

Knowledge Regarding Reproductive Health Among Young Married Women Residing in a Municipality of Jhapa District, Nepal

Rachita Neupane¹, *Apsara Pandey², Shila Adhikari³, Bhuwan Kumari Dangol²

¹Scheer Memorial Adventist Hospital Medical Institute, College of Nursing, Banepa, Kavre, Nepal

²Maharajgunj Nursing Campus, Institute of Medicine, Tribhuvan University, Nepal

³Bir Hospital Nursing Campus, National Academy of Health Sciences, Ministry of Health and Population, Nepal

ABSTRACT

Introduction: Every year 16 million girls aged 15 to 19 years and 2.5 million girls under age 16 years give birth followed by some 3.9 million girls aged 15 to 19 years who undergo unsafe abortions in developing regions. This study aimed to find out the knowledge of reproductive health among young married women of Birtamode Municipality.

Methods: A descriptive cross-sectional study was carried out among 398 young married women using a convenience sampling technique. Data were collected using the structured schedule. Data were analyzed using descriptive statistics and the Chi-square test was applied to measure the association between knowledge of reproductive health and selected variables.

Results: Most of the respondents (82.9%) were between 20-24 years of age with a mean (SD) age 21.74(±2.13) years; 44.2 % had secondary education; 46.2 % were farmers; and 64.2% lived in a joint family. More than half (54.5%) had adequate knowledge regarding reproductive health. Respondents' level of knowledge was significantly associated with their age, educational status, economic status, and ethnicity.

Conclusions: It is concluded that more than half of the young married women had adequate knowledge regarding reproductive health. However, 45.5% had inadequate knowledge regarding reproductive health. Therefore, there is still a need to enhance knowledge by raising awareness programs, counselling sessions, and educational initiatives regarding adolescent and youth-friendly health services at the community level.

Keywords: Young women, adolescent, reproductive health

***Correspondance:** Apsara Pandey, Associate Professor, Department of Paediatric Nursing, Maharajgunj Nursing Campus, Institute of Medicine, Tribhuvan University, Kathmandu, Nepal, Email: apsara.pandey@mnc.tu.edu.np, Mobile: +977 9851186586

INTRODUCTION

The sexual and reproductive health of women of any community reflects the health status of that community. Sexual behavior in the general population has been inadequately researched in Nepal. Owing to social and cultural taboos and inhibitions, sexual health research in Nepal remains restricted to a small number of studies. Further, much of the limited research on young people remains

unpublished.¹ The continuing practice of early marriage, early sexual exposure, and teenage pregnancies in Nepal are associated with unplanned pregnancies and adverse reproductive outcomes like preterm births and low birth weight babies. Though the sexual and reproductive needs of young people in Nepal continue to receive attention from the government and other agencies in terms of policies and programs yet, prevention of early

marriage and childbearing in youth continues to be a challenge. In Nepal, knowledge about family planning among adolescents and youth is almost universal (99.9%). However, only 14% of married adolescent girls aged 15-19 years and 24 % of married women aged 20-24 are currently using a modern contraceptive method.²

In Nepal, despite attention from the government and other agencies in terms of policies and programs, early marriage and childbearing continue to be a challenge. Almost one-quarter of women who were aged 25-49 years in 2011 had given birth by age 18.³ The continuing practice of early marriage, early sexual exposure, and teenage pregnancies in Nepal is associated with unplanned pregnancies and adverse reproductive outcomes like preterm births and low birth weight babies.⁴ The young population has been threatened by sexual and reproductive health problems which are not only due to scarcity of health facilities but also the lack of proper knowledge about sexual reproductive health and a huge barrier of shyness to communicate about sexual and reproductive health problems.⁵ Thus, this study aimed to assess the knowledge regarding the sexual and reproductive health of young married women for this study.

METHODS

A descriptive cross-sectional study based on a quantitative approach was carried out in wards no 2 and 10 of Birtamode Municipality of Jhapa, which comprises 10 village bodies of Birtamode Municipality. It is located on the north of the east-west highway of Jhapa district. Altogether 398 young married women between the ages of 15-24 years and living with their husbands were selected using a non-probability, convenience sampling technique. The sample size of the study was calculated by using Cochran's formula,⁶ with 5.0% allowable error; 44.0% modern contraceptive prevalence rate;⁷ and 5.0% non-response rate.

