

Assessment of the Magnitude and Associated Factors of Unmet Need for Family Planning among Women of Reproductive Age Group with Disabilities in Bahir Dar City, Amhara Region, North West Ethiopia

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Abstract

The study was conducted to assess the magnitude and associated factors of unmet need for family planning among women of reproductive age group with disabilities who are members of disabled associations in Bahir Dar town. Institution based cross-sectional study was carried out. A total of 337 women of reproductive age group with disabilities were included in the study with simple random sampling. Data were collected through face-to-face interview, coded, cleaned and entered by Epi info 2002 and analyzed with SPSS version 16 computer software. Logistic regression was used to assess possible associations. The magnitude of unmet need for family planning among women with disabilities was 24.3%. Women with disabilities in the age group of 25 - 29 had 80% less likely to have unmet need than women above 35 years old. Women with disability who have no education were 11 times more likely to have unmet need than those who have secondary education. Women who desire to have more than 3 children have more likely to have unmet need than those who need to have 1 - 2 children. Unmet need for family planning among women with disabilities was high in Bahir Dar town. Age, Educational status and desired number of children were found to have statistically significant association with unmet need for family planning. Hence, it is important to encourage people with disabilities to attained formal education and the associations should provide short term trainings in accordance with their age group.

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Keywords

Women with Disability, Unmet Need for Family Planning, Bahir Dar City

1. Introduction

The concept of unmet need for family planning refers to fecund women who either wish to postpone the next birth (spacers) or who wish to stop child bearing (limiters) but are not using a contraceptive method [1]. Globally, it is estimated that more than 100 million women in low income countries or about 17% of all married women, would prefer to avoid pregnancy but are not using any form of family planning [2]. Within the low income regions of the world, about one-fourth of all pregnancies are unintended while an estimated 18 million unsafe abortions take place each year, thereby, contributing to the high maternal mortality and injuries [3]. Approximately 300 million women around the world have mental and physical disabilities. Globally, women make up three-quarters of the disabled people in low and middle income countries, and between 65 and 70 percent of those women live in rural areas. Women with disabilities comprise 10 percent of all women worldwide [4].

Sub-Saharan Africa has the highest fertility rates of any world region, 5.4 births per woman on average, double that of Asia (excluding China) and more than three times that of Europe. Every hour of every day, at least 30 women die from complications of pregnancy and childbirth in sub-Saharan Africa which is about 270,000 deaths every year [5].

Family planning can reduce maternal mortality by reducing the number of pregnancies, the number of abortions, and the proportion of births at high risk. Only 18 percent of married women in sub-Saharan Africa use modern methods of family planning [6].

Demographic health survey (DHS) results in 53 countries reveal that in 16 of 25 countries outside sub-Saharan Africa, unmet need among married women is 15 percent or lower, while only three of 28 sub-Saharan countries have levels that low [7]. An estimated 35 million women in sub-Saharan Africa have an unmet need for family planning. In 28 of 31 countries where unmet need is measured, at least one-fifth of married women ages 15 - 49 have an unmet need for family planning [8]. Unmet need for family planning in Ethiopia was estimated at 35.8%, 33.8 and 25.3% in 2000, 2005 and 2011 respectively [9]. In Ethiopia, about 7 million persons are with disabilities [10].

The present study therefore aims at examining both the level of unmet need and factors affecting family planning service utilization in one of the fast growing city of Ethiopia, Bahir Dar.

2. Methods and Materials

Institution based cross section study was conducted to assess the prevalence of unmet need for family planning and associated factors among disabled women who are members of disabled associations in Bahir Dar town. A total of 337 women of reproductive age group with disabilities were included in the study using Simple random sampling method. Data were obtained through well designed and pretested questionnaire by face to face interview. Collected data were analyzed using SPSS version 16 computer software.

