Modern Family Planning Utilization among Married Rural Women in Ethiopia: The Case of Sululta Woreda, Oromia Special Zone

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Abstract: Ethiopia is one of the most populous Sub-Saharan countries characterized by high population growth rate where only 27% of women in the reproductive age group are currently using modern family planning methods. Hence, this study aimed to assess the utilization of modern family planning among married rural women in Sululta *woreda* of Oromia special zone. A descriptive research design was used, whereby a community based cross-sectional study was conducted among married rural women in the study area. A structured questionnaire was developed and administered to 115 randomly selected married rural women. The collected data were statistically analyzed by using both descriptive and inferential statistics. There is a high degree of awareness about family planning (88.7%) while 13.9% of the sample respondents practiced modern family planning. Injectable contraceptive was the most frequently used method (62.5%), followed by oral pills (25%). The multivariate regression analysis shows that couple's discussion about family planning (OR = 21.472) and a large number of alive children (OR = 1.588) were found to have statistically a significant relationship with the use of modern family planning. The study revealed that modern family planning utilization was low in the study area and significantly associated with low educational status, the absence of couple's discussion and the number of alive children. Therefore, the concerned stakeholders should encourage couples to talk freely about family planning, provide information on the benefit of birth spacing, possible side effects of contraception and encourage positive attitudes towards modern family planning use.

Keywords: Family Planning; Married Rural Women; Modern; Utilization

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1. Introduction

Ethiopia is one of the Sub-Saharan countries situated in the Horn of Africa and characterized by a high population growth rate (Amente *et al*., 2017). Data revealed that the population of Ethiopia has steadily increased, especially over the last four decades from 42.6 million in 1984 to 53.5 million in 1994 and 73.8 million in 2007 (CSA and ICF International, 2012). Ethiopian population is currently one of the fastest growing in the world and its population is projected to reach 125 million people in 2025 (UN, 2015).

Family planning is one of the most leading strategies to improve family life and welfare, control unwanted population growth (Bani *et al*., 2014; Gebre *et al*., 2016) and aid the development of the nation (Yigzaw *et al*., 2015). It also plays a significant role in reducing maternal deaths (Ahmed *et al*., 2012; Cleland *et al*., 2012) and child mortality (Cleland *et al*., 2012) and ultimately assists in achieving national and international development goals (Yigzaw *et al*., 2015). Family planning is a decision-making process by couples, together or individually, on the number of children that they would like to have in their lifetime, the age interval (birth spacing) between children and the time of their birth (Shafiwu 2013; Amente *et al*., 2017). In planning their future children, partners need to have the right information on when and how to get and use methods of their choice without any form of coercion (Tilahun *et al*., 2013). Modern family planning service in Ethiopia was started in 1966 with the establishment of the Family Guidance Association of Ethiopia (Olson and Piller, 2013). Additionally, in 1996, the Federal Ministry of Health released guidelines for family planning services in Ethiopia to guide health providers and managers, as well as to expand and ensure quality family planning services in the country. The Ministry of Health designed new outlets for family planning services in the form of community-based distribution, social marketing, work-based services, facility-based services and outreach family planning services (Lakew *et al*., 2013; Worku *et al*., 2014).

The review of different kinds of literature indicated that numerous factors affect the utilization of family planning and the use of modern contraceptives. These determinants of contraceptive use extend from the characteristics of the individual (age, educational status, marital status, etc.), through resources of the household (income, ownership of means of getting information, etc.) and community in which he/she lives, to the socio-cultural norms and institutions that affect autonomy, behavior, lifestyle and access to health care services (Mohammed *et al*., 2014; Palamuleni, 2013; Tobe *et al*., 2015). Generally, the determinants of family planning and contraceptive use have been grouped into: demographic factors (age of the women, marital duration, number of living children, desired family size, etc.); socio-economic factors (level of education, place of residence, information about family planning, access to health care and family planning services, religious affiliation, work status of the women) and attitudinal factor towards family planning. The individual's awareness of family planning, poor access to information, lack of knowledge about contraceptive methods, how to use and where to obtain services, fear of side effects and disapproval of the partners are among the most important

variables in influencing family planning practices and utilization of modern contraceptive methods (Ko *et al*., 2010; Palamuleni, 2013; Shafiwu, 2013; Tilahun *et al*., 2013; Gedefaw *et al*., 2014; Sileo, 2014; Malalu *et al*., 2015).

