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Knowledge and Utilization of Family Planning among Reproductive Age Women in a Community of Banke

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Abstract

Family planning plays important role in the growth and development reproductive health of reproductive age women. Maternal mortality is associated with the unmet need of family planning. Proper utilization of family planning is the best interventions to reduced maternal and neonatal morbidity and mortality. This study aims to assess the level of knowledge and utilization of family planning among Reproductive age women in a community of Banke. A descriptive cross -sectional study was conducted at Nepalgunj-19, Banke among 67 reproductive age women by using Non-probability, Purposive sampling technique and semi-structured questionnaire was used to collect data. The collected data was entered in SPSS version 16 and analysed by using descriptive statistics (such as frequency, percent, median, interquartile range, mean and standard deviation). This study revealed that, more than half (59.7%) of respondents had good level of knowledge, where less than half (40.3%) of respondents had poor level of knowledge regarding Family Planning and more than half (58.2%) of respondents had currently used different type of short-term or long-term family planning, among them more than one quarterly (30.7%) of respondents had used Depo-Provera as short-term family planning method and only (12.8%) had used implant as a long-term family planning method. The study finding reveals that more than half of respondents had good knowledge on family planning. Most of the respondents knew about only one method of family planning. Majority of the respondents had incomplete information regarding short-term and long-term family planning method. So that there is need to increase information regarding family planning through the preferred community channels.

Keywords: Family planning, knowledge, reproductive age women, utilization

Introduction

Family planning is defined as A way of thinking and living that is adopted voluntarily, upon the basis of knowledge, attitudes and responsible decisions by individuals and couples, in order to promote the health and welfare of the family group and thus contribute effectively to the social development of a country (World Health Organization, 1991).

Family planning is an acceptable, logical, and an important component of global health and development. It can have a wide range of positive effects to women, their families, the societies and nation as a whole. on women empowerment including reproductive and sexual rights as the fundamental aspects for development A lack of knowledge of contraceptive methods or a source of supply, cost and

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poor accessibility are the barriers that exist in developing countries. Mass media also plays an important role in promotion and acceptability of contraception (Deo et al., 2013). Government of Nepal target for Sustainable Development Goal 3.7.1, is that 74% of all women age 15-49 have a met need for family planning with modern method by 2022 and 80% by 2030 (National Planning Commission, 2022). Fifty-seven percentages (57%) of married women currently using contraceptive Method and Unmet need of family planning is still high ie.21% in Nepal (Nepal Demographic Health Survey, 2022).

According to the Turkey Demographic and Health Survey data of 2018, 97% of women of reproductive age know at least one modern contraceptive method.
Study shows that only 19.5% participants had good knowledge, 76.4% had average knowledge and 4% had poor knowledge of family planning. (Ayub et al., 2015) Study showed that most women were Christian 52%, illiterate 26.5%, housewives 43.5%, and from low socio-economic backgrounds 31.5%. A majority 87% knew about contraceptive methods, Condoms being the most common method 38.2%, followed by oral contraceptive pills 27.6% and intrauterine devices 15.8% (Pegu et al., 2014). Study showed that 32% of the married women belonged to 20-24 years of age group. Among them 64 68% were using modern contraception methods. Injectables hormonal contraceptives were most commonly practiced by 54% women. Among not using any contraceptives, 60% of them said their husband being abroad. (Gupta et al., 2011) Study shows that majority of women 94.5% had heard about family planning, most of the women 73.2% knew about Depo, total 79.3% of women were found to have practiced temporary family planning (Dhakal et al., 2015)

According to an analysis of Demographic and Health Surveys data from 27 countries, 95% of women who are 0–12 month's postpartum want to avoid a pregnancy in the next 24 months; but 70% of them are not using contraception (Ross & Winfrey 2001). FP can prevent more than 30% of maternal deaths and 10% of child mortality if couples space their pregnancies more than 2 years following childbirth (Cleland et al., 2006).