3. Result and Discussion

In this study a total of 337 women with disability aged between 15 - 49 years were included. The response rate was found to be 96.5%. **Figure 1** shows, The Unmet need for family planning among women with disabilities was found to be 24.3% of which 15.4% had unmet need for spacing and 8.9% for limiting childbearing. **Table 1** shows, among the participants, majority, 25.2% were within the age range of 15 - 19 years about 84.4% of the respondents had no education and only 8% of the respondents are above secondary school. In the forms of disabilities those who are handicapped at the lower limb and handicapped of both limbs, accounted for 39.4% and 17.8% respectively. **Table 2** shows, nearly 90.5% of the study participants were heard about family planning. One hundred thirty nine, 42.8% had been pregnant. Among those, larger proportions of the women, 89.2% have more than five children and 10.8% have less than five children. Out of those who had history of pregnancy, 64% reported that their pregnancy was unintended. Lack of awareness accounts about 38% and contraceptive failure,

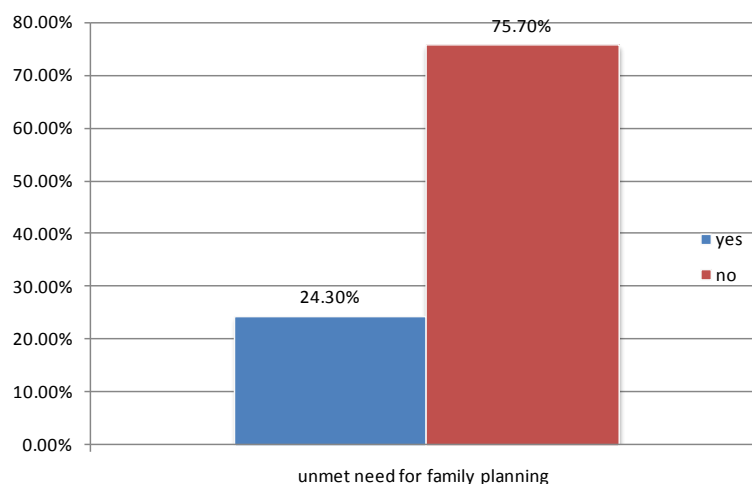


Figure 1. The prevalence of unmet need for family planning among women with disabilities of reproductive age group in Bahir Dar town, Amhara region, Ethiopia, August 2013.

Table 1. Socio demographic characteristics of study participants in Bahir Dar City, Amhara Region, North West Ethiopia, August 2013.

Variables	Choices	Frequency	Percentage
Age	15 - 19	82	25.2
	20 - 24	69	21.2
	25 - 29	75	23.1
	30 - 34	38	11.7
	≥35	61	18.8
Marital status	Married	134	41.2
	Single	13	4
	Have a boyfriend	138	42.5
	Divorced	24	7.4
	Others*	16	4.9
Religion	Orthodox	290	89.2
	Muslim	33	10.2
	Protestant	2	0.6
Educational status	No education	153	47.1
	Primary education	99	30.5
	Secondary education	47	14.5
	Above secondary education	26	8
Forms of disability	Deaf	37	11.4
	Blind	58	17.8
	Handcape upper limp	41	12.6
	Handcape lower limp	128	39.4
	Handcape both limp	28	8.6
	Others*	33	10.2
Occupation	Housewife	48	14.8
	Student	66	20.3
	Governmental employment	4	1.2
	NGO	7	2.2
	Merchant	74	22.8
	Daily laborer	41	12.6
	Local drink seller	3	0.9
	Beggars	82	25.2
Income	150 - 300 ETB	147	45.2
	301 - 600 ETB	132	40.6
	601 - 1000 ETB	39	12.
	≥1001 ETB	7	2.2

Income category is based on published literatures (10), *widowed and separated, *spinal bone deformation. Age categorization is based on EDHS 2011, ETB (Ethiopian birr).

Table 2. Family planning characteristics of study individuals in Bahir Dar City, Amhara Region, North West Ethiopia August 2013.