Progress in contraceptive prevalence rate in Ethiopia was characterized by remarkable success story (Olson and Piller, 2013), with 6.3%, 13.9% and 27.3% of the married women using any modern contraceptives in 2000, 2005 and 2011 respectively (USAID *et al*., 2012). The use of modern contraceptive methods among married rural women in Ethiopia over the same period rose from 3.3% to 10.3% and 22.5%, respectively (USAID *et al*., 2012; Olson and Piller, 2013). Despite these positive progresses, Ethiopia still remains one of the countries with a low contraceptive use rate (Worku *et al*., 2014) characterized by high unmet need for contraception and lack of access to family planning services, particularly in the rural areas (Genet *et al*., 2015; Gebre *et al*., 2016). There was also considerable variation in the prevalence of modern family planning across region, urban and rural areas (Ayele *et al*., 2013; Genet *et al*., 2015; Belayihun *et al*. (2016). Studies showed that about 60% of women in Addis Ababa reported using modern contraception compared to 3% in Somali region and women in the urban area are five times more likely to use modern contraceptives than women in rural areas (Ayele *et al*., 2013; Lakew *et al*., 2013).

There was limited evidence on the utilization of modern family planning practices among married women in the rural areas of Sululta *woreda*[1]. The objective of this study was, therefore, to assess the utilization of modern family planning and associated factors among married rural women in Sululta *woreda* of Oromia Special Zone.

2. Research Methods

2.1. Description of the Study Area

The study was conducted in Sululta *woreda* of Oromia special zone surrounding Finfinne, Ethiopia. Sululta *woreda* is located in the central part of Ethiopia, astronomically situated between $9^0$04'00" to $9^0$32'00" North of latitude and 38^0 32'00" to $38^0$58'00" East of longitude. Chancho is the center of the *woreda* located 43 kilometers north of Addis Ababa on the main road to Gojam. The *woreda* covers a total land area of 109,269 hectares and has 23 rural and three urban *kebeles*[2] (Woreda Agricultural and Rural Development Office, 2016). In 2016, the total population of Sululta *woreda* was estimated to be 148, 701 of whom about 90.37% live in the rural areas while the remaining 9.63% were urban dwellers. Out of the total population of the *woreda*, about 4,788 (3.22%) are children under the age of one year, 24,432 (16.43%) are children under the age of five years and about 70,677 (47.53%) of them were the economically active population. In addition, about 32,907 (22.13%) of the population were women in the reproductive age group (15-49 years) and 5,160

[1] *Woreda* refers to local adminstrative unit next to zone in Ethiopia, often used interchangeably with district.

[2] *Kebele* refers to the smallest administrative units in Ethiopia next to *woreda*, often used interchangeably with peasant association (PA).

(3.47%) were the estimated pregnant women (Woreda Health Center Office, 2016). Regarding to the *woreda's* health institution, there is one hospital, six health centers, 23 health posts with 61 health extension workers and nine private clinics.

Table 1. Estimated population profile of Sululta *woreda* in 2015/16

Category	Estimated number	Percent
Children < 1-year age group	4,788	3.22
Children < 5 years age group	24,432	16.43
< 15 years age group	70,796	47.61
15 – 59 years age group	70,677	47.53
Women in reproductive age group (15-49)	32,907	22.13
Estimated pregnancies	5,160	3.47
Non-pregnant women	27,703	18.63
Estimated total population	148,701	

Source: Sululta Woreda Health Center Office, 2016

2.2. Variables and Measurements

The dependent variable in this study was the utilization of any modern contraception (family planning methods). It was defined as the use of at least one of the modern family planning methods. The dependent variable (utilization of family planning) is a binary or dichotomous variable measured by assigning one (1) if one ever practiced at least one modern family planning method and zero (0) if the women did not practice modern family planning method. Therefore, for this research, a binary logistic regression model was used. The independent variables are the different socio-demographic factors that are expected to determine the practice of family planning and modern contraceptive methods such as: age of the women, age at marriage, duration of marriage, number of living children measured as continuous variables and educational status of the women, educational status of the husband, desire for children, awareness of family planning practices, discussion with partners and exposure to media which were measured as dichotomous variables (see Table 2). Hence, the practice of modern contraceptive methods among currently married rural women is mathematically expressed as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \mathcal{E}$$

Where, Y is the utilization of modern family planning or contraceptive methods (assigning 1 if one practices family planning and 0 if otherwise), β_0 is an intercept from the regression equation (the value of the dependent variable when the predictor is equal to zero), β_1 is the slope of the equation in the model or regression coefficient (the relative effect of a particular explanatory variable on contraceptive use), X_i is explanatory variables and Ɛ is an error term.

