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Utilization of Family Planning Services among Married Women of Reproductive Age in Bhimeshwor Municipality of Dolakha District

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ABSTRACT

Introduction: Family planning (FP) is an essential component to reduce; the maternal and neonatal mortality rate, and improve the child health, and also to achieve gender and economic equality. Recently, Nepal observed a setback in FP services utilization among Married Women of Reproductive Age (MWRA). Hence, we conducted a study to assess the FP services utilization among the MWRA of Bhimeshwor Municipality of Dolakha District of Bagmati Province.

Methods: We conducted a cross-sectional descriptive study among 230 MWRA (15-49 years). Ethical approval was obtained from Nepal Health Research Council. Data collection tool included structured and semi-structured questionnaires. Data analysis was done on SPSS-version22. Categorical variables were described using numbers and percentages.

Results: A total of 53.9% MWRA used different methods of FP. Depo Provera (42.7%) and Hormonal implants (0.8%) were the most commonly used and least common contraceptive method, respectively. Around one-third women who didn't use any contraceptives responded the reason being fear of side effects (35.8%) and husband disapproval (29.2%). Almost two in three women (68.0%) who didn't use any contraceptives had no intention of using it in the future.

Conclusions: The utilization of FP services among MWRA is slightly more than half of the respondents. Though the utilization is considerably higher than the both national and provincial average but certainly will have to raise the bars to meet the standard set by Sustainable Development Goals (SDG). Furthermore, conduction of community programmes with an intention to sensitize about contraceptives and its possible effect would be beneficial.

Keywords:*; Family planning method; Family planning services; Married women of reproductive age; Nepal.*

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INTRODUCTION

FP denotes individuals and couples' capacity to predict and achieve their desired number of children, space and limit their births.[1] FP is central not just to reduce; the maternal and neonatal mortality rate, and improve child health, but also to achieve gender and economic equality.[2]

The Government of Nepal is determined to provide FP services through its various components of reproductive health packages and essential healthcare services.[3] However, Nepal in 2076/77 observed a setback in FP services at both national and provincial level with a decrease in utilization by 2% from 39% than the previous year.[4] FP methods are still unknown to many MWRA in Nepal.

FP services utilization can be essential to design programmes aiming to uptake FP services. In this context, we aimed to assess the FP services utilization among the married women of reproductive age of Bhimeshwor Municipality of Dolakha District.

METHODS

We conducted a cross-sectional study among married women of the reproductive age group of Bhimeshwor Municipality located at Dolakha district of Bagmati Province in Nepal. Bhimeshwor Municipality is 130 km away from the capital Kathmandu city. The data was collected from April to May 2019.

Ethical approval was obtained from Nepal Health Research Council. All the participants were administered after they provided a written informed consent. Women of reproductive age group i.e., 15-49 years and who were present on the day of data collection were included in the study. Exclusion criteria consisted of those who did not give consent to participate, were critically ill and suffering from medical conditions.

Sample size calculation

The sample size was calculated by using the formula given below:

$$n = \frac{z^2 pq}{d^2}$$

Where,

p= prevalence = 81.5% = 0.815 (Prevalence from an international study)[5]

q = 1-p = 1-0.81 = 0.185

d = acceptance error = 5% = 0.05

z = confidence interval =95% = 1.96

Now,

$$n = \frac{1.96 * 1.96 * 0.815 * 0.185}{0.05 * 0.05}$$

$$= 232$$

Sample size (n) = 232

Of the 9 wards in Bhimeshwor Municipality, first we selected 30% of the wards (4,5,6) by lottery method. Further, the targeted population was selected conveniently from each selected ward.

232 females were approached in the study, while 2 of them did not give the consent. Data from 230 participants were collected through face-to-face interview using the structured and semi-structured questionnaire. Questionnaire was developed through intensive literature review. First, the questionnaire was developed in English language and translated into Nepali language and again back translated to English language to maintain the reliability. Minimal changes such as orders were made after the use of the questionnaire for pre-testing in 10% of total sample size in a similar setting.

