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Sexual and Reproductive Health Service Utilization and Assosciated Factors Among Adolescents of Rural Nepal

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Abstract:

Introduction: Adolescence is the transitional phase of growth and development between childhood and adulthood where physical, psychological and behavioral changes are commonly noted. Adolescent are compelled to deal with a variety of challenges like harmful sexual orientation, early marriage, peer pressure, limited participation within family, community and national level and reports information on menstrual problems, information on adolescent physical change, information on intimate relationship, STI counseling and information on masturbation as major perceived needs for SRH services. The study aims to assess the utilization and factors associated with SRH services among adolescents.

Materials and methods: A quantitative cross-sectional research design was conducted among 240 adolescent's students of grade 11 and 12 of selected higher secondary schools of Jumla using a self-administered questionnaire. Simple random sampling technique was used to select the sample. Descriptive statistics (frequency, percentage, mean and standard deviation) and inferential statistics (Chi-square test, fisher exact test and logistic regression)was used for data analysis.

Results: Overall utilization of SRH services was 24.2%. and was found to be strongly associated with marital status (p- value <0.001), occupation of father (p-value 0.002), know SRH service nearby (p-value 0.005), Sexually active in the past 12 months (p- value <0.001), Had more than one sexual partner in the past 12 months (p-value 0.004), Had unplanned/unintended sex in the past 12 months (p- value <0.001).Utilization of SRH service was slightly higher among females (24.5%) compared to male (23.8%.). Most utilized services were for family planning devices and general health checkup.

Conclusions: This study concludes that lack of sufficient information hinders the utilization of SRH services.

Keywords: Adolescent; reproductive health; sexual health; utilization.

INTRODUCTION

A transitional phase of growth and development between childhood and adulthood is adolescence. According to World Health Organization (WHO), ''adolescence'' is the span of life between 10 and 19 years and is commonly associated with a period of physical, psychological, behavioral and social changes and maturity [1]. The physical changes include changes in voice, appearance, sexual activeness whereas psychological change includes individual thinking. Changes in sentiments, mood swings comprise behavioral changes [2]. According to WHO, sexual health is defined as “a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity.'' Sexual health necessitates a positive, healthy and approachable sexual relationship and sexuality, safe sexual experience, free of harm, discrimination and violence [1]. The International conference on population and development (ICPD) 1994 defined reproductive health as “a state of complete physical,

mental and social well-being and not merely the absence of disease or infirmity in all matters concerning the reproductive system and to its functions and processes [3]. Sexual activity, menstrual problems, psychosexual problems, mental and behavioral well-being issues are the rapidly growing concerns of adolescents [4]. People of this age group are constrained to deal with a variety of disputes like harmful sexual orientation and values, early marriage, dowry, peer pressure, limited participation within family, community and national level and reports that information on menstrual problems, information on adolescent physical change, information on intimate relationship, STI counseling and information on masturbation as major perceived needs on sexual and reproductive health (SRH) [2,5].

In Nepal, adolescents constitute 24% (6.4 million) of the population being third highest country in child marriage globally though 20 being the legal age of marriage. Seventeen percent of girls aged 15-19 years are already mothers or pregnant with their first child. Only 15% of currently married adolescents use a modern method of contraceptives that shows this population requires increased sexual and reproductive healthcare attention. The highest unmet need of contraceptives use is faced by adolescents population where approximately one in ten abortion service users are adolescents and shows the decreasing trend in utilization of SRH services especially in the area of safe abortion services, family planning and Antenatal Care Visit (ANC) visit [6].

SRH service utilization in Nepal was reported by 9.2% of adolescents where service utilization proportion was lower among females (4.3%) than males (12.5%). The major cause of non-utilization being lack of confidential services (71%) and 30% services being inadequate to meet their SRH needs [4]. Also, reported that lack of confidentiality, gender mismatch of service providers, and fear of embarrassment, as well as unawareness of the existence of services are some of the delays in the accessibility to SRH related information and services [7]. The International Conference on Population and Development (ICPD) 1994 emphasized the need for SRH-related information to adolescents.