Table 2. Description of the variables

Variables	Values
Utilization of family planning (Y)	0 = No and 1 = Yes
Awareness of family planning (X_1)	0 = No and 1 = Yes
Age of the women (X_2)	Years
Age at marriage (X_3)	Years
Duration of marriage (X_4)	Years
Number of living children (X_5)	Number
Educational status of the women (X_6)	0 = Illiterate and 1 = Literate
Educational status of the husband (X_7)	0 = Illiterate and 1 = Literate
Family planning discussion with partners (X_8)	0 = No and 1 = Yes
Exposure to media (X_9)	0 = No and 1 = Yes
Desire to have children (X_{10})	0 = No, 1 = undecided, 2 = within two years and 3 = delay more than two years

2.3. Sample Size and Sampling Procedure

A descriptive survey research design was utilized, whereby a community-based cross-sectional study was conducted among married rural women in Sululta *woreda*. Sululta *woreda* consists of 23 rural kebeles and of these two kebeles namely; Gorfo and Deka Bora were purposively selected as the sample site based on their accessibility, possibility of getting data and affordability in both time and cost. These two rural kebeles consisted of 1,148 rural household heads; 618 in Gorfo and 530 in Deka Bora. Hence, all the currently married rural women in the reproductive age group (15-49 years) living in the study area were taken as the target population of the study. A total of 115 sample respondents (62 from Gorfo *kebele* and 53 from Deka Bora *kebele)* were selected proportional to their population size using simple random sampling method as participants of the study.

2.4. Data Collection Method

Data were collected from the sample of married rural women who were in the reproductive age group (15-49 years) in the study area through a structured self-administered survey questionnaire. The questionnaire was first prepared in English and translated into Afan Oromo and was used to collect the data.

2.5. Methods of Data Analysis

The collected data from sample respondents were classified, organized and analyzed using a combination of both quantitative and qualitative data analysis methods. Accordingly, information obtained from the currently married rural women using structured questionnaire was coded, tabulated and entered into a computer specifically using SPSS (Statistical Package for Social Science) version 24 and analyzed quantitatively by applying descriptive statistics (frequency distribution, percentage, mean, and standard deviation) and inferential statistics (chi-square test,

independent sample t-test, multivariate logistic regression). The chi-squared (χ^2) test was used to determine if there was a statistically significant association between the dependent and explanatory variables. An independent sample t-test was computed to compare whether there is a statistically significant difference in mean age of the respondents, marital duration and mean number of live children between the user and non-user of modern contraceptive methods. Multivariate logistic regression analysis was also computed to determine and identify factors associated with family planning practices and modern contraceptive use. The test of significance was performed using $\alpha = .05$ level. Hence, comparisons and associations of the variables were considered statistically significant when *P*-value was less than 0.05.

3. Results

3.1. Socio-demographic Characteristics of Respondents

A total of 115 currently married rural women participated and responded to the questionnaire in this research. Results in Table 3 indicate that the majority (30.4%) of the sample respondents were from those in the 30 to 34 age group, 27 (23.5%) were in the age group of 35 to 39 years and 17 (14.8%) belonged to 40 to 44 years of age. The mean age of the sample respondents is 34.8 years old with a standard deviation of 6.5 years. The minimum and maximum age at marriage of the sample respondents are 18 and 26 years, respectively, with 21.37 mean age at marriage and a standard deviation of 1.62 years. Regarding to marital duration, the minimum is 2 years and the maximum is 28 years with a mean of 13.42 years and a standard deviation of 6.88 years and about 31 (27%) and 30 (26.1%) of the sample respondents were within the marital duration of 6-10 and 11-15 years respectively.

Table 3. Socio-demographic characteristics of married rural women in Sululta *woreda*

Variables		Frequency (n =115)	Percent
Age	20-24	8	7.0
	25-29	17	14.8
	30-34	35	30.4
	35-39	27	23.5
	40-44	17	14.8
	45-49	11	9.6
Marital duration	1-5	13	11.3
	6-10	31	27.0
	11-15	30	26.1
	16-20	21	18.3
	21-15	12	10.4
	26-30	8	7.0
Educational status of the women	Illiterate	101	87.8
	Literate	14	12.2
Educational status of the husband	Illiterate	96	83.5
	Literate	19	16.5
Number of living children	0	2	1.7
	1-2	17	14.8
	3-4	36	31.3
	5-6	24	20.9
	7+	36	31.3
Desire for children in the future	Undecided	12	10.4
	Wants no more children	29	25.2
	Next birth within two years	26	22.5
	Delay more than two years	48	41.7
Family planning discussion with partners	Yes	27	23.5
	No	88	76.5
Exposure to media (radio, so on)	Yes	10	8.7
	No	105	91.3

