

Assessment of Factors Affecting Modern Contraceptive Utilization in Merawi Town, Northwest Ethiopia

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Abstract

Background: The population of the world is increasing from day to day especially in developing countries like Ethiopia. The highest maternal and child morbidity and mortality rates associated with child bearing, pregnancies and abortion in such countries are the main problems.

Objective: The study had been done to determine prevalence of modern contraception, roles of males and religious leaders on contraception as well as to identify limitations.

Method: A quantitative cross-sectional study was conducted in Merawi town, Mecha woreda, west Gojjam zone, north western Ethiopia, from January to May 2012. A total of 353 women from the target population (15-49 years of age) living in Merawi were interviewed with questionnaire. Knowledge, attitude and practice on contraception were evaluated. Statistical analysis were done by using SPSS version 16.0

Results: The contraceptive prevalence rate was found to be 65.2%. About 79% of the users were living with their sexual partners. More than 50.4% of the modern contraceptive users were in the age group of 15-26 years. Factors enhancing contraceptive utilization were the following: Spacing (85.6%), and limiting number of children (4.8%). Women of 11 (8.9%) by opposition of their partners and 5 women (4.1%) by opposition of religion and religious leaders.

Conclusion and recommendation: Prevalence of contraceptive utilization was low, since there are factors hindering it. Therefore, the government as well as nongovernmental organization should create more community awareness on contraceptive usage and family planning.

Keywords: Contraceptives; Family planning; Child mortality

Background

Family planning services have become the interventions of choice to slow population growth. It is believed that child spacing and the timing in every birth can improve survival chance of the child and can maintain good physical and emotional health for the whole family. Social and cultural factors have been shown to influence couple's decision to use contraception even with the availability of contraceptives [1,2]. The low contraceptive prevalence rate in Ethiopia results from limited availability and access to specific methods, cultural and religious barriers including male opposition to change existing practices [3,4]. Twenty Million Unsafe abortions are performed globally each year. They result in nearly 80,000 maternal deaths and hundreds of thousands disabilities. In some countries unsafe abortion is the most common cause of maternal deaths. It is also one of the most easily preventable and treatable condition. In Africa, the risk of dying after unsafe abortion is one in hundred fifty (1:150), the percent of maternal deaths due to unsafe abortion is 13% [5]. In Ethiopia, the level of infant and maternal mortality and morbidity rates are among the highest in the world. Early marriage is widely practiced; exposing young women to premature and prolonged labor and poor health out-comes [6]. Merawi town is one of the areas in Ethiopia where abortion or child birth and other pregnancy related complications are observed.

Objectives

General objective-To assess modern contraceptives utilization and associated factors in Merawi town.

Specific objectives

- To determine modern contraceptive prevalence rate in Merawi town
- To identify factors that affect utilization of modern contraceptives in Merawi town

Methods

Study design, area and period A quantitative cross-sectional study had been done from January to July 2012 by interviewing all sampled women from target population (age of 15-49) living in Merawi town.

Study population

All clients or women (15-49 years old) living in Merawi town were study populations in the above specified time.

Sample size and sampling procedures

In this study the sample size was determined by the formula:

$$n = Z^2 P(1-P) / D^2$$

Considering the following assumptions: Estimated population or proportion (p) is unknown, so I took 50%, confidence interval=95%, margin of error tolerated (D=5%). Thus,

$$n = Z^2 P(1-P) / D^2$$

Where

D=Margin of error between the sample and the population (5% marginal error)

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n =sample size

Z =95% confident interval (95% C.I. for $P=p \pm 1.96$ standard error)

P =assume prevalence rate of 50%, since it is unknown in the previous literature

$$= (1.96)^2 * 0.5(1-0.5)/(0.05)^2$$

$$= 385 \text{ women}$$

Since the study population (4230) is less than 10,000; " n " final was re adjusted as $n=n/1+n/N$, then become:

$$= 385/1+385/4230=353 \text{ women.}$$

Study variables

- Dependent variable-utilization of modern contraceptives.
- Independent variables: marital status, choice of methods, sources of information, age, educational status, occupation and religion.

Data collection instrument, procedures quality assurance

Data were collected by face to face interview using a structured and pre-tested questionnaire which was adopted from previous researches done in other places. The data collectors and supervisors were given enough training before the actual work about the purpose of the study, procedure and data collection techniques. The quality of data were assured by proper designing and pre-testing of the questionnaire, and checked for completeness and relevance by the supervisors and principal investigators [7-10].

Operational definitions

Unmet need-a need of women for limiting or spacing of child bearing but not successful, not achieved desire.

Family planning-the ability of individuals or couples to decide when to have children, how many and what interval of time.

Contraceptive prevalence rate -percentage of contraceptive utilization at specific time.

Contraceptive users-women of child bearing age groups, who were/are using modern contraceptives.