Methods

A Descriptive cross-sectional research design was used to assess knowledge and Utilization of family planning among Reproductive age women in a community of Banke. This study was carried out in Nepalgunj sub-metropolitan-19, Banke district that lies in Province 5. Nepalgunj Sub-Metropolitan City, located in the Banke District of Nepal's Lumbini Province, has a diverse demographic profile. As of the National Population and Housing Census (2021), the population stands at 164,444 with a population density of 101.30 individuals per square kilometre. The city comprises 1,913 households, with an average household size of 4.3 members. Approximately 34,565 individuals, or 21% of the population, are aged between 15 and 49, encompassing the reproductive age group for women. There is a total of 2,487 females in the 15-49 years age group in Nepalgunj Sub-Metropolitan City, Ward No. 19 (Census, 2021)

The study population was Married women of Reproductive age group of Nepalgunj sub-metropolitan-19, Banke. Respondents were who were willing to participate voluntarily in the study and available at the time of data collection. Non-probability, purposive sampling technique was used to select sample for this study. Prevalence of modern family planning utilization among married women of reproductive age group in Nepal is 43% (NDHS, 2022).

For sample size estimation, using Cochrane formula for infinite population:

Sample size (no) = z^2pq/e^2
Were,

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z= tabulated value of z at 90% level of significance is 1.64
e= allowable error i. e * 10% = 0.1
p=43%=0.43
q= 1 - p = 1 – 0.43 = 0.57
e= allowable error i. e * 10% = 0.1
Now,
No = Z2 pq / e2
= (1.64)2 x 0.43 x 0.57 / (0.1)2
=2.6896 x 0.43 x 0.53/0.01
=0.6129/0.01
=61.29

Assuming 10% as non-respondent i.e., 10% of 61.29Thus the desired sample size=61.29+6.1=67

Interview schedule was developed by researcher herself on the basis of objectives of the study with the help of extensive literature review and seeking the opinion from the research advisors, subject expert advisor. The research instrument consists of three parts.
Part-I: consists of semi-structured questionnaire related to Socio demographic information of the respondents.
Part- II: consists of structured questionnaire related to knowledge of family planning.
Part-III: consists of semi-structured questionnaire related to utilization of family planning.

Prior to data collection, formal administrative approval was obtained from administration of Nepalgunj Nursing Campus, Research Management Cell (RMC). Written permission letter was obtained from administrative department of Nepalgunj sub-metropolitan -19, Banke. Informed consent was taken from each respondent prior to data collection. The respondents were not forced to participate in the study. Respondent's dignity was maintained by right to reject or discontinue from the research study at any point during data collection. Precaution was taken throughout the study in every step to safeguard right and welfare of all respondents. The collected data was kept confidential and used only for research purpose.
The approval letter was obtained from the administrative body of Nepalgunj Nursing Campus Written permission letter was obtained from Nepalgunj sub-metropolitan-19, Banke. For data collection written permission was taken from the administrative authority of respective Ward-19 office through a permission letter. Following that, the researcher introduced herself and objective of the study was adequately explained. The data was collected by the researcher after taking formal permission from respondent. Purpose of study was explained to respondents before collection of data.

The data was collected using the interview schedule, and information was gathered in Nepali language by researcher herself. Respondents were free to withdraw from study at any time when they feel uneasy. Confidentiality was maintained by keeping the filed questionnaire safely, not disclosing the information with others and collected information will be used for research purpose only.
After collecting data, it was checked, reviewed and organized for its accuracy. Then entered into Statistical Package for Social Sciences (SPSS) version 16. Data was analysed by using descriptive statistics such as frequencies, percentage, mean, median, interquartile range and standard deviation.