Source: Field survey, 2016

Of the total currently married rural women, 14 (12.2%) were literate and the remaining 101(87.8%) were illiterate and about 19 (16.5%) of their husbands were literate. Regarding the number of live children, 36 (31.3%) respondents have greater than six children and the mean number of live children is five. Moreover, about 27.8% of the currently married rural women were married at and before 20 years of age, while 80% got married at and before 22 years of age. Concerning the desire to have children in the future, about 29 (25.2%) respondents wanted no more children, 26 (22.5%) wanted to have children within two years and 48 (41.9%) wanted to delay

the next birth for more than two years. According to the survey results, 27 (23.5%) respondents claimed they were engaged in comprehensive dialogue to discuss family planning with their husbands and the remaining 88 (76.5%) were not. The study also showed that the percentage of sample respondents who were exposed to media was only 8.7 (See Table 3).

3.2. Awareness and Utilization of Modern Family Planning Methods

Knowledge of family planning methods among the sample respondents provides a measure of the level of awareness of contraception in the study area. Data in Table 4 revealed that about 102 (88.7%) respondents heard about modern family planning methods and had knowledge of at least one modern contraceptive method. The most common sources of information about family planning and contraceptives among the sample respondents in the study area were friends and relatives (61.8%), health extension workers (44.1%) and mass media (9.8%). As indicated in Table 4, the most common contraceptive methods known by the married rural women respondents were injectable (91.2% of the cases) followed by oral pills (90.2% of the cases).

Table 4. Awareness and knowledge of modern family planning methods among married rural women in Sululta *woreda*

Variables	Response	Frequency	Percent
Heard about family planning	Yes	102	88.7
	No	13	11.3
Source of information*	Health care workers	45	44.1
	Mass media (radio)	10	9.8
	Friends and relatives	63	61.8
Knows any specific method*	Pills	92	90.2
	Injectable	93	91.2
	Implant	11	10.9
	IUCD	13	12.7

* Multiple responses are possible

Source: Field survey, 2016

Data in Table 5 revealed that about 16 (13.9%) respondents had experience of using modern family planning methods besides the high level of awareness and knowledge of contraception. The percentage of respondents currently using modern contraceptive method was accounted 7.8%. From this, it is concluded that there is a high gap between awareness and the utilization of modern contraceptive methods in the study area. The most common modern contraceptive methods used by the respondents were injectable which accounted 62.5%, followed by oral pills which accounted 25% of the cases.

Table 5. Prevalence of modern family planning among married rural women in Sululta *woreda*

Variables	Response	Frequency	Percent
Ever used	Yes	16	13.9
	No	99	86.1
Current use of contraceptive	Yes	9	7.8
	No	106	92.2
Types of contraceptive used	Injection	10	62.5
	Oral pills	4	25.0
	Implant	1	6.3
	IUCD	1	6.3

Source: Field Survey, 2016

3.3. Factors Associated with Utilization of Modern Family Planning

Results in Table 6 showed that, from the total currently married literate rural women respondents, about 71.4% practiced modern contraceptive methods while 5.9% of the illiterate women practiced contraceptive (χ^2 (1) = 44.027, P<.01). Similarly, 63.2% of the women whose husbands are literate used modern contraception compared to 4.2% of women whose husbands are illiterate (χ^2(1) = 46.083, P<.01). This shows that, there is statistically significant association between the use of contraceptive methods and educational status.

Additionally, about 51.9% of the rural married women who were engaged in family planning dialogue with their husbands used modern contraceptive methods and it is found to be statistically significant (χ^2 (1) = 42.402, P<.01). Moreover, exposure to media (χ^2 (1) = 19.422, P<.01) had also a statistically significant association with the utilization of modern contraceptive methods. The results in Table 6 revealed that, from the total respondents exposed to media, about 60% used modern contraceptive methods, and from the women respondents not exposed to media, 9.5% used contraceptive.