Questionnaire included socio-demographic characteristics: age, age at marriage, ethnicity, family type, International Wealth Index (IWI),[6] education level, occupational status, occupational status of husband. Likewise, pregnancy and children related characteristics of the participants: age at first pregnancy, times of pregnancy, no. of children. Similarly, utilization of FP services: using ≥1 modern FP method,[7] response to benefit of using contraceptives, currently used modern FP method, duration of FP method use, most recent source for receiving currently used FP method, major reason for not using FP methods, intention to use contraceptives in future, contraceptives intended to use in future, and characteristics related to information source for FP services: heard about at least one contraceptives, heard about particular contraceptive and source of information about contraceptives.

Data entry was done using Epi-data 3.1 software.[8] Further analysis was done using SPSS (version22) statistical software. Categorical variables were described using numbers and percentages.

RESULTS

Among 230 respondents, 53.9% of the women were using the modern FP method. Of being asked if use of FP method is beneficial, around one fifth of the respondent (23%) considered that FP method has no beneficence. Of 124 respondents who use the FP method during the visit for data collection, Hormonal contraception Depo Provera (42.7%) was the most commonly used contraceptive method and the least common was Hormonal implants (0.8%). Of the women who responded they had used the FP method, only 23.4% had been using it for more than 6 years (23.4%). Most respondents received currently used FP services from the governmental health facilities (34.7%) followed by medical/pharmacies (21.0%), private hospitals (4.8%) and least from FP organizations (1.6%).

Among 106 respondents not using any of the contraceptives, the major reason for not using contraceptives is fear of side effects (35.8%), husband disapproval (29.2%), due to pregnancy (19.8%), mother-in-law disapproval (13.2%) and distanced health facilities (1.9%). Of the total non-users of the FP method, 68.0% had no intention of using it in the future. Of which most opted for female sterilization (44.1%).

Table 1. Utilization of FP services

Utilization of FP services	n(%)
Using ≥1 modern FP method (n=230)	
Yes	124(53.9)
No	106(46.1)
Response to benefit of using contraceptives (n=230)	
Beneficial	177(77.0)
Not beneficial	53(23.0)
Currently used modern FP method (n=124)	
Condom	3(2.4)
Pills	17(13.7)
Hormonal implants	1(0.8)
Depo Provera	53(42.7)
Intrauterine device	12(9.7)
Female sterilization	22(17.7)
Male sterilization	16(12.9)
Duration of FP method use (n=124)	
< 1 year	27(21.8)
1-2 years	34(27.4)
3-4 years	21(16.9)
5-6 years	13(10.5)
> 6 years	29(23.4)
Most recent source for receiving currently used FP method (n=124)	
Government health facilities	68(54.8)
Medical/ pharmacy	42(33.8)
FP organizations	3(2.4)
Private hospital	11(8.8)
Major reason for not using FP methods (n=106)	
Fear of side effects	38(35.8)
Husband disapproval	31(29.2)
Due to pregnancy	21(19.8)
Mother-in-law disapproval	14(13.2)
Distanced health facilities	2(1.9)
Intention to use contraceptives in future (n=106)	
Yes	34(32.0)
No	72(68.0)
Contraceptives intended to use in future-multiple response (n=34)	
Condom	2(5.8)
Hormonal implants	2(5.8)
Depo Provera	11(32.3)
Intrauterine device	6(17.6)
Female sterilization	15(44.1)
Male sterilization	8(23.5)

Of the total 230 respondents, the majority were above 35 years of age (43.0%) and were married within the age of 18-20 years (16.5%) respectively. Study population belonged to the Brahmin (30.4%), Chhetri (27.4%), Janajati (28.7%) and Dalit (13.5%) ethnicity. More than half of respondents were living in a nuclear family (67.4%). According to the IWI, the majority belonged to the Middle-class family (35.7%) followed by Upper class family (35.2%), Poor family (20.0%), Rich family (6.5%) and Extremely Poor family (2.6%). Most of the women were illiterate (41.7%) and homemakers (39.6%). A total of 36.5% of respondents' husbands were involved in Service, while only 3.5% were staying abroad at the time of data collection.