Non-users of contraceptives- women of child bearing age groups, who had not using modern contraceptives

Ethical consideration

The research proposal was approved by Bahir Dar university ethical committee based on the objectives of the study and the importance of conducting the study. Formal letter of cooperation was written to Merawi town health office and the respective kebeles [11-15]. Verbal informed consent was obtained from each participant. Each participant was informed about the objective and importance of the study. The confidentiality of each client has been respected during and after the data collection. The clients were not forced for interview and their names had not been written. All information they gave during the interview have been preserved [15-18].

Data processing and analysis

After data collection, all questionnaires were checked, coded and entered to SPSS version 16.0 software package for analysis. The data were analyzed using binary regression to determine the effect of different factors on the outcome variable. Confounding was controlled

by multivariate analysis [18-25]. The degree of association between dependent and independent variables was assessed using X^2 -test with 95% CI.

Results

A total of 353 women were interviewed. The response rate was 100%. The contraceptive prevalence rate of this study was 65.2%. Thirty four point eight percent (123 women) of the total interviewed women were non-users of modern contraceptives. The majority of the respondents (178 women/50.4%) were in the age group of 15-26 and the least of them 26 women/7.4%) were in the age group of 39-49 years. Marital status, most of the respondents (278 women/78.8%) were married and the least (3 women/0.8%) were widowed. Educational level; the most respondents (188 women/53.3%) were illiterates and the least (23 women/6.5%) were 11-12 grades. Occupation, 220 women/62.3 % were unemployed and 40 women/11.3%) were employed. Religion, Orthodox Christians 326 women/92.4% of the respondents and, 4 women/1.1%) were Protestants (Table 1).

This distribution showed that selected socio-demographic variables on modern contraceptive utilization among women aged 15-49 years have significant associations (Tables 2 and 3).

The enhancing factors for contraceptive utilization among contraceptive users were also determined that 197 women (85.6%) were using contraceptives for child spacing; 20 women (8.7%) used it due to economical problems; 11 women (4.8%) used for limitation and 2 women (0.9%) of them used it for other reasons like to control menstruation (Table 4).

The above distribution revealed that from a total of 353 women interviewed in the community about modern contraception. The majority of them (340 women/96.3%) were informed. From these women, 179 women/50.7%, 115 women/32.6%, 34 women/9.6% and 12 women/3.4% have got the information from Health professionals, Mass-media, Intimate friends and other sources respectively. And the least of them (13 women/3.7%) haven't got information about modern contraceptives (family planning) (Table 5).

From the total of 230 women of contraceptive users, 11 women (4.8%), 180 women (78.2%), 31 women (13.5%), 6 women (2.6%) and 2 women (0.9%) were using pills, inject able, Norplant, Intra Uterine Contraceptive Device (IUCD) and others (condoms) respectively. This showed that the most commonly used contraceptive is Depo-Provera. Considering women's thought how to take contraceptives at health facilities showed that the most number of them (210 women/91.3%) were using it openly and 20 women (8.7%) used their contraceptives covertly.

When we were evaluating contraceptive users whether they knew or did not know changes of their life style using contraceptives, 92.6% of them knew and 7.4% of them did not know change of their life style.

Discussion

The Ethiopian demographic health survey (EDHS 2005) showed that contraceptive prevalence rates was 15% (of which 11% used for spacing, 4% used for limiting) respectively. In this study, the contraceptive prevalence rate is 65.2% of which 55.8%/197 women/used for child spacing, 3.1%/11 women/used for limiting. There is no consistency between the two reports. The rate is going up despite there is a gap in contraceptive utilization, due to expansion of reproductive health care services and service providers, the study being done only in urban area, Participation of males and religious leaders in reproductive

Characters (variables)	Are you using modern contraceptives?		Chi-square test (X ² -test)	DF	p-value
	Yes (n=230)	No (n=123)			
Age in years					
15-26	116	62	175.7	2	<0.001
27-38	101	48			
39-49	13	13			
Marital status					
Married	210	68	554.1	3	<0.001
Single	14	31			
Divorced	4	23			
Widowed	2	1			
Educational status					
Illiterates	134	54	162.6	3	<0.001
1-6 grades	30	18			
7-10 grades	27	31			
11-12 grades	14	9			
College-university	25	11			
Occupational Status					
Employed	31	9	145.4	2	<0.001
Unemployed	152	68			
Others	47	46			
Religion					
Orthodox Christians	209	118	560.3	2	<0.001
Muslims	18	5			
Others	3	0			

Table 1: Socio-demographic characters and their associations to modern contraception among women aged 15-49 years, in Merawi town, northwest Ethiopia.

Reasons of women not to use contraceptives	Frequency	%
I want to give birth	27	22
Opposition of my religion & religious leaders	5	4.1
Opposition of my partner	11	8.9
I will never give birth	80	65
Total	123	100

Table 2: Reasons of women not to use modern contraceptives in Merawi town.