Variables	Categories	Frequency	Percentage
Have you ever been pregnant	1. Yes	139	42.8
	2. No	186	57.2
If yes, How many times have you been pregnant	1. <5	124	38.2
	2. ≥5	201	61.8
Were all your pregnancies wanted	1. Yes	89	27.4
	2. No	50	15.4
If no, what was the reason you could not avoid becoming pregnant	1. Lack of awareness	19	38
	2. Poor access	2	4
	3. Husband/partner disapproval	10	20
	4. Relative disapproval	13	26
	5. Contraceptive failure	2	4
	6. Religion prohibition	2	4
	7. Rape	2	4
If it was due to contraceptive method failure, what was the method used	1. Pills	7	53.8
	2. Injectables	3	23.1
	3. Natural methods	2	15.4
	4. Other	1	7.7
Are you currently pregnant	1. Yes	9	2.8
	2. No	316	97.2
Desired number of children	1. 1 - 2	187	57.5
	2. ≥3	138	42.5
How long would you like to wait from now before the birth of another child	1. Less than 2 years	20	6.2
	2. 2 to 3 years	70	21.5
	3. 3 to 4 years	19	5.8
	4. More than 4 years	78	24
Did you give birth	1. Yes	137	42.2
	2. No	188	57.2
If yes, how many live children do you have	1. <4	124	38.2
	2. ≥4	14	4.3

Number of pregnancy category is based on published literatures.

4%, mentioned as reasons for these unwanted pregnancies. Only 2.8% respondents were pregnant during the study period. Majority, 57.5% of the study participants had a desire to have 1 - 2 children for the future. Seventy eight, 41.5% of respondents mentioned that they can wait more than four years till the next child. About 42.2% of the respondents had ever given birth and the 57.8% didn't give birth. A larger proportion, 89.8% of the women had less than 4 children and 10.2% had no living children at the time of the study. About 94% of the participants had knowledge on family planning. Women were also asked whether they have any intention to use family planning services in the future. About 75.1% of respondents reported having the intention to use one of the family planning methods. **Table 3** shows, only 36.9% of the respondents have ever used any method at the time of the survey and the majorities, 63.1% were non-users. Among those who are non user, the majority, 95.7% of the study participants didn't want to use any method to delay or limit pregnancy. Among the list of family planning methods, Injection were the most frequently used, 61% followed by pills, 18.3%, Norplant, 15.9%, condom, 2.4%, and Intra Uterine Contraceptive Device, 2.4% while the remaining 5.21% of respondents used other type of family planning methods. Regarding the purpose of using contraceptive, spacing were mentioned by majority of respondents, 70.7% and limiting 29.3% respectively. **Table 4** shows, more than half, 52% of participants agreed and about, 26.5% of the study participants disagreed on existence of disability friendly reproductive health services. The reason for disagreement were inconvenience of services, 60.9%, inappropriate information, 6.9% and inconvenience of institution, 18.4% were attributed to this reported poor disability friendly sexual and reproductive health services. With respect to sexual and reproductive health service outlet, 63.8%, 12.8% and 14% of the participants knew that they could get the products from governmental health facilities, private health facilities and family guidance association clinics, respectively.

Table 5 shows, age > 35, low educational status and desired children greater than three were the independent

Table 3. Product characteristics of study participants in Bahir Dar City, Amhara Region, North West Ethiopia, August 2013.