Table 2. Socio-demographic Characteristics of the respondents (n = 230)

Characteristics	n(%)
Age (in years)	
16-20	10(4.4)
21-25	30(13.0)

26-30	51(22.2)
31-35	40(17.4)
> 35	99(43.0)
Age at marriage (in years)	
<15	30(13.0)
15-17	29(12.6)
18-20	133(57.9)
>20	38(16.5)
Ethnicity	
Brahmin	70(30.4)
Chettri	63(27.4)
Janajati	66(28.7)
Dalit	31(13.5)
Family Type	
Nuclear	155(67.4)
Joint	75(32.6)
IWI Index	
Extremely poor	6(2.6)
Poor	46(20.0)
Middle class	82(35.7)
Upper class	81(35.2)
Rich	15(6.5)
Education level	
Illiterate	96(41.7)
Primary	47(20.4)
Lower secondary	48(20.9)
Secondary	25(10.9)
Higher secondary	13(5.7)
Bachelor	1(0.4)
Occupational status	
Homemaker	91(39.6)
Agriculture	67(29.1)
Job	39(17.0)
Business	26(11.3)
Labor	7(3.0)
Occupation of husband	
Service	84(36.5)
Agriculture	72(31.3)
Labor	39(17.0)
Business	27(11.7)
Abroad	8(3.5)

More than half of the women had their first child after 20 years of age (52.2%). Around 18.3% and 12.2% of the women were pregnant once and more than 4 times respectively. Most women (63.5%) had two or less than two children whereas 36.5% had 3 or more than 3 children.

Table 3. Pregnancy and children related characteristics (n = 230)

Pregnancy and children related characteristics	n(%)
Age of first pregnancy	
<15	3(1.3)
15-17	14(6.1)
18-20	93(40.4)
>20	120(52.2)
Times of pregnancy	
1 time	42(18.3)
2 times	104(45.2)
3 times	56(24.3)
≥4 times	28(12.2)
No. of children	
≤ 2	146(63.5)
≥ 3	84(36.5)

Out of 230 respondents, the majority of the respondents (97.4%) had heard about contraceptives. Likewise, the maximum had heard about the pills (69.1%) while only 15.7% had heard about hormonal implants. Health facilities (63.0%) were the main source of contraceptives information followed by Neighbours/Relatives/Friends (25.7%), Media (21.7%), Female Community Health Volunteers (FCHVs) (17.4%) and Family members (6.1%).

Table 4. Information source for FP services related characteristics

Information source for FP services	n(%)
Heard about at least one contraceptive (n=230)	
Yes	224(97.4)
No	6(2.6)
Heard about particular contraceptive (n = 224)*	
Condoms	134(58.3)
Pills	159(69.1)
Hormonal implants	36(15.7)
Depo Provera	155(67.4)

Intrauterine device	116(50.4)
Female sterilization	68(29.6)
Male sterilization	71(30.9)
Source of contraceptives information (n = 224)*	
Health facilities	145(64.7)
Media	50(22.3)
FCHVs	40(17.8)
Family member	14(6.2)
Neighbours/Relatives/Friends	59(26.3)

** Indicate multiple response question*

DISCUSSION

The findings showed that slightly more than half of the respondents (53.9%) enrolled in our study used a method of FP. While the finding is aligned with the Nepal Demographic Health Survey (NDHS) report of 2016, where exactly 53% of married women mentioned using at least one FP method.[9] In contrast, the use of modern contraception among MWRA exceeded the national level record of modern contraceptive prevalence rate of 37% and even higher than in Bagmati Province (32%) from last fiscal year 2076/77.[4] The most common method of FP was Hormonal Depo Provera, which was also the most adopted method (Injections) for FP among married women of Kavre district.[3] Similar to the national average (70%) respondents received FP services from the Governmental health facilities (34.7%).[9]

Around one third women who didn't use any contraceptives responded the reason being fear of side effects and husband disapproval. This finding has relevancy with results from a qualitative study which mentions about fear of adverse health consequences, potential discrimination from male-counterparts as few of the reasons for not using contraceptives.[10] Along with that considering the significant role husbands can play for promoting family health, husbands' equal involvement in use of contraceptives should be encouraged generating a shared sense of responsibility while planning for family.[11] Almost two in three women who didn't use any contraceptives had no intention of using it in the future, which is considerably high as compared to NDHS, 2016 report where 77% MWRA had intention to use FP in the future.[9]