A structured interview schedule developed by the researcher herself was used to collect the data. The interview schedule consisted of three parts. Part one was related to socio-demographic information; part two was related to knowledge of reproductive health, and part three was related to the practice of reproductive health. The content validity of the interview schedule was established by literature review, consultation with an obstetrician and public health experts; nursing teachers of women's health and development, and research project supervisors. The instrument was developed in the English version and was translated into Nepali language and back translation with the help of a bilingual expert. Pretesting was done among 40 young married women in a similar setting. Based on pretesting, the instrument was revised and finalized. Ethical approval was obtained from the Institutional Review Committee (IRC) of the Institute of Medicine, Tribhuvan University. Before data collection, written informed consent was obtained from each respondent, and assent was obtained for respondents below 18 years of age. Data were collected every day four weeks from two to 30 September 2018 by the researchers themselves. Confidentiality of the information was maintained. There were 17 questions to identify knowledge of reproductive health. Among them nine were multiple responses; five were yes or no questions; and three were multiple choice questions. One point was given for each one point and zero was given for the wrong response. The total score was 34. The data were checked for completeness and accuracy after each day of data collection. The data were edited, coded, and entered in Microsoft Excel and exported in Statistical Package for Social Sciences (SPSS) version 16.0 for analysis. Descriptive statistics such as frequency, percentage, mean, and median were used. The chi-square test was applied to measure the association between the knowledge and practice regarding the reproductive health of young married women and selected variables. The level of knowledge

was categorized as adequate and inadequate based on median score i.e.¹⁸. Median score and above median score were considered as adequate knowledge and below median score is considered inadequate knowledge.

RESULTS

Socio-demographic Characteristics

Regarding the socio-demographic characteristics of the respondents, most of the respondents (82.9%) were between ages 20-24 years of age with a mean (SD) age of 21.74(±2.13); 44.2 % had secondary education; 54.3 % belonged to a family whose household income was sufficient for 6-12 months; 45% belonged to disadvantaged Janajati; 46% were engaged in agriculture; and 64.2% lived in joint families (Table 1).

Table 1 Socio-demographic Characteristics of the Respondents n=398

Characteristics	Number	Percent
Completed (Age in years)		
≥20	330	82.9
<20	68	17.1
Mean (SD)= 21.74(±2.13)		
Education level		
Can't read and write	73	18.3
Primary	103	25.6
Higher secondary and above	176	44.2
Secondary	46	11.8
Economic status		
Household income sufficient for less than 6 months	25	6.3
Household income sufficient for 6-12 months	216	54.3

Characteristics	Number	Percent
Household income sufficient for more than 12 months and surplus	157	39.4
Ethnicity		
Disadvantaged Janajati	179	45.0
Upper caste group	141	35.4
Dalit	45	11.3
Relatively advantaged Janajati	15	3.8
Disadvantaged non-Dalit Terai caste group	9	2.3
Religious minorities	9	2.3
Occupation		
Agriculture	184	46.2
Business	143	35.9
Homemaker	46	11.6
Service	39	9.8
Driver	17	4.3
Type of family		
Nuclear family	132	33.2
Joint family	258	64.8
Extended family	8	2.0

Knowledge of Reproductive Health

Regarding the knowledge of sexual health among the respondents, 79.1% knew the legal age of marriage. Similarly, respondents knew the use of family planning devices for safe sex (71.2 %); and safe sex as a sexual activity to protect themselves from being pregnant (59.3%). Likewise, respondents had heard about STIs (70.4%). Among them, respondents knew foul-smelling from the vagina (92.9%); itching in genitalia as a symptom of STIs (88.6%), and the use of condoms for prevention of STIs (94.3%) (Table 2).

Table 2 Knowledge of Respondents regarding Sexual Health n=398

Variables	Number	Percent
Legal age of marriage		
20 years	315	79.1
Others	83	20.9
Safer sex practices*		
Sexual activity with precaution to protect self from being pregnant	236	59.3
Sexual activity with precaution to protect self from STIs	166	41.7
Sexual activity using family planning devices (condoms)	283	71.2
Sexual relations with only one partner	156	39.2
Don't know	50	12.6
Ever heard about sexually transmitted infections (STIs)		
Yes	280	70.4
No	118	29.6
Symptoms of STIs (n=280) *		
A foul smell from the vagina	260	92.9
Itching in genitalia	248	88.6
Abnormal discharge from the vagina	219	78.2
Genital sore or ulcer	204	72.9
Prevention of STIs (n=280)*		
Use of Condom	264	94.3
Single Partner	191	68.2
Early treatment	211	75.4
Abstinence from sex	18	6.4

*Multiple Responses

Hundred percent of respondents had heard about contraceptive devices. Among them, almost all respondents had knowledge of contraceptive pills and few had heard about

traditional methods of family planning. Only 33.7 % (134) had knowledge of emergency contraception and 96.3% had identified I pills as the method of emergency contraception. Similarly, 79.4 % (286) had heard about safe abortion services (Table 3).

