

Prevalence and Associated Factors of Unmet need for Family Planning among Married Women in Enemay District, Northwest Ethiopia: A Comparative Cross-Sectional Study

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Received: 6 December 2012 Accepted: 4 January 2013 Published: 15 January 2013

Abstract

Introduction : Millions of women want to delay or avoid pregnancy but are not using contraception. Ethiopia has the highest levels of unmet need for family planning among African countries. The 2011 Ethiopia Demographic and Health survey found that 25.3 percent of women had unmet need for family planning, 16.3

Index terms— family planning, unmet need, married women, Ethiopia.

1 Introduction

Family planning (FP) began to be viewed as a way of making changes in women's lives, securing women's empowerment and ensuring their well being (Cleland J, 2006).

Unmet need for FP is the number or percent of women currently married (in union) who are fecund and who desire to either terminate (do not want anymore) or postpone (at least 2 years) childbearing, but who are not currently using a contraceptive method (John A, et al., 2002).

Around the world, about 222 million women have an unmet need for FP and 645 million women have their needs met through the use of a modern contraceptive method such as intra-uterine device (IUD), pills, injectables or sterilization [9]. Every minute, nine children under age 5 die in Africa which resulted in death of 4.8 million children annually. Family planning could prevent many of these deaths by enabling women to bear children during the healthiest times for themselves and their children (David O, 2008).

Evidence on the benefits of FP for maternal and child health, poverty reduction strategies and women's empowerment is quite clear. In Sub-Saharan Africa for example, it is estimated that provision of FP services reduces unintended pregnancies by 77% (i.e. from 17 million to 4 million annually); reduces unsafe abortions from 5.2 million to 1.2 million; and reduces the number of women in need of medical care from unsafe abortion from 2.2 million to 500,000. It is therefore clear that FP is a valuable economic investment. Reducing unmet need would significantly reduce unintended pregnancies, abortions, and maternal and child deaths. A current projection for Ethiopia estimates 56 million pregnancies from 2005 to 2015, of which nearly 24 million would be unintended. By meeting unmet need in Ethiopia, there would be almost 6 million fewer unintended pregnancies, which would lead to nearly 2 million fewer abortions. Moreover, more than 1 million infant and child deaths (under age 5) would be averted and nearly 13,000 maternal deaths would be averted over the 10-year period (Family Planning Conference, 2009).

Ethiopia has among the highest levels of unmet need for contraception in Africa. The 2011 Ethiopia Demographic and Health survey (EDHS) found that 25.3 % of women had unmet need for FP, 16.3 % for spacing and 9 % for limiting. Unmet need for both spacing and limiting is higher among rural residents than their urban counterparts. The general unmet need for FP among urban and rural dwellers is 15% and 27.5% respectively (ICF International, 2012). Particularly, it would have a substantial contribution in the improvement of the health status of women and children.

Unmet needs for contraception have a tendency to be influenced unequally among different settings mainly due to the effect of socio-economic and demographic variables.

The availability of accurate information and high quality FP services enable people to make informed choices. In Ethiopia, however, it is clear that factors affecting FP use are area-specific and require different approaches. Hence, this study examined the factors in different settings (urban and rural); the findings would help as an input for policy makers and health planners in the area to respond to the fertility preferences of the population while simultaneously improving maternal health, slowing the rate of population growth, and contributing to achievement of national goals. Therefore, this study tried to determine the prevalence and identify the key socio-demographic determinants of unmet need for FP in the district.

2 II.

3 Methods

4 a) Study area and period

The study was conducted in Enemay district, northwest Ethiopia, from 20 th March to 10 th April 2013.

5 b) Study Design

A community-based comparative crosssectional study was carried out to determine the prevalence and identify the key socio-demographic determinants of unmet need for FP services.