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Findings

Table 1
Respondents' Sociodemographic Characteristics

n=67

Socio-demographic characteristics	Number	Percent
Age (in completed years)		
<29	32	47.8
≥29	35	52.2
Median (IQR) 29 (9) Min 20 Max 45		
Marital Status		
Married	64	95.5
Widow	3	4.5
Religion		
Hindu	54	80.6
Islam	13	19.4
Respondents' Educational Status		
No education	27	40.3
Basic education	27	40.3
Secondary education	12	17.9
More than secondary	1	1.5
Respondents' Husband Educational Status		
No education	12	17.9
Basic education	25	37.3
Secondary education	26	38.8
More than secondary	4	6.0
Family Planning Device are Easily Available as per Need or Choice	64	95.5
Reaching Time to Nearest Health Facility (by walking)	50	75.0
<30 minutes	17	25.0
≥30 minutes.		
Source of Information*		
Health care provider	58	86.6
FCHV	33	49.2
Relatives	9	13.4
Radio	4	6.0

*Multiple response**

Table 1 shows, more than half (52.2%) of the respondents were from the ≥29 years age group. Almost all (95.5%) of respondents were married. Most (80.6%) of respondents belongs to Hinduism. Below half (40.3%) of respondents had basic level education and more than one-third (38.8%) of respondents' husband had studied secondary level education. Almost all (95.5%) of respondents reported that family planning devices are easily available as per need or choice. Most (75%) of respondents reaching time to health care service facility had <30 minutes. Most (86.6%) of the respondents were received information about Family Planning from healthcare provider.

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Table 2
Respondent's Reproductive Information (n=67)

Reproductive information	Number	Percent
Age at Marriage (in completed years)		
<20	51	76.1
≥20	16	23.9
No of Female Child		
1-2	34	50.8
3-4	14	20.9
No of Male Child		
1-2	45	67.0
3-4	3	4.5
5-6	1	1.5
Plan for Next Baby		
No plan for next baby	45	67.0
Within 2 years	17	25.5
After 2 years	5	7.5
Family Planning used in Past	39	58.2

Table 2 shows, most (76.1%) of the respondents had married at <20. Among them more than half (50.8%) had 1-2 female child. Majority (67.0%) of the respondents had 1-2 male child. 1-2 male child. Majority (67.0%) of respondents had no plan for next baby. More than half (58.2%) had used family planning in past.

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Table 3
Respondents' Knowledge regarding Short-term Family Planning (n=67)

Variables	Number	Percent
Family Planning mean to control birth, bring wanted birth and maintain birth spacing	65	97.0
Goal of family planning programs is to improve maternal and child health	65	97.0
Suitable time for taking Depo-Provera is within 5 days of menstruation	52	77.5
Working duration of Depo-Provera is 3 months	63	94.0
Advantage of Depo-Provera*		
Highly effective	54	84.4
Reduce pain during period	46	71.9
Avoid trouble to eat every day	48	75
No interference in intercourse	51	79.7
Side Effect of Depo-Provera*		
Irregular menstruation	52	83.9
Prolong bleeding	47	75.8
Delay returns of fertility after discontinuation	45	72.6
Weight gain	44	72.0
Breast tenderness	48	77.4
One Condom is only effective for one-time use	41	61.2
Advantage of Condom*		
Immediate effective after use	23	63.9
Easily available	31	86.1
Prevent from STI	20	56.5
Don't interfere in fertility	20	56.5
Disadvantage of Condom*		
High failure rate	19	34.5
Allergy	22	40.0
Disposal problem	32	58.2
Require partner cooperation for use	51	92.7
Suitable timing for OCPs use is within 5 days of menstruation	41	61.2
Daily dose of oral pills is 1 tablet per day	48	71.6
Advantage of Oral Contraceptive Pills*		
Don't interfere in sexual intercourse	35	81.4
Highly effective	26	60.5
Keep regular menstrual pain	37	86.0
Prevent anaemia	30	69.8
Disadvantage of Oral Contraceptive Pills*		
Trouble to eat every day	42	91.3
Not suitable for every age group woman	33	71.7
Change in body weight	42	91.3
Don't prevent from STD	25	54.3