Table 3 Knowledge of Family Planning and Abortion n=398

Variables	Number	Percent
Temporary methods of family planning devices heard*		
Pills	392	99.0
Condom	391	98.7
Depo-Provera	382	96.5
Intrauterine device	314	79.3
Norplant	275	69.4
Traditional method	46	11.6
Methods of emergency contraception (n=134)*		
I Pills	129	96.3
Intrauterine contraceptive device	62	46.3
Don't Know	5	3.7
The exact time for taking I Pill for emergency contraception (n=129)		
As soon as possible after unprotected sex	34	26.4
Within 120 hours (4 days)	73	56.6
Don't know	22	17.1
The exact time for taking copper T (n=62)		
Within 7 days of unprotected sex	40	64.5
As soon as possible after unprotected sex	4	6.5
Don't know	18	29.0

Variables	Number	Percent
Meaning of abortion (n=360)		
Termination of pregnancy before 22 weeks of gestation	85	23.6
Termination of pregnancy before 32 weeks of gestation	33	9.1
Termination of pregnancy in any period of gestation	190	52.8
Don't Know	54	15.0
Safe abortion services in Nepal(n=286) *		
Abortion is done by authorized health personnel in any period of gestation	155	54.2
Abortion is done in private clinics by doctors	53	18.5
Abortion is done in any hospital by nursing staff	48	16.8
Abortion done by health personnel	30	10.5
Complications of unsafe abortion (286) *		
Bleeding	241	84.2
Fever	156	54.5
Abdominal pain	201	70.3
Sterility	103	36.0

*Multiple Responses

Overall knowledge of reproductive health is categorized as adequate and inadequate based on the median value of the knowledge score. The median score was 17.5. Among the respondents, 54.5 % had adequate (> 17.5 median score) knowledge, and less than half (45.5 %) had inadequate (< 17.5 median score) knowledge regarding reproductive health (Figure 1).

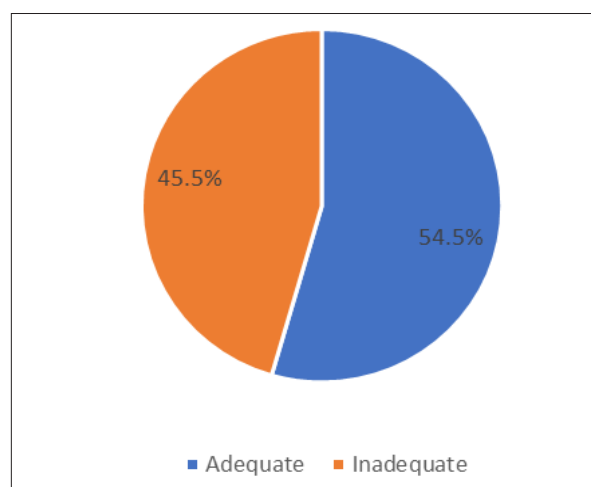


Figure 1: Level of Knowledge of Reproductive Health among the Respondents

The level of knowledge was significantly associated with age, educational status, economic status, and ethnicity ($p < 0.001$) of the respondents (Table 4).

Table 4 Association between Level of Knowledge of Reproductive Health and Selected Socio-demographic Characteristics (n=398)

Characteristics	Level of knowledge		χ^2	p-value
	Adequate No. (%)	Inadequate No. (%)		
Age in years				
< 20	16 (23.5)	52 (76.5)	31.772	0.000
≥ 20	201 (60.9)	129 (39.1)		
Educational status				
Secondary level and above	148 (66.7)	74 (33.3)	29.859	0.000

Characteristics	Level of knowledge		X ²	p-value
	Adequate No. (%)	Inadequate No. (%)		
Below Secondary	69(39.2)	107 (60.8)		
Economic status				
Household income sufficient for 12 months	116 (47.9)	126 (52.1)	10.809	0.001
Household income sufficient for more than 12 months	101 (64.7)	55 (35.3)		
Ethnicity				
Upper Caste	94 (66.7)	47 (33.3)	12.987	0.000
Others	123 (47.9)	134 (52.1)		

P-value significant at ≤ 0.05

The majority of respondents (71.9 %) sources of information were friends, radio/TV/internet whereas few of the respondents (26.6 %) had heard from family (Table 5).