6 c) Study Population

The source population constituted all married women in the reproductive age and married women in the selected kebeles were the study population. d) Sample size determination Table ?? : Assumptions for sample size calculation, Enemay district, Northwest Ethiopia, 2013

The sample size was determined based on double population proportion according to the assumptions in the above table ??Table 1).

The proportion of unmet need for FP among currently married women 15% and 27.5% for urban and rural respectively was taken from EDHS 2011 (ICF International, 2012).

The sample size was calculated using Epi Info sample size calculator for cross-sectional study. With consideration of design effect of 2 and non-response rate of 5%, the total sample size was 770. e) Sampling method and procedures Multi-stage sampling followed by systematic random sampling method was employed; five out of the 25 rural kebeles and three urban kebeles were selected to represent the rural and urban residents by using lottery method respectively. The peri-urban kebeles of the district were excluded from the study to avoid mixing of urban and rural populations. The sample size for both rural and urban areas was allocated proportionally; systematic random sampling technique was used to reach the study units (households). Women of reproductive age who were living with their husband were included in the study. Data were collected using semi-structured questionnaires adapted by reviewing literatures and suited to the local situation [31,36,39].

The questionnaire was prepared first in English and was The data were collected by 12 trained diploma nurses and was supervised by 3 BSc nurses. During data collection, if there were more than one eligible woman in households, one woman was selected randomly; where there was no an eligible woman in the sampled households, the next household was visited and in case it was closed revisit were done.

7 h) Data quality control

In order to maintain quality of data, data collectors and supervisors ware trained and questionnaire guide was prepared. Pre-test was done on 5% of the total sample and based on the findings of the pre test the questions were modified. The collected data were checked for completeness and consistency by the principal investigator and supervisors and were communicated to data collectors. Moreover, double data entry was performed to 10% of the data to check for consistency.

8 i) Data processing and analysis

The collected data were cleaned and fed to Epi Data version 3.1 and analysis was done by using SPSS version 16 statistical software. Variables with p-value of less than 0.2 in bivariate analyses were entered for multivariable logistic regressions to analyze the associated factors for unmet need for family planning. Standard deviations, odds ratios and 95% confidence intervals with p-value less than 0.05 as statistical significant were used for data presentation.

9 j) Definitions

Unmet need for FP : The number or percent of women currently married (in union) who are fecund and who desire to either terminate (do not want anymore) or postpone (at least 2 years) childbearing, but who are not currently using a contraceptive method [8].

Kebele : The lowest government administrative hierarchy.

10 k) Ethical Considerations

Ethical clearance was obtained from the ethical committee of Debremarkos University.

The study participants were informed about the objective, rationale and expected outcomes of the study and oral consent was obtained either to participate or refuse for the interview. Majority 326 (62.7%) of the study subject got FP services from health centers followed by health posts 171 (32.9%). On the other hand, majority 617 (82.0%) of the respondents took less than an hour for round trip to get FP services. About 476 (63.0 %) of respondents ever discussed about FP services with healthcare providers and 437 (57.9%) visited by healthcare providers within the last 12 months prior to this study (Table 4).

11 III.

12 Results

13 a) Demographic and socio-economic characteristics of the study subjects

14 d) Sources of information about FP methods

Two hundred fifty four (33.5%) of urban and 307 (63.7%) of rural married women got information about FP methods from health extension workers. No one of the rural respondents got information from television while 119 (15.7%) of the urban respondents got the information from television.

15 e) Reasons for not-use of FP methods

Out of 755 married women, 520 (68.9%) were current users of FP methods; of these, 369 (48.9%) were using for spacing and 151 (20%) for limiting. The contraceptive prevalence rates for urban and rural residents were 266 (70.7%) and 254 (67%) respectively. The main reasons for not using FP methods for both urban and rural residents were health concern and fear of side effects 74 (38.34%), less perceived risk of pregnancy 51 (26.42%), opposition from partners 18 (9.33%), religious prohibition 17 (8.81%), familial opposition 17 (8.81%), ambivalence to plan when to get pregnant 15 (7.77%) and availability of preferred methods 8 (4.15%). The main reasons for not using FP methods for 29 (31.5%) urban and 45 (41.7%) rural study subjects were health concerns and fear of side effects followed by less perceived risk of pregnancy 25 (27.2%) and 26 (24.1%) for urban women and rural respectively.