Variables	Categories	Frequency	Percentage	
Have you ever used anything or tried in any way to delay or avoid getting pregnant	Yes	120	36.9	
	No	205	63.1	
Did u want to use any method to delay or limit pregnancy at that time	Yes	120	60.9	
	No	77	39.1	
Are you currently doing something or using any method to delay or avoid getting pregnant	Yes	82	25.2	
	No	243	74.8	
Have you ever used modern contraceptives to prevent pregnancy	Yes	122	37.5	
	No	203	62.5	
Are you currently using modern contraceptives	Yes	82	25.2	
	No	243	74.8	
If yes, what type	Pills	15	18.3	
	Condom	2	2.4	
	Injectables	50	61	
	Norplant	13	15.9	
	IUDs	2	2.4	
Why you prefer this method	I have no choice	11	13.4	
	It is easy to use	52	63.4	
	It is for short period of time	13	15.9	
	Fear of side effect	4	4.9	
	Others	2	2.4	
If no, what were the reasons	because I am pregnant	3	2.4	
	Not sexually active	20	15.9	
	Have less frequent sex	2	1.6	
	Husband/partner disapproval	19	15.1	
	Religious Prohibition	2	1.6	
	Lack of knowledge	13	10.3	
	fear of side effect	40	31.7	
	Difficult to obtain	4	3.2	
	Method was expensive	1	0.8	
	Too far	2	1.6	
If you are currently using the contraceptive method for what purpose	Preferred method is not available	2	1.6	
	I don't want to use	14	11.6	
	Others	4	3.2	
	Spacing birth	58	70.7	
	Limiting birth	24	29.3	
	Is it easy or difficult for you to use contraceptives	Easy	196	60.3
		Difficult	99	30.5
		Don't know	30	9.2
		Lack of money to buy	6	6
		Lack of information	47	47
Pressure from sex partners		6	6	
Religious prohibition		3	3	
Difficult to find		9	9	
If difficult, why is it difficult		Provider disapproves	5	5
		Distribution places are inconvenient	14	14
	Being afraid to buy from ops/pharmacy	5	5	
	Too far to find	2	2	
	Ignorance	2	2	
	Others	1	1	
	Which group you belong regarding contraceptive practice?	Current user	75	23.1
		Ever used	50	15.4
Non user		200	61.5	

Table 4. Health Service Provider characteristics of study participants in Bahir Dar town, Amhara Region, North West Ethiopia, August 2013.

Variables	Categories	Frequency	Percentage
Do you agree that existing SRH services are disability friendly?	1. Agree	169	52
	2. Disagree	86	26.5
	3. Unsure	70	21.5
If you disagree, what is your main reason?	1. Service are not in accordance with PWDs need	53	16.3
	2. Information provided at the centers are not appropriate	6	1.8
	3. Providers fail to keep privacy and confidentiality	1	0.3
	4. Poor handling and scolding by health workers	3	0.9
	5. Too much waiting time to get the service	2	0.6
	6. The health institutions are inconvenient.	16	4.9
	7. Other	6	1.8
What are the main obstacles that prevent disabled from getting Sexual and Reproductive Health services in health institutions?	1. Too far health institutions	47	14.5
	2. Too expensive services	14	4.3
	3. Providers fail to keep privacy and confidentiality	7	2.2
	4. Poor communication and handling by health worker	10	3.1
	5. Too much waiting time to get the service	13	4.0
	6. The health institutions are inconvenient.	131	40.3
	7. The health institutions are inconvenient.	83	25.5
	8. Don't know	20	6.2

Table 5. Association of variables with unmet need for family planning in Bahir Dar, Amhara, North West Ethiopia, August 2013.