*Multiple response**

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Table 3 shows that almost all (97%) of respondents correctly answered the meaning of family planning. Similarly (97%) of respondents answered that improve maternal and child health as goal of family planning programmed. Most (77.5%) of the respondents answered within 5 days of menstruation as suitable time for taking depo. Almost all (94%) correctly answered about working duration of depo-Provera. Most (84.4%) of respondents answered highly effective as advantage of depo. Most (83.9%) of respondents answered irregular menstruation as side effect of Depo-Provera.Majority (61.2%) of respondents know that one condom is only effective for one-time use. Most (86.1%) of the respondents answered easily available of condom as advantage for condom user and almost all (92.7%) answered required partner cooperation for condom use as disadvantages of condom. Majority (61.2%) of the respondents know about within 5 days of menstruation as a suitable time for taking pills tablets. Majority (71.6%) answered daily dose of pills was one tab per day. Most (80%) of respondents answered keep regular menstruation as advantage of pills. Similarly, almost all (91.3%) answered trouble to eat every day and change in body weight as disadvantage of pills.

Table 4

Respondents' Knowledge regarding Long-term Family Planning (n=67)

Variables	Number	Percent
Suitable time to insert implant is within 5 days of menstruation	31	46.5
Working duration of implant is 5 years	35	52.2
Advantage of Implant*		
Highly effective	32	94.1
Appropriate for lactating mother	25	73.5
Prevent anemia	19	55.9
Don't interfere in sexual intercourse	26	76.5
Suitable time to insert IUCD is with in 5 days of menstruation	42	62.3
Working duration of Intrauterine contraceptive device is 12 yrs	31	46.3
Advantage of IUCD*		
Highly effective	28	59.6
Appropriate for lactating mother	22	46.8
Long term use	39	83.0
Immediate effective after use	23	48.9
Don't delay in fertility return after remove	20	42.6
Side effect of IUCD*		
Don't prevent from STD	29	69.0
Heavy vaginal bleeding	38	90.5
Pain during insertion	33	78.6
Difficulty in intercourse	22	52.4
Female sterilization is a permanent FP method	67	100
Common misconception about Female sterilization is it's a reversible procedure	53	79.1
Purpose of female sterilization is to prevent pregnancy permanently	63	94.0

*Multiple response **

Table 4 shows that nearly half (46.5%) of respondents answered within 5 days of menstruation as a suitable time to insert implant. More than half (52.2%) of respondents correctly answered working

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duration of implant 5year. Almost all (94.1%) of respondents answered highly effective as advantage of implant. Majority (62.7%) of respondents answered within 5 days of menstruation as a suitable time to insert Intrauterine Contraceptive Device. Nearly half (46.3%) of respondents correctly answered working duration of insert Intrauterine Contraceptive Device 12 years. Most (83%) of respondents answered long term use as advantage of insert Intrauterine Contraceptive Device. Similarly, almost all (90.5%) of respondent answered heavy vaginal bleeding as disadvantage of insert Intrauterine Contraceptive Device. All (100%) of respondents answered female sterilization is permanent family planning method. Most (79.1%) of respondent answered female sterilization is reversable as common misconception and almost all (94%) of respondents answered prevent pregnancy permanently as primary purpose of female sterilization.

Table 5

Respondents' Level of Knowledge Regarding Family Planning (n-=67)

Knowledge Level	Number	Percent
Good knowledge (>50 %)	40	59.7
Poor knowledge (<50 %)	27	40.3
Mean ± S.D. 29.3±10.2		
Total knowledge score =52	(Egenti et al., 2018)	

Table 5 shows knowledge level on Family Planning among respondents. More than half (59.7%) of respondents had good level of knowledge, where less than half (40.3%) of respondents had poor level of knowledge regarding Family Planning.

Table 6

Respondents' Status of Family Planning Utilization n=67

Currently use family planning	Number	Percent
Yes	39	58.2
No	28	41.8
If yes, (n= 39)		
Depo	12	30.7
Condom	9	20.0
Pills	6	15.3
Implant	5	12.8
IUCD	3	7.8
Female sterilization	4	10.2

Table 6 shows that more than half (58.2%) of respondents had currently used different type of short-term or long-term family planning, among them more than one quarterly (30.7%) of respondents had used Depo-Provera as short-term family planning method and only (12.8%) had used implant as a long-term family planning method.