16 f) Unmet need for family planning

The overall unmet need for FP was 193 (25.6) of which 119 (15.8) was for spacing and 74 (9.8) for limiting (Figure 1). Women and their partners with educational level of secondary and above (AOR=0.201; 95%CI: 0.13-0.213) and (AOR=0.231, 95%CI: 0.144-0.295) respectively were also less likely to have unmet need for FP when compared to with no formal education.

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Married women who had not been visited by healthcare providers within the last 12 months prior to the study were 2.63 times more likely to have unmet need for FP compared to women who had been visited (AOR=2.630, 95%CI: 1.452-6.926). Moreover, married women whose partners did not support the use of FP methods were 2.08 times more likely to have unmet need compared to those whose partners support FP use (AOR=2.08, 95%CI: 1.46-9.408).

On the other hand, married women who had not decided their total number of children before their first pregnancy were 1.871 (AOR=1.871, 95%CI: 1.208-6.147) times more likely to have unmet need for FP than their counterparts. h) Factors associated to unmet need for family planning (rural) Age at first marriage 18 and above was negatively and significantly associated to unmet need for FP compared to marital age of less than 18 (AOR=0.260, 95%CI: 0.189-0.368). On the other hand, primary as well as secondary and above educational level of married women were negatively and significantly associated to unmet need for FP when compared to no formal education (AOR=0.355, 95%CI: 0.280-0.831) and (AOR=0.324, 95%CI: 0.053-0.999) respectively. Moreover, married women whose husbands' educational levels of secondary and above were less likely to have unmet need for FP compared to those whose partners had no education (AOR=0.428, 95%CI: 0.319-0.895).

Married women who had ever discussed about FP issues with healthcare providers were also less likely to have unmet need for FP than their counterparts. Currently menstruating was significant predicting factor for unmet need for FP (AOR=0.3619, 95%CI: 0.209-0.696). On the other hand, married women whose partners do not support the use of FP methods were 3.73 times more likely to have unmet need for FP services compared to those whose partners support FP use (AOR=3.73, 95%CI: 1.293-4.770) (Table ??).

IV.

18 Discussion

The prevalence of unmet need for FP services was 25.6%, which is comparable to the national prevalence (25.3%) and is slightly higher than in eastern Nepal (21.7%) and in Amhara region, Ethiopia (22.1%) (ICF International, 2012; Sellen D., 2012); this figure is lower than the prevalences Endersa, Tigray region (48%), Butajira (52.4%), Belesa (39.5%) and Kobo (47.3%) (Assefa H, 2011; Ghebreselasie R, 2006; Awang N. L, 2011). These variations might be attributed to the expanding health services coverage and increased awareness of FP and maternal health services. In most parts of Ethiopia, rural residents are usually of low education and socioeconomic status and have limited access to FP services. This study also revealed that the prevalence of unmet need for FP in urban and rural areas were 18.4% and 32.7% respectively; the discrepancy was wider than the national figure which was 15% and 27.5% (ICF International, 2012). Higher unmet need in rural areas might reflect limited awareness and acceptability of FP services in rural areas.

About two-third married women were FP method users; this is higher than in Kobo, northern Ethiopia (38%) (Choudhary S, 2011); the variation might be due to increased awareness on FP.

Women who married before their 18 birth anniversary were more likely to have unmet need in both areas. This might show awareness of legal marriage in the rural area was inadequate and on the other hand women who marry at their 18 and above were able to plan and manage their family size because they had more exposure to FP methods and were mature enough to do so.