Variables	Variable categories	Unmet need n =		COR with 95% confidence interval	AOR with 95% confidence interval
		Yes	no		
Age	15 - 19	8	16	0.64 (0.16 - 2.66)	0.5 (0.09 - 3.24)
	20 - 24	19	33	0.28 (0.11 - 0.72)	0.2 (0.07 - 0.76)**
	25 - 29	12	40	0.14 (0.05 - 0.4)	0.4 (0.14 - 1.42)
	30 - 34	13	18	0.35 (0.13 - 0.92)	1.9 (0.31 - 12.6)
	≥35	27	13	1.00	1.00
Educational status	No education	42	47	2 (1.02 - 4.2)	11.2 (1.3 - 101.8)**
	Primary education	24	41	0.72 (0.23 - 2.22)	7.3 (0.81 - 65.5)
	Secondary	4	21	0.23 (0.05 - 1.11)	0.9 (0.07 - 11.3)
	Above secondary	9	11	1.00	1.00
Did you give birth	Yes	46	46	2.24 (1.21 - 4.18)	2.1 (0.65 - 6.45)
	No	33	74	1.00	1.00
Easy or difficult to use FP	Easy	52	76	0.91 (0.27 - 3.18)	2.1 (0.87 - 5.32)
	Difficult	21	36	0.78 (0.21 - 2.98)	6.9 (1.29 - 36.87)
	Don't know	6	8	1.00	1.00
Desired number of children	1 - 2	36	81	0.4 (0.23 - 0.74)	0.2 (0.09 - 0.47)**
	≥3	43	39	1.00	1.00
Main obstacles	Health institution related	44	80	1.00	1.00
	Health service worker	13	8	2.96 (1.14 - 7.67)	2.21 (0.87 - 5.32)
	Don't know	22	32	1.25 (0.65 - 2.41)	0.5 (0.11 - 2.35)
Were all pregnancies wanted	Yes	23	32	1.00	1.00
	No	23	14	2.28 (0.9 - 5.89)	0.3 (0.53 - 1.36)
Why like to use FP for the future	Spacing	51	75	0.04 (0.01 - 0.27)	0.7 (0.45 - 1.17)
	Limiting	19	1	1.00	1.00

predictor variable for unmet need for family planning. The Hosmer and Lemeshow goodness test shows the model is fitted which was 0.994.

According to this study the level of unmet need for family planning among women with disabilities was 24.3%

which is in line with Amhara region findings, which is 22.1% and Demographic health survey results for Ethiopia which is 25.3% [11] [12]. It is about nearly same as those of the Philippines, 22.3% and Cambodia, 16.6%. While in china unmet need for family planning was 2.3% [13]. The discrepancy found between the study in china and this study might be due to one child policy of china and other socio-economic factors.

This study revealed that unmet need is specifically high among women who are 35 year and above which is about 67.5%. Smaller Percentages in need of family planning were found in the age group of 25 - 29 which is 23%. In contrast the study conducted in Hawassa showed that unmet need is high in the age group of 25 - 29 and low in the age group of above 35 [14]. Based on the result of this study women with disabilities in the age group of 25 - 29 had 80% less likely to have unmet need than women above 35 years old (AOR = 0.2, 95% CI: 0.07 - 0.76), In contrast the study conducted at Enemay district, northwest Ethiopia stated that as age increased, the level of unmet need was decreased and age groups of married women 15 - 19, 20 - 24 and 25 - 29 were positively and significantly associated to unmet need for FP when compared to age group 34-39 with (AOR = 2.357, 95%CI: 1.689 - 5.691), (AOR = 2.630, 95%CI: 1.347 - 8.262) and (AOR = 2.018, 95%CI: 1.525 - 4.820) respectively [11]. This variation might be mostly due to women with disability has delayed to start sexual relationship.

According to this study the prevalence of unmet need among women who have no education is 47.2% is considerably higher than secondary education which is 16% which is in line with the study in Kenya [15]. This study also revealed that those women with disability who have no education were 11.2 times more likely to have unmet need than those who have secondary education (AOR = 11.2, 95% CI: 1.3 - 101.8), which is In consistent with the study at Hawssa showed that Women with primary education were 7 times more likely than women with higher education to have unmet need [14]. And the study at Butajira showed that married women who attained primary and secondary plus level of education have about 1.3 and 2 times less likely to have unmet need [9]. The study conducted in Kenya also showed that better educated women—secondary level or higher have considerably less unmet need which is 17% than women with little or no education that is 26% [15].

This study had also revealed that women's desire for 1 - 2 children were 60% less likely to have unmet need than those who need to have greater than three children (AOR = 0.2, 95% CI: 0.09 - 0.47). Unlike a study done in Enemay district northwest Ethiopia which showed no significant association between desired number of children and unmet need [11]. The discrepancy might be because of the difference in sampling technique (multistage), high sample size (770) and sampling design (comparative cross-sectional study design).