Nepal was a signatory to ICPD and prepared and implemented a National Reproductive Health Strategy in 1998 where adolescent health and development was a central issue. Accordingly, it developed the National Adolescent Health and Development (NAHD) Strategy in 2000 which was revised in 2015. Additionally, the National Adolescent Sexual and Reproductive Health (ASRH) Program Implementation Guideline was issued in 2011 along with a National ASRH Communication Strategy (2011-2015) [8]. As a result, adolescent-friendly service (AFS) was introduced in health facilities whereby appropriate information on adolescent health and development is provided, as well as a safe and supportive environment providing accessibility, affordability, and acceptability for AFS. Hence, the study aims to assess the utilization and factors associated with SRH services among adolescents. The study also focuses to find out the association between utilization of SRH services and selected variables

MATERIALS AND METHODS

Study design and Setting

The descriptive, cross-sectional study was conducted at Karnali Higher Secondary School, to assess the utilization and factors associated with SRH services among adolescents in Jumla, Nepal. Karnali Higher Secondary School is located at Chandannath -3, Jumla with education service from grade nursery to grade 12. Study was conducted from 4th to 16th June 2023. During the time of data collection there were total of 300 enrolled students in higher secondary level.

Participants, Sample size and Sampling Technique

Participants were the adolescent students studying at Karnali Secondary School. Students aged 15-19 years were included in the study; excluding those who not willing to participate and those who do not have assent in case of students below 18 years. Cochran's formula was used to calculate the sample size of the study. n=z2pq/d2. z=1.96, p=17.2% for the utilization of SRH services in the study conducted by Pokhrel et al [2], q=82.8%, d=5%. n=218.84. Adding 10% non-response rate, a sample size of 240 was calculated for the study. Purposive, non-probability sampling technique was used to select the study participants from 300 students.

Data collection procedure and study variables

Self-administered questionnaire was used to collect data on utilization of SRH services and factors associated among adolescent after obtaining consent from the participants. The instruments consist of 28 items and consist three parts according to variables: Part I: Questions related to the socio demographic characteristics. Part II: Questions related to the utilization of SRH Services. Part III: Questions related to the associated factors towards SRH services. The study variables included utilization of SRH services, gender, age, mariatal status, ethnicity, religion, educational status of father, educational status of mother, occupation of father, occupation of mother and current living status.

Statistical analysis and data management

After completion of data collection, data was checked for its completeness and accuracy. The data was edited, coded, entered, classified into excel and using statistical package for social science (SPSS version 16) was used for data entry, data transformation and data analysis. The data was analyzed and calculated according to the nature of variables in terms of descriptive statistics (frequency, percentage, mean and standard deviation)

whereas inferential statistic (Chi-square test, fisher exact test and logistic regression) was used to examine the association between the utilization of SRH service with selected variables. The finding of the study is presented by the use of tables and figures.

Ethical Consideration

Data was collected after obtaining ethical clearance letter from IRC of Karnali Academy of Health Sciences (Ref- 2078/2079/49). Written consent was collected from the participants before collection of the data.

RESULTS

Table 1 shows that more than half (54.2%) were male with the mean age of 17.14± 1.04 years. Most (92.5%) of the respondent were unmarried with 74.2% belongs to Brahmin, Chhetri ethnicity. Most (87.1%) of the respondent followed Hindu religion. Regarding educational qualification less than half (47.9 %) of father can read and write only whereas 50.8% of the mothers were illiterate. Likewise, more than half (56.7%) of the father and (55.8%) of the mother were engaged in agriculture. More than half (52.9%) of the respondent lives with their parents.

Utilization of SRH services

The overall utilization of SRH services was 24.2%. Utilization of SRH services was slightly higher among females i.e.24.5% than in male i.e. 23.8% (Figure 1).