Only 26% of urban and 18.3% of rural respondents had discussed about family planning issues with their partners. This was lower than a study from Belesa, north Gondar that revealed around 45% of wives had experiences of FP discussion with partners (Mihret N, 2008). The possible reason for this difference might be inadequate behavioral change communication in the area.

As the educational status of women improves they would have more awareness about the FP services and hence unmet need decreases. These findings were supported by the Demographic and Health Survey analysis of Kenya which indicates better educated women -secondary level or higher have considerably less unmet need (17%) than women with little or no education (26%) [38]. Husband educational level secondary and above was also negatively associated with unmet need for FP in both urban and rural residents; a study in Butajira district revealed a similar pattern (Mekonnen W. and Worku A, 2011).

The main reasons for not using FP methods for both urban and rural residents were health concerns and fear of side effects, less perceived risk of pregnancy, religious prohibition, familial opposition and ambivalence to plan when to get pregnancy; these findings were supported by the findings of a studies done in Nigeria and Iraq (Laya K.S, 2012).

Discussion with health care providers about FP issues was negatively and significantly associated to unmet need for FP, this is in line with studies done in Kobo, Northern Ethiopia Awang N. L, 2011) and Nigeria (Laya K.S, 2012). Menstrual status of married women was significantly associated to unmet need for FP in the rural area but not in urban area; this might be due to their misperception of less likely to become pregnant in the absence of menstruation.

The overall prevalence of unmet need for FP was high; age at first marriage, educational status of respondents and partners and partner attitude towards FP use were independent predictors of unmet need for FP in both urban and rural areas.

Moreover, desired number of children, healthcare providers visit, age of respondent, menstrual status and discussion about FP were the main predicting factors of unmet need for FP.

The local government should strive to create awareness and implement the legal age for marriage so as to increase marital age at least to 18 years and above to contribute for the decrement of unmet need for FP.

Health extension workers should strengthen the visiting and awareness creation of women and their partners towards the importance of FP services utilization; education for women should be scaled up.

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Figure 1:

2

Prevalence and Associated Factors of Unmet need for Family Planning among Married Women in Enemay District, Northwest Ethiopia: A Comparative Cross-Sectional Study

Enemay district, Northwest Ethiopia, 2013

Characteristics	Urban%		Rural		%	Total
	N		N			N
Age						
15-19	9	2.4	31		8.2	40
20-24	60	16.0	52		13.7	112
25-29	84	22.3	76		20.1	160
30-34	108	28.7	98		25.9	206
35-39	75	19.9	55		14.5	130
>=40	40	10.6	67		17.7	107
Religion						
Orthodox	315	83.8	367		96.8	694
Muslim	51	13.6	7		1.8	51
Protestant	10	2.7	5		1.3	10
Educational status of respondent						
No formal education	231	61.4	312		82.3	543
Primary education	66	17.6	52		13.7	118
Secondary and above	79	21.0	15		4.0	94
Educational status of husband						
No formal education	145	38.6	270		71.2	415
primary education	105	27.9	77		20.3	182
Secondary and above	119	31.6	30		7.9	149
Don't know	7	1.9	2		.5	9
Occupational status of respondents						
House wife/farmer	330	87.8	371		97.9	701
governmental employee and long government employee	46	12.2	8		2.1	54

Figure 2: Table 2 :

3

Most, 344 (91.5%), of the urban and 337 (88.9%) of the rural study subjects had pregnancy history and of which 666 (97.8%) had given birth. Regarding family planning information, 375 (99.7%) of urban and 374 (98.7%) of rural respondents heard about FP methods and 358 (95.2%) of urban and 361 (95.3%) of rural respondents knew at least one FP method respectively (Table 3).