Table 6. Relationship between socio-demographic variables and utilization of modern family planning methods among married rural women in Sululta *woreda*

Variables		Ever used		χ^2	p-value
		Yes (13.9%)	No (86.1%)		
Age of the respondents	20-24	0	100	10.091	.184
	25-29	6.7	93.3		
	30-34	11.8	88.2		
	35-39	14.8	85.2		
	40-44	23.5	67.5		
	45-49	18.2	81.8		
Marital duration	1-5	0	100	6.630	.356
	6-10	10	90		
	11-15	16.7	83.3		
	16-20	14.3	85.7		
	21-15	33.3	66.7		
	26-30	12.5	87.5		
Educational status of the women	Illiterate	5.9	94.1	44.027	.000
	Literate	71.4	28.6		
Educational status of the husband	Illiterate	4.2	95.8	46.083	.000
	Literate	63.2	36.8		
Desire for children in the future	Undecided	16.7	83.3	2.108	.550
	Wants no more children	20.7	79.3		
	Next birth within two years	7.7	92.3		
	Delay next birth more than two years	12.5	87.5		
Discussion with partners	Yes	51.9	48.1	42.402	.000
	No	2.3	97.7		
Exposure to media (radio)	Yes	60	40	19.422	.000
	No	9.5	90.5		
Awareness of family planning	Yes	15.7	84.3	2.369	.124
	No	0	100		

Source: Field survey, 2016

On the other hand, awareness about family planning and the desire to have children have no statistically significant association with the use of modern contraceptive methods. However, results in the Table indicated that, the proportion of modern contraceptive users is higher among women of older age, and among women with high awareness of family planning. Moreover, the study revealed that about 79.3% of the currently married rural women who preferred to stop childbearing or wanted no

more children and 87.5% of women who opted to delay childbearing for more than two years are not using any method of contraception to prevent pregnancy. This indicated that there is a high percentage of unmet need for family planning among the currently married rural women in the study area.

As indicated in Table 7, an independent t-test value revealed that there was a statistically significant difference in the mean number of live children for the currently married rural women who were users of modern contraceptive methods (M = 6.50, SD = 2.42) and non-users of modern contraceptive methods (M = 4.81, SD = 2.60); (t (113) = 2.435, P<.05). This result reveals that, women with a large number of alive children are more likely enforced to use modern contraceptive methods than women with a small number of live children. On the other hand, data in Table 7 has showed that statistically there is no significant difference in the mean age of the sample respondents, mean age at marriage and their marital duration (P>.05) between users and non-users of modern contraceptive methods.

Table 7. Differences in modern contraceptive use among married rural women in Sululta *woreda* in terms of age, marital duration and number of live children

Variables		Ever used modern contraceptive		T-test for equality of means		
		User	Non-user	t-value	Sig.(2-tailed)	df
Age of the respondent	Mean	37.38	34.36	-1.720	.088	113
	SD	5.46	6.64			
Age at marriage	Mean	21.25	21.38	.305	.686	113
	SD	1.39	1.66			
Marital Duration	Mean	16.13	12.98	-1.711	.090	113
	SD	6.35	6.89			
Number of live children	Mean	6.63	4.81	-2.622	.010*	113
	SD	2.36	2.60			

*Significant at $\alpha = .05$

Source: Field survey, 2016

Furthermore, multivariate logistic regression models were also fitted to determine the presence of an association between the dependent variable (modern contraceptive utilization among married rural women) and the independent variables at ($P < 0.05$) level of significance. All the variables that were found to be statistically significant (P-value ≤ 0.05) in the bivariate analysis were used to examine the determinants of modern contraceptive use among married rural women in the study area through the computation of a multivariate analytical technique based on binary logistic regression. Preliminary runs of the logistic regression model gave rise to large regression coefficients (-3.8) and the standard errors for the age of the respondents, age at marriage, marital duration, awareness about family planning and desire for children. Although these variables are important determinants of modern contraceptive use among married rural women in the study area, they were excluded from the final regression analysis model. Hence, the variables that were found to

greatly influence modern contraceptive use among married rural women in the study area after keeping the other explanatory variables constant were presented in Table 8.

From the diagnostic test model in Table 8, the goodness of fit of the model is good enough given the log likelihood which is an omnibus test of the overall significance of the model is 52.600. Furthermore, the pseudo-R-square statistics (Nagelkerke R^2 value of 0.663) indicates that about 66% of the variation in the dependent variable (use modern contraceptive methods) can be explained by the combined effect of the mentioned predictor variables. Moreover, the model has correctly classified 93% of the cases in the model. The findings from multiple regression analysis presented in Table 8 revealed that the number of live children and spousal discussion on family planning were found to be statistically significant in determining the use of modern contraceptive methods.