Table 5: Sources of Information n=398

Sources of information*	Number	Percent
Friends	284	71.9
Radio/TV/Internet	284	71.9
Family	105	26.6
Schools	229	58.0
Health personnel	207	52.4

*Multiple responses

DISCUSSION

This study was conducted to find out the knowledge of reproductive health among young married women. In this study, 82.9% of respondents were between ages 20-24 years of age with a mean (SD) age of 21.74(±2.13); 44.2 % had secondary education; 54.3 % belonged to families whose household income was sufficient for 6-12 months; 45% belonged to disadvantaged Janajati; 46.2 % were engaged in agriculture; and 64.2% lived in joint families.

The current study found that the majority of respondents (79.1%) knew the legal age of marriage as 20 years which is consistent with the findings of the study carried out in

India where the majority (88.0%) had correct knowledge about the appropriate age for marriage.⁸

Likewise, this study revealed that the majority of the respondents (71.2 %) had knowledge of the use of family planning devices for safe sex and more than half (59.3%) knew safe sex as a sexual activity to protect self from being pregnant which are slightly lower than the findings from a cross-sectional household survey done in Kathmandu, Nepal where 89.4% understood safe sex as use of condom while having sex and 70.3 % knew as avoiding multiple sex partner which may be due to different sample size and setting.⁹

In this study, a majority (70.4%) of the respondents had heard about STIs. Among them, most of them (92.9%) knew about foul smells from the vagina and 88.6% knew about itching in genitalia as a symptom of STIs and most of the respondents (94.3%) knew about the use of condoms for the prevention of STIs, nearly two-thirds of the respondent (68.2%) knew single partner as preventive measures for STIs which is slightly lower than the finding from the study done in Kathmandu which showed 97.9% had heard about STI, 90.1% knew the use of condoms and 51.2% knew abstinence of sex as prevention for STIs which may be due to sampling size and different setting.⁹

Likewise, in this study, all the respondents (100.0%) had heard about contraceptive devices, and among them, almost all the respondents had heard about pills, male condoms & Depo-Provera (99.0%, 98.7% & 96.5%) respectively, 79.3% heard about the intrauterine contraceptive device (IUCD) & 33.7% had heard about emergency contraceptives which are consistent with a cross-sectional survey done in Kerala in terms of male condom (90.0%) and (99.0%) respectively but contrast findings in terms IUD, Depo-Provera, and emergency contraceptives i.e. 84.2%, 32%, and 55.2% respectively which may be due to different setting.¹⁰ It is in contrast to the study done in India where 87.1% had heard about pills, 63.1% about IUDs, 41.4% about condoms, and 23.1% about withdrawal method⁸ and another cross-sectional household survey done in Kathmandu where over three-quarters of women had knowledge of male condom and pills but less than half knew about implants and IUDs. Heard about male condoms (96.5%), pills (79.2%), implants (79.8%), IUCD (31.4%), and emergency contraceptives (26.7%).⁹

In this study, the majority (79.4%) of the respondents had heard about safe abortion. Likewise, more than 54.2% knew the meaning of safe abortion; 84.2% identified bleeding, and 36.0% identified sterility as a complication of unsafe abortion which is in contrast to the study done by Khanal et al., 2014 in Nepal, where 23.0% held the correct meaning of safe abortion and 21%-30% identified heavy bleeding and sterility as complications of unsafe abortion.¹¹ Similarly, the study done in the Bogra district reported that 38.8% of participants had good knowledge of sexual and reproductive health, and the remaining 54.9% had poor knowledge.¹² These differences might be due to differences in study settings, time, and population characteristics.