In the present study not all the respondents had heard about any contraceptive (2.6%). Out of 224 women who had heard about at least one contraceptive, had mostly heard of Pills (69.1%) and less heard contraceptive was Hormonal implants (15.7%). And when compared with national average it is low as 95% and 94.2% married women claimed to heard of Pills and Hormonal Implants, respectively.[4]

Our study can be regarded as one of the first few studies stating FP service utilization among MWRA in the Dolakha district. However, our study had few limitations, first, the absence of variables for measuring unmet needs for contraceptives, which could be helpful to reflect the gap between the service availability and accessibility. Second, having not been able to collect information related to discontinuation of any FP method, which would have otherwise benefited, to understand the major reasons and design programmes accordingly for that community. Third, limitation is the lack of integration of husbands for questions relevant to male contraceptives such as intention for using contraceptives in future.

CONCLUSIONS

The utilization of FP services among MWRA of Bhimeshwor Municipality is slightly more than half of the respondents. Though the utilization is considerably higher than the both national and provincial average but there is more to do to raise the bars for meeting the standards set by SDG. In the light of this finding, initiation of community awareness programs with the use of appropriate communication media would be beneficial. Additionally, such programs can be designed to highlight; the FP methods and its possible effect to health, and the importance of shared responsibility in decision-making of both the counter-parts in FP. Furthermore, more research work involving male respondents would help to elucidate their perspective on FP methods, making the results more precise and accurate.

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CONFLICT OF INTEREST

None

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REFERENCES

1. World Health Organization. The ABC's of family planning. WHO. World Health Organization. Available from: https://www.who.int/pmnch/media/news/2010/20100322_d_shaw_oped/en/
2. World Health Organization. Contraception. WHO. Available from: https://www.who.int/westernpacific/health-topics/contraception
3. Bista S. The Status of Family Planning Methods among Married Women of Kavre District in Nepal. Journal of Population and Development. 2020 Nov 27;1(1):181–91.
4. MOHP. Annual Report- 2076/77 (2019/20). Department of Health Services, Ministry of Health and Population, Government of Nepal; 2021. Available from: https://dohs.gov.np/wp-content/uploads/2021/07/DoHS-Annual-Report-FY-2076-77-for-website.pdf
5. Motlaq ME, Eslami M, Yazdanpanah M, Nakhaee N. Contraceptive use and unmet need for family planning in Iran. International Journal of Gynecology & Obstetrics. 2013 May 1;121(2):157-61.
6. Smits J, Steendijk R. The International Wealth Index (IWI). Social Indicators Research: An International and Interdisciplinary Journal for Quality-of-Life Measurement. 2015;122(1):65–85.
7. Ibnouf AH, Van den Borne HW, Maarse J a. M. Utilization of family planning services by married Sudanese women of reproductive age. EMHJ - Eastern Mediterranean Health Journal. 2007;13(6):1372–81.
8. Lauritsen J, Bruus BM. EpiData Entry (3.1). A comprehensive tool for validated entry and documentation of data. Denmark: Epidata Association; 2019. Available from: https://epidata.dk/download.php
9. Ministry of Health and Population (MoHP). Nepal Demographic and Health Survey 2016. Kathmandu: Ministry of Health and Population, New ERA and Macro International Inc., Nepal; 2017.
10. Bhatt N, Bhatt B, Neupane B, Karki A, Bhatta T, Thapa J, et al. Perceptions of family planning services and its key barriers among adolescents and young people in Eastern Nepal: A qualitative study. PLoS One. 2021 May 26;16(5):e0252184.
11. Paudel YR, Acharya K. Fertility Limiting Intention and Contraceptive Use among Currently Married Men in Nepal: Evidence from Nepal Demographic and Health Survey 2016. BioMed Research International. 2018 Dec 23;2018:e5970705