Table 8: Result of multiple logistic regression analysis of modern family planning utilization among married rural women in Sululta *woreda*

Predictor variable	β	Std. error	Wald	Odds ratio
Constant	-6.882	1.898	13.146	0.001
Number of children alive (X_1)	0.463*	0.233	3.953	1.588
Educational status of the women (X_2)	0.811	1.203	0.455	2.251
Educational status of the husband (X_3)	1.476	1.094	1.819	4.376
Discussion with husband (X_4)	3.067*	1.223	6.289	21.472
Exposure to media (X_5)	0.585	1.464	0.160	1.795
Model diagnostics**:**				
Log likelihood = 40.177	Omnibus test of the model (χ^2) = 52.600; *P* =.000			
Nagelkerke R^2 = 0.663	Correct classification = 93%			

* Significant at α = .05

Source: Field survey, 2016

According to the survey results presented in Table 8, women who had discussions on family planning issues with their husbands were 21.5 times more likely to use modern contraceptive methods than women who had no discussions (OR = 21.472). Moreover, the result of the study revealed that women with a large number of live children were 1.6 times more likely to use modern contraceptive methods (OR = 1.588). Additionally, the odds ratio of the multivariate analysis presented in Table 8 showed that literate women were 2.25 times more likely to use modern contraceptive methods (OR = 2.251) and women whose husbands are literate were 4.38 times more likely to use modern contraceptives (OR = 4.376).

3.4. Future Intention to Use and Reasons for Not Using Modern Family Planning among Respondents

Data in Figure 1 revealed that the majority of the surveyed respondents (43.5%) were either unable to decide or not sure whether they could use modern family methods or not. On the other hand, about 27.8% of the respondents intend to use modern contraceptive methods in the future, whereas 28.7% do not intend to use.

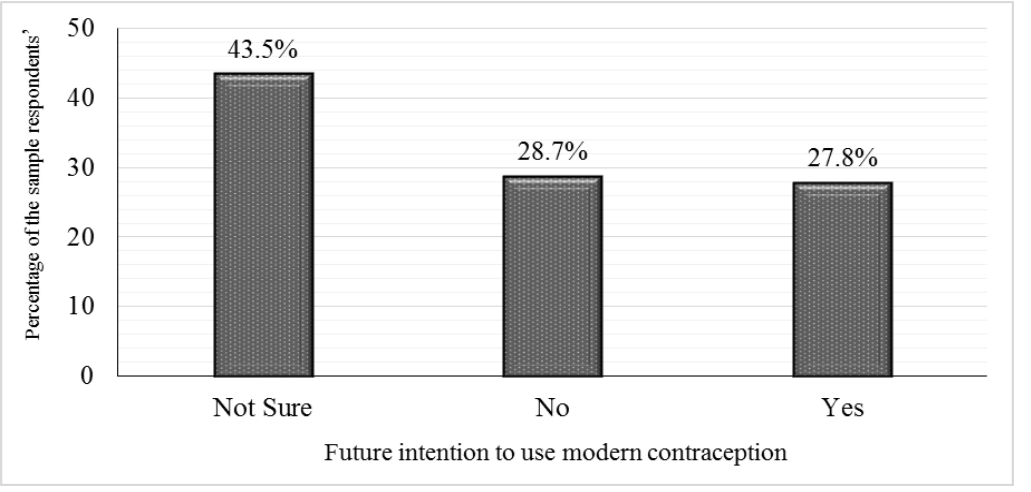

Figure 1: Future intention to use modern family planning methods among married rural women in Sululta *woreda*
Source: Field survey, 2016

Moreover, married rural women who were not using modern contraceptive methods were asked about the reasons for not using modern family planning methods. Accordingly, the respondents reported fear of side effects (74.75%), desire to have more children (67.68 %), lack of knowledge and awareness about family planning (13.13%), seeing children as social prestige due to cultural beliefs (62.63%), afraid to freely communicate and discuss about family planning (48.49%) and religious factor where children are considered as the gift of God (72.73%) as the main reasons for not using modern contraceptive methods.