Figure 3: Table 3 :

4

Ethiopia, 2013

Figure 4: Table 4 :

5

Variables	Unmet need		COR (95% C.I)	AOR (95% C.I)	P-value (Overall)
	for FP				
	Yes	No			
Age of respondents					
15-19	3	6	3.1(1.28, 12.027)*	1.580(0.916, 2.314)	
20-24	11	49	1.891(1.014, 11.345)*	1.247(0.442, 10.462)	
25-29	12	72	1.03(0.342, 12.431)	1.621(0.239,11.860)	0.049
30-34	15	93	1.00	1.00	
35-39	14	61	1.423(0.208, 10.282)	1.094(0.708, 2.452)	
>=40	14	26	3.34(2.701, 11.319)*	2.605(1.105, 4.003)*	
Age at first marriage					
<18	62	194	1.00	1.00	
>=18	7	113	0.193 (0.229, 0.433)*	0.390 (0.282, 0.649)*	0.001
Educational status of respondent					
No formal education	58	172	1.00	1.00	
Primary education	9	56	0.491 (0.477, 0.825)*	0.145 (0.134, 1.479)	
secondary and above	2	79	0.082 (0.075, 0.420)*	0.201 (0.130, 0.213)*	0.001
Educational status of husband					
No formal education	28	117	1.00	1.00	
Primary education	12	93	0.671 (0.539, 0.935)*	0.078 (0.037, 3.134)	
Secondary and above	28	91	0.308 (0.201, 0.470)*	0.231 (0.144, 0.295)*	< 0.001
Do not know	1	6	0.696 (0.420, 1.384)	0.294 (0.281, 2.881)	
Occupational status of respondents					
House wife/ farmer	233	55	1.00	1.00	
Government employee	6	25	0.057 (0.018, 0.585)*	0.239 (0.232, 0.411)*	0.027
Merchant/other private work	8	49	0.041 (0.027, 0.345)*	0.200 (0.128, 2.300)	
Visited by a healthcare providers in the last 12 months					
Yes	31	180	1.00	1.00	
No	38	127	1.737 (1.014, 8.279)	2.630 (1.452, 6.926)*	0.048
Partner attitude towards FP use					
Approve	32	238	1.00	1.00	

Figure 5: Table 5 :

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Explanatory Variables	Unmet need for		COR (95 % C.I)	AOR (95 % C.I)	P-value	D D
						) D
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						D K
					(overall)	
	FP					
	Yes	No				
Age of respondents						
15-19	13	18	3.00(1.411, 14.247)*	2.357 (1.689, 5.691)*	<0.001	
20-24	11	41	0.869 (0.757, 1.840)	2.630 (1.347, 8.262)*		
25-29	28	48	2.425(1.326, 10.609)	2.018 (1.525, 4.820)*		
30-34	19	79	1.00	1.00		
35-39	24	31	0.774 (0.454, 1.319)	0.243 (0.046, 1.278)		
>=40	29	38	0.763 (0.471, 1.237)	0.207 (0.040, 1.082)		
Age at first marriage						
<18	104	204	1.00	1.00	0.003	
>=18	20	51	0.769 (0.537, 0.984)*	0.260 (0.189, 0.368)*		
Educational status of respondent						
No formal education	107	205	1.00	1.00	<0.001	
Primary education	13	39	0.639 (0.478, 0.980)*	0.355 (0.280, 0.831)*		
secondary and above	4	11	0.697 (0.519, 0.871)	0.324 (0.053, 0.999)*		
Educational status of husband						
No formal education	191	79	1.00	1.00	0.01	
Primary education	26	51	0.210 (0.108, 0.618)*	1.780 (0.833, 3.804)		
Secondary and above	18	12	0.620 (0.435, 0.804)	0.428 (0.319, 0.895)*		
Don't know	1	1	1.000 (0.063, 15.988)	9.477 (0.230, 30.221)		
Ever discussed about FP methods with healthcare providers					0.033	

Figure 6: Table 6 :

.1 Acknowledgements

- We would like to thank DebreMarkos University and Gamby College of Medical Sciences for their financial support; we would like to extend our gratitude to all the study participants.
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