4. Conclusions

Based on the finding of the study we can conclude that, the overall magnitude of unmet need among women with disabilities was high. Women who are in the age group of 20 - 24, women who have no education and women desire to have 1 - 2 children were independent predictor variables for unmet need for FP among women with disabilities.

Therefore based on the study findings and conclusion discussed above, the associations provide short term trainings in accordance with their age group. The local educational bureaus should also strive to increase the educational level of women with disabilities beyond primary level. Family guidance association should give adequate attention and trainings for women with disabilities and should also prepare awareness creation programs.

Further research should be conducted by increasing sample size and more geographic areas in order to identify the extent of the unmet need of women with disability in rural population.

Competing Interests

The authors declare that they have no computing interests.

Authors' Contributions

Abel Lule Tessema designed the study, organized data collection, analyzed the data, interpreted the data and prepare the manuscript.

Mekonnen Aycheluhem: Advised and led in designing the study, data collection, analysis and take much part in manuscript preparation.

Tsion Samuel Bunare also assisted in designing the study, data collection, analysis and manuscript preparation.

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References

- [1] Hailemariam, A. and Haddis, F. (2011) Factors Affecting Unmet Need for Family Planning in Southern Nations Nationalities and Peoples Region, Ethiopia. *Ethiopian Journal of Health Sciences*, **21**, 77-89. <http://dx.doi.org/10.4314/ejhs.v21i2.69048>
- [2] USAID (2010) The Unmet Need for Contraception in the Developing World and the Former Soviet Union. *Academic Article Journal from International Family Planning Perspectives*, **28**.
- [3] Anthony, L.O., Joseph, U.O. and Emmanuel, M.N. (2009) Prevalence and Determinants of Unmet Need for Family Planning in Nnewi, South East Nigeria. *International Journal of Medicine and Medical Sciences*, **1**, 325-329.
- [4] Center for Reproductive Rights. Reproductive Rights and Women with Disabilities, 2002.
- [5] USAID (2010) The Status of Family Planning in Sub-Saharan Africa.
- [6] Kols, A. (2008) Reducing Unmet Need for Family Planning: Evidence Based Strategies and Approaches. *Outlook*, **25**.
- [7] Ashford, L. (2009) Unmet Need for Family Planning: Recent Trends and Their Implications for Program.
- [8] USAID (2010) Three Successful Sub-Saharan African Family Planning Programs.
- [9] Mekonnen, W. and Worku, A. (2011) Determinants of Low Family Planning Use and High Unmet Need in Butajera District, South Central Ethiopia. *Bio Med.*, 2011.
- [10] Ethiopian Center for Disability and Development (ECDD) in Collaboration with DKT (2012) Assessment of Sexual and Reproductive Health Products and Services Use by Persons with Disability.
- [11] Getiye, D., Mekonnen, A. and Amanuel, A. (2013) Prevalence and Associated Factors of Unmet Need for Family Planning among Married Women in Enemay District, Northwest Ethiopia. *Global Journal of Medical Research*, **13**, 29-30.
- [12] Central Statistical Agency [Ethiopia] (2011) Ethiopia Demographic and Health Survey Addis Ababa, Ethiopia.
- [13] World Health Organization (2013) Contraceptive Prevalence Rate, Total Fertility Rate, Unmet Need for Family Planning. WHO in the Western Pacific.
- [14] Sahele, S. (2003) Assessment of the Magnitude and Determinants of Unmet Need for Family Planning among Currently Married Women in Urban and Periurban Community in Hawassa, Southern Ethiopia. *Ethiopia Journal of health Science*, **21**, 68-70.
- [15] NCPD Policy Brief (2010) Fulfilling Unmet Need for Family Planning Can Help Kenya Achieve Vision.

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