Likewise, this study revealed that the level of knowledge was significantly associated with age, educational status, economic status,

and ethnicity ($p < 0.001$). which is similar to the study done in Ethiopia, where age and economic status were significantly associated with reproductive health knowledge moreover reproductive health practice was associated with age.¹³ The findings are also supported by findings from the study in Yemen, where knowledge of reproductive health was significantly associated with educational status and age ($p < 0.001$).¹⁴ Since this study was carried out in only two wards of Birtamode, Jhapa with a convenience sampling technique. The study population was also a specific age group, so the result may not be generalizable to all the women of reproductive age in Nepal

CONCLUSIONS

Nearly half of the young married women had an inadequate level of knowledge regarding reproductive health. Age of women, educational status, economic status, and ethnicity were significantly associated with the level of knowledge regarding reproductive health. Therefore, there is a need to enhance knowledge by raising awareness programs, counselling sessions, and educational initiatives regarding adolescent and youth-friendly health services at the community level to empower young married women, improve their reproductive health outcomes and promote overall well-being. Health education sessions and awareness programs should be carried out among young married women.

ACKNOWLEDGMENT

We would like to express our sincere thanks and gratitude to all young married women who participated in this study.

Source of Financial Support : None.

CONFLICT OF INTEREST: None declared

REFERENCES

1. Regmi P, Simkhada P, Van Teijlingen ER. Sexual and reproductive health status among young peoples in Nepal: opportunities

- and barriers for sexual health education and services utilization. Kathmandu Univ Med J (KUMJ). 2008;6(2):248-56. PMID: 18769100
2. Ministry of Health and Population Nepal. Nepal demographic and health survey 2016: key indicators. Kathmandu, Nepal [Internet], 2017. Available from: <https://dhsprogram.com/pubs/pdf/PR88.pdf>
 3. Ministry of Health and Population Nepal. Nepal demography and health survey 2011. Kathmandu, Nepal [Internet], 2012. Available from: <https://dhsprogram.com/pubs/pdf/GF25/GF25.pdf>
 4. Maharjan RK, Karki KB, Shakya TM, Aryal B. Child marriage in Nepal [Internet], 2012. Available from: https://resourcecentre.savethechildren.net/sites/default/files/documents/child_marriage_research_report_final.pdf
 5. Rai AK, Chauhan BG, Kumari A. Sexual and reproductive health status in Indian youth : Addressing the needs and their involvement. *Int J Med and Health Resear.* 2015;1(4): 141-8. Available from: <https://www.researchgate.net/publication/286778169>
 6. Cochran WG. Sampling techniques. 3rd ed. New York: John Wiley and Sons;1977. Available from: https://archive.org/details/Chocran_1977_Sampling_Technique_201703
 7. Department of Health Services, Ministry of Health and Population. Annual Health Report 2073/74. Kathmandu, Nepal;2016.
 8. Gaferi MS, Al-Harbi MF, Yakout MS, Soliman TA. Knowledge, attitude, and practice related to reproductive health among female adolescents. *J Nur Edu Prac.* 2018; 8(8): 53-65. doi: 10.5430/jnep.v8n8p53
 9. Tamang L, Raynes-Greenow C, McGeechan K, Black KI. Knowledge, experience, and utilization of sexual and reproductive health services amongst Nepalese youth living in the Kathmandu Valley. *Sex Reprod Healthc.* 2017;11:25-30. PMID: 28159124. doi:10.1016/j.srhc.2016.09.002
 10. Thulaseedharan JV. Contraceptive use and preferences of young married women in Kerala, India. *Open Access J Contracept.* 2018;9:1-10. Published 2018 Jan 5. PMID: 29440936. PMCID: PMC5804019. doi:10.2147/OAJC.S152178
 11. Khanal P, Sanjel K, Chalise HN. Knowledge and Practice of Abortion among Women in Nepal. *AsiaPacific E- J Heal Soc Sci.* 2014;3(1):1- 6. [GoogleScholar]
 12. SM Monwar H, Yeasmin A, Md Ashrafuzzaman, Md Rashed M, Md Ruhul A, et al. Knowledge of Sexual and Reproductive Health among Young People in a Selected Community. *J Gynecol Women's Health.* 2016; 1(3): 555-65. DOI: 10.19080/JGWH.2016.01.555565
 13. Abajobir AA, Seme A. Reproductive health knowledge and services utilization among rural adolescents in east Gojjam zone, Ethiopia: a community-based cross-sectional study. *BMC Health Serv Res.* 2014;14:138. Published 2014 Mar 29. PMCID: PMC3986455. doi:10.1186/1472-6963-14-138
 14. Masood MS, Alsonini NA. Knowledge and attitude about reproductive health and family planning among young adults in Yemen. *Int J Populat Res.* 2017. Doi: 10.1155/2017/1895472.