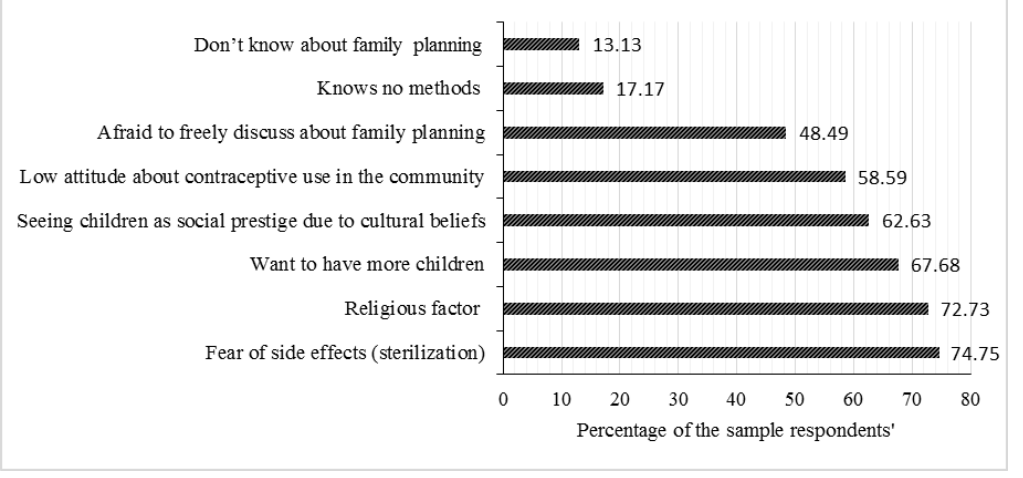

Figure 2: Reasons for not using modern contraception among the married rural women in Sululta *woreda*
Source: Field survey, 2016

4. Discussions

This study has attempted to assess the utilization of modern family planning methods among married rural women in Sululta *woreda*. The findings of the study seem to suggest that awareness and knowledge of modern family planning methods are high amongst the married rural women in the study area, i.e, 88.7% heard and had knowledge of at least one modern family planning method. This indicates that, there is a high level of awareness about family planning and almost adequate information about modern contraceptive methods in the study area. However, this result is less than what is reported in the Ethiopian Demographic and Health Survey of Central Statistical Agency (CSA, 2014). According to CSA document, about 97% of women aged 15-49 years do have understanding of at least one modern method of contraception. Moreover, a study conducted by Eliason *et al*. (2014) on the determinants of family planning use among women of reproductive age group showed a high level of awareness among the respondents, i.e., as a little over 90% of them had knowledge of at least one modern contraceptive method. Similarly, a study conducted by Mohammed *et al*. (2014) in North Shoa revealed that about 98.5% of the respondents heard about family planning and cited at least one method. On the other hand, the result of studies conducted by Gedefawu *et al*. (2014) and Debebe *et al*. (2017) was slightly less than the finding of this research which is 82.1% and 82.6% respectively, indicating that there is a slight variation in the level of awareness about use of modern family planning methods among married rural women of varied places.

Despite a high level of awareness about modern family planning and knowledge of specific contraception methods, the proportion of married rural women in the study area who practiced modern family planning was low (13.9%). The result showed that, there is a high gap between the level of awareness and the use of modern contraceptive methods in the study area. The finding of this study was by far less than the figure reported by the Ethiopian Demographic and Health Survey (2014) (27.3%), studies conducted by Gedefawu *et al*. (2014) (26.7%), and Mohammed *et al*. (2014) (46.9%). The reason for this could be the fact that the study participants were from rural areas.

The finding of this research indicated that the most common contraceptives known by the currently married rural women in the study area were injectable (91.2% of the cases) method, followed by oral pills (90.2% of the cases). A study conducted by Eliason *et al*. (2014) also revealed that injectable was the most known method of modern contraception followed by oral pills. The study results further revealed that injectable (62.5%) and oral pills (25%) were the most common modern contraceptive methods ever used by the respondents in the study area. A similar study conducted in Ethiopia by Ko *et al*. (2010) also found out that, injection (83.1%) and oral pills (17.7%) were the most commonly used family planning methods. Furthermore, a study conducted by Debebe *et al*. (2017) in the rural Dembia district of northwest Ethiopia showed similar finding that injectable and oral pills are among the most commonly known methods and used by the respondents.

The result of this study also revealed that, there was a positive correlation between the educational status of married couple and utilization of modern family planning methods indicating that educated partners were found to be more likely to utilize modern contraception compared to their counterparts. In this particular study, literate women were 2.25 times more likely to use modern contraceptive methods and women whose husbands are literate were 4.38 times more likely to use modern contraceptives. Studies conducted by Aryeetey *et al*. (2010), Mekonnen and Worku (2011), Palamuleni (2011), Gedefaw *et al*. (2014), Sileo (2014) and Malalu *et al*. (2015) similarly found that the level of the educational status of the partners was positively and significantly associated with the utilization of modern contraceptive methods. Furthermore, a study conducted by Eliason *et al*. (2014) and Belayihun *et al*. (2016) showed that, partners with no formal education were significantly less likely to practice modern family planning methods relative to those with some formal education. The possible explanation might be education can improve awareness and the attitudes towards modern family planning utilization. Hence, as women's and their partners' educational level increases, the utilization of modern family planning methods also increases.