Reasons to use contraceptives	Frequency	%
For child spacing	197	85.6
For limitation	11	4.8
Economic problems	20	8.7
Other (as treatment)	2	0.9
Total	230	100

Table 3: Reasons of women aged 15-49 years of to use modern contraceptives in Merawi town.

Sources of Information	Frequency	%
Health professionals	179	50.7
Mass-media	115	32.6
Intimate friends	34	9.6
Other sources	12	3.4
Not informed women	13	3.7
Total	353	100

Table 4: Distribution of source of information in modern contraception to child bearing age group of women in Merawi town.

Choice of methods	Frequency	%
Pills	11	4.8
Injectables	180	78.2
Norplant	31	13.5
Intra Uterine Contraceptive Device	6	2.6
Others (condom)	2	0.9
Total	230	100

Table 5: Distribution of contraceptive methods of contraceptive users in Merawi town.

health care programs, extending IEC (health education) program about reproductive health in the community.

The contraceptive prevalence rate (CPR) in this study (65.2%) was higher compared to contraceptives prevalence rate (National-29% of which 14.7% used for spacing, 12.1% used for limiting respectively; Amhara region-33.9% of which 19.4% used for spacing, 14.5% used for limiting respectively) in Ethiopian demographic health survey (EDHS 2011). The difference might be due to time difference, the study being done only in urban area, expansion of RH care services and service providers, sustainable availability of different methods of contraceptives, Participation of males and religious leaders in (reproductive health) RH care programs, extending IEC (health education) program about reproductive health (RH) in the community at schools, churches in any meeting/conference/as well as in a family and individual level to increase awareness of contraception and CPR to prevent risks of complications due to pregnancy and child birth (abortion).

Considering age to assess contraceptive utilization, the majority of them (50.4%) were in the age group of 15-26 and the least of them (7.4%) were in the age group of 39-49 years. The association of contraceptive utilization and age was computed; X^2 -test was 175.7, with DF 2 and p -value <0.05 indicates that there is significant association between them.

On the aspect of marital status, most of the respondents (78.8%) were married and the least (0.8%) were widowed. The association of contraceptive utilization and marriage was considered; X^2 -test was 554.1, with DF 3 and p -value <0.05 indicates that there is significant association between contraceptive utilization and marital status.

Taking educational status, most of the respondents (53.3%) were illiterates and the least (6.5%) were 11-12 grades. We also computed the association of contraception and education as X^2 -test was 162.6, with DF 3 and p -value <0.001 indicates that there is significant association between them.

Considering occupation, majority (62.3%) were unemployed and the rest (11.3%) were employed. The association of contraceptive utilization and occupation was also computed; X^2 -test was 145.4, with DF 2 and P -value <0.001 indicates that there is significant association between them.

The contraceptive utilization varies with religion; Orthodox Christians account the highest (92.4%) of the respondents and the least (1.1%) were Protestants. The association of contraceptive utilization and religion was computed; X^2 -test was 560.3, with DF 2 and p -value <0.001 indicates that the association between them is very significant.

Short gap between births and other risks from pregnancy and child birth (abortion) and economic problems were factors that enhanced women to use contraceptives. On the other hand, opposition of males and religious leaders in contraception, believing that they should never give birth and willingness to give birth are some factors not to use contraceptives. Generally, a young population combined with high fertility, limited access to family planning, and low contraceptive utilization, not only predicts rapid population growth but also exacerbates the country's poor maternal health.

Conclusion

In this study contraceptive prevalence rate is low; from the total of 353 child bearing aged Women were interviewed with 100% response rate. Two hundred thirty women (65.2%) and (123 women/34.8%) were users and non-users of modern contraceptives respectively.

Limiting factors of (123 non-user) women not to use contraceptives believed that they should never give birth at all (80 women/65%), having willingness to give birth (27 women/22%), partners' opposition (11 women/8.9%) and opposition of religion and religious leaders (5 women/4.1%).

The enhancing factors for contraceptive utilization were child spacing (85.6%), economical problems (8.7%), child limitation (4.8%), and as treatment (0.9%). Muslim contraceptive users were less than Christians. 8.9% and 4.1% of the interviewed women were discouraged by their husbands and religious leaders respectively, to use contraceptives.

Considering sources of information on contraception, from a total of 353 women interviewed in the community about modern contraception, the majority of them (96.3%) were informed. About 50.7%, 32.6%, 9.6% and 3.4% of them have got the information from health professionals, mass-media, Intimate friends and other sources, respectively. From the total 230 women of contraceptive users, 4.8%, 78.2%, 13.5%, 2.6% and 0.9% of them were using pills, inject able, nor plants, I.U.C.D and others (condoms), respectively; giving the total CPR around 65% of the study population. This showed that the most commonly used contraceptive is Depo-Provera.

Recommendation

I have recommended that; the government as well as nongovernmental organization should create community awareness on contraceptive usage and family planning.

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