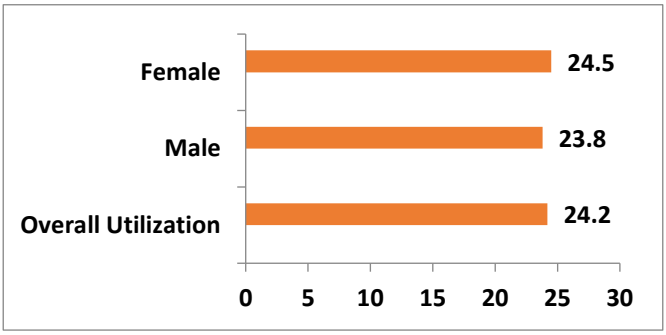

Figure 1| Proportion of utilization of SRH services

Table 1|Socio-demographic Characteristics of Respondents (n=240)

Characteristics	Frequency (f)	Percentage (%)
Gender		
Male	130	54.2
Female	110	45.8
Age in Years	Mean± SD: 17.14± 1.04	
Marital Status		
Married	18	7.5
Unmarried	222	92.5
Educational qualification of father		
Illiterate	54	22.5
Can read and write only	115	47.9
Formal Education	71	29.6
Educational qualification of mother		
Illiterate	122	50.8
Can read & write only	99	41.3
Formal Education	19	7.9
Occupation of father		
Agriculture	136	56.7
Formal Employment	29	12.1
Self-Employment	29	12.1
Daily Laborer	28	11.7
Foreign Employment	18	7.5
Occupation of mother		
Agriculture	134	55.8
Housewife	67	27.9
Daily laborer	21	8.8
Self-Employment	13	5.4
Formal Employment	4	1.7
Foreign Employment	1	0.4
Living Status		
With parents	127	52.9
Alone	57	23.8
With relatives	28	11.7
School dormitory	28	11.7

Table 2 shows proportion of utilization of SRH as per services. Half of the respondents utilized the family planning and general health check-up followed by 39.6% related to menstrual problems, 12% related to emergency contraceptive pills and VCT for HIV and 8.6% had utilized STI diagnosis and treatment; and safe abortion services respectively.

Table 2|Proportion of utilization as per service (n= 58)

Utilization as per type of service [a]	Frequency (f)	Percentage (%)
Family Planning	29	50
General Health check up	29	50
Menstrual Problems	23	39.6
Emergency contraceptive pills	7	12.0
VCT for HIV	7	12.0
STI Diagnosis and Treatment	5	8.6
Safe abortion service	5	8.6

[a] Multiple response

Table 3 shows barriers for services utilization. One third (33.8%) of the respondent responded that due to lack of

Table 3| Barrier preventing from utilizing SRH service (N=240)

Barriers for service utilization	Frequency (f)	Percentage (%)
Lack of sufficient information	81	33.8
No friendly service	60	25
Fear of society and family	56	23.3
No need	31	12.9
Due to cost	12	5.0

sufficient information, 25% due to no friendly service, 23.3% due to fear of society and family, 12.9% due to no need and 5% due to cost are the barriers for utilizing SRH services

Sources of SRH Services

Figure 2 shows the proportion of sources of SRH services. Majority (70%) of the sources of information for SRH service is from social media followed by 48.3% from friends, 46.7% from school education, 29.2% from radio, 24.6% from television, 18.8% from family and 17.5% from newspaper respectively.