The finding of this particular study also showed a positive association between the spousal discussion on family planning issues and utilization of modern contraceptive methods. Women who had discussion on family planning issues with their husbands were 21.5 times more likely to use modern contraceptive methods than women who had no discussion on family planning at all. Similarly, studies conducted by Ko *et al*. (2010), Mekonnen and Worku (2011) and Mohammed *et al*. (2014) revealed that women who had frequent discussions with their husbands about family planning were 11 times, 2.2 times and 7 times more likely to use family planning respectively, than those who had no discussion on family planning. A study conducted by Sileo (2014) on the determinants of family planning service uptake and use of contraceptives among postpartum women in rural Uganda also showed that partners' discussions about contraceptive use with their couples were found to have a statistically significant relationship with the use of contraceptive methods. It revealed that couples who had discussions about family planning were 1.8 times more likely to use modern contraceptive methods than their counterparts.

Additionally, the result of the study revealed that women with a large number of live children were 1.6 times more likely to use modern contraceptive methods than those with a small number of live children. Likewise, a study conducted by Gedefaw *et al*. (2014) in Gumuz, northwest Ethiopia on the current status and correlates of modern family planning utilization showed that the number of live children (with an odds ratio of 3.31) was found to be in a statistically significant relationship with the adoption and practices of modern family planning. Similarly, a study conducted on family planning utilization by Shafiwu (2013) revealed that the number of live children was found to have a statistically significant association with utilization of contraceptive methods.

This study also showed the percentage of respondents who were exposed to media was very low (8.7%) which has an impact on the knowledge, access to information

and finally on the use of modern family planning methods. Though the percentage of the respondents that were exposed to media is low, exposure to media had a statistically significant association with the utilization of modern contraceptive methods, indicating that women who are exposed to media are found to be more likely to utilize modern family planning methods than their counterparts. The result of this finding was similar to the previous studies conducted by Ayele *et al*. (2013).

In this particular study, even though about 22.5% of the married rural women in the study area prefer to space (postpone) the next childbirth for at least two years, 41.7% prefer to delay the next childbirth for more than two years and another 25.5% of the women prefer no more children, and the majority of them do not actually utilize modern family planning methods. The finding of the study revealed that, of the total married rural women respondents who preferred next birth within two years (92.3%), who wanted to delay childbearing for more than two years (87.5%) and who opted to stop childbearing (79.3%), were not using any method of contraception to prevent pregnancy. This indicates that there is a high percentage of unmet need for family planning among the currently married rural women in the study area. The finding of this study is in line with previous studies conducted by Mekonnen and Worku (2011), Genet *et al*. (2015), and Gebre *et al*. (2016) that reported a large number of couples who had a strong desire for modern family planning services were not receiving the services for a variety of reasons.

As regards the reasons, three out of four women responded the fear of side effect for not using modern contraception. A study conducted by Awoke (2014) also showed that fear of side effect is one of the major reasons not to use contraception. Additionally, about 72.73% and 67.68% of the respondents reported religious factor (children are considered as the gift of God) and desire to have more children as reasons for not using modern contraception. Studies conducted by Khan *et al*. (2011), Palamuleni (2013), Tilahun *et al. (*2013), and Belayihun *et al*. (2016) also showed that fear of side effect, religious factors, community attitude and cultural norms are among the major reasons for not practicing family planning methods.

5. Conclusion and Recommendation

The finding of the study revealed that there is a gap between awareness and the practices of modern contraceptive methods. Despite having basic understanding and knowledge about family planning and methods of contraceptive use, the proportion of married rural women using contraceptive in the study area is very low. Education status of married couple, number of live children, spousal discussions on family planning issues and exposure to media found to be the significant determinants of modern contraceptive use among married rural women in the study area. Moreover, fear of side effects, the desire to have children, low attitude toward contraceptive use in the community, seeing children as social prestige due to cultural beliefs and religious factor are among the major reason for not using contraceptives in the study area. Hence, family planning education programs should reach out to women and provide accurate information on the benefit of birth spacing and safety, inform about the possible side effects of contraception, and improve knowledge of partner's

attitudes towards family planning. Educating women on the available family planning services and providing them with information on the available services, where to access services and enhancing the rightful choices of contraception should be given special attention.

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