Discussion

A descriptive cross-sectional study was conducted with an objective to assess the level of knowledge and status of utilization regarding family planning among 67 married women of reproductive age group in a community of Banke.

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This study finding revealed that more than half (52.2%) of the respondents were from the ≥29 years age group. Almost all (95.5%) of respondents were married. Most (80.6%) of respondents belongs to Hinduism. Below half (40.3%) of respondents had basic level education and more than one-third (38.8%) of respondents' husband had studied secondary level educationn. Most (75%) of respondents reaching time to health care service facility had <30 minutes. Most (86.6%) of the respondents were received information about Family Planning from healthcare provider. Nearly half (43.3%) of respondents had marriage at ≤16 years of age. Among them more than half (50.8%) had 1-2 female child. Majority (67.0%) of the respondents had 1-2 male children. Majority (67.0%) of respondents had no any further plan for next child or pregnancy. More than half (58.2%) had used family planning in past.

The current study shows that more than half (59.7%) of respondents had good level of knowledge, where less than half (40.3%) of respondents had poor level of knowledge regarding Family Planning.Similarly previous study conducted in comprehensive health center in Ogun state Nigeria. which showed that more than half (55.5%) of respondents had demonstrate good knowledge of family planning (J.O. et al., 2021). which is consistent the present study.

This study shows that more than half (58.2%) of respondents had currently used different type of short-term or long-term family planning, among them more than one quarterly (30.7%) of respondents had used Depo-Provera as short-term family planning method and only (12.8%) had used implant as a long-term family planning method. Similarly, a study conducted at the Dhabi Village Development Community of Eastern Nepal which showed that (63.3%) of respondents were using contraceptive method (Uprety et al., 2016). which is consistent to the present study. This study shows that almost all (97%) of respondents knew about meaning of family planning. Similarly, a study conducted in Dhabi Village Development Community of Eastern Nepal where (98%) of respondents knew about meaning of family planning. (Uprety et al.,2016). The finding is consistent to the present study. The present study revealed that Depo Provera was the most common choice of respondent which is similar with the findings of study conducted in Nepal which showed that Depo Provera was the most commonly used family planning methods (Sapkota et al., 2016). More than one quarterly (30.7%) of respondents currently using Depo as a short-term family planning. Similarly, a study conducted in Dhabi Village Development Community of Eastern Nepal where (63.7%) of respondents use Depo as a choice of modern contraceptive method (Uprety et al., 2016). Which is inconsistent to the present study might be due to variation in study setting, sampling technique and simple size.

In this study majority (71.6%) of respondents had answered that pills must be taken one tab per day, most (80%) answered pills keep regular menstruation. Majority (62.7%) correctly answered the best time to Intrauterine Contraceptive Device insertion (5th day of menstruation), nearly half 46.3 percent answered that Intrauterine Contraceptive Device was long term method Twhich works for 12 years. More than half 55.6 percent answered condom protect from STIs and HIV. This is similar to the previous study conducted in Dharan which showed that among the respondent who had heard about pills, 91 percent answered pills taken daily one tab, 59 percent replied Intrauterine Contraceptive Device works for 12 years, one third (32.9%) answered the best time for Intrauterine Contraceptive Device insertion as within 5 days of menstruation (Thapa et al., 2018). This finding is inconsistent to present study findings might be due to variation in study setting, sampling technique and simple size.

The Present study shows that all (100%) of respondent female sterilization is permanent family planning method. Majority (79.1%) of respondent answered female sterilization is reversable as common misconception and almost (94%) of respondents answered prevent pregnancy permanently as primary purpose of female sterilization.

Conclusion

The study finding reveals that more than half of respondents had good knowledge on family planning. Most of the respondents knew about only one method of family planning. Majority of the respondents had incomplete information regarding short-term and long-term family planning method. So that there is need to increase information regarding family planning through the preffered community channels like community health workers, Female Community Health Volunteer, mother groups, political leaders, school teachers, as well as radio, television source among Reproductive age women to fulfil the gap.

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