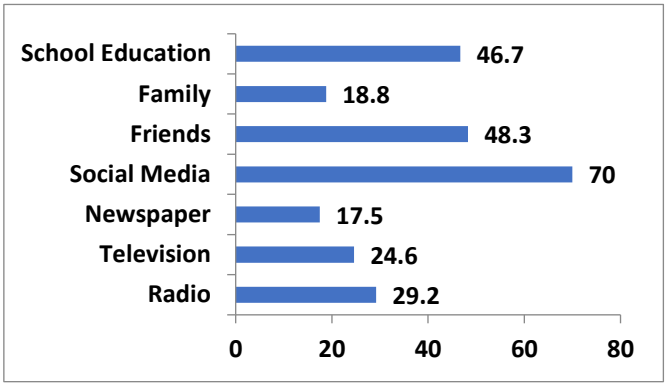

Figure 2| Proportion of sources of SRH services

Reason for utilization of SRH services

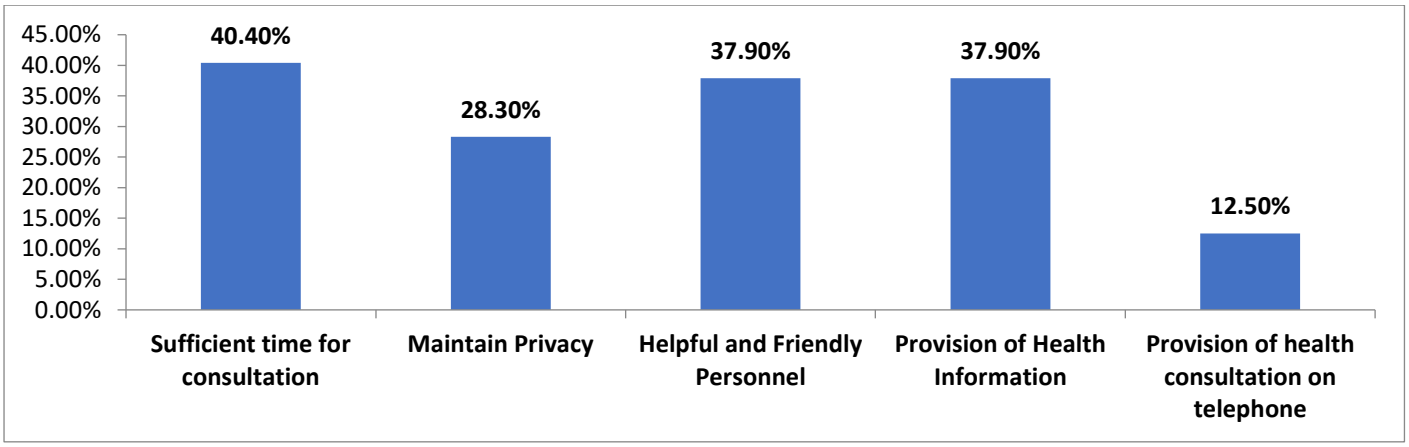

Figure 3| Reason for utilization of SRH services

Figure 3 shows the reason for utilization of SRH services where less than half (40.4%) of the respondent responded sufficient time for consultation. Likewise, 37.9% responded helpful and friendly personnel, provision of health information, 28.30% responded health facility-maintained privacy and 12.5% responded provision of health consultation on telephone are the reasons for utilization of SRH services respectively.

Table 4 |Bivariate analysis between utilization of SRH services and different variables

Variables	Utilization of SRH services		p value	OR (CI 95%)
	Yes, f (%)	No, f (%)		
Marital Status				
Married	12(5.0)	6(2.5)	<0.001	0.59(1.12-2.51)
Unmarried	46(19.2)	176(73.3)		
Occupation of Father				
Agriculture	43(17.9)	93(38.8)	0.002	3.26(1.31-8.13)
Other	15(6.3)	89(37.1)		
Know SRH service nearby				
Yes	48(20.0)	115(47.9)	0.005	0.53(0.22-1.27)
No	10(4.2)	67(27.9)		
Sexually active in the past 12 months				
Yes	35(14.6)	16(6.7)	<0.001	16.23(5.67-46.4)
No	23(9.6)	166(69.2)		
Had more than one sexual partner in the past 12 months				
Yes	9(3.8)	8(3.3)	0.004	0.46(0.09-2.22)
No	49(20.4)	174(72.5)		
Had unplanned/unintended sex in the past 12 months				
Yes	17(7.1)	4(1.7)	<0.001*	4.99(0.88-28.23)
No	41(17.1)	178(74.2)		
Pearson chi-square test, *Fisher exact test, p-value significant at <0.05				

Table 4 shows that utilization of SRH services were found to be strongly associated with marital status (p-value <0.001), occupation of father (p-value 0.002), know SRH service nearby (p-value 0.005), Sexually active in the past 12 months (p- value <0.001), Had more than one sexual partner in the past 12 months (p-value 0.004), Had unplanned/unintended sex in the past 12 months (p- value <0.001) respectively.

DISCUSSION

The study revealed that the overall utilization of SRH service was 24.2% which is in line to the study conducted in Ethioipa (21.2%), Ethiopia (33.8