
18. Westoff CF, et al. Trends in the demand for family limitation in developing countries. 2000;26:56-62.
19. Fitaw Y, et al. Differentials of fertility in rural Butajira. Ethiopian Journal of Health Development. 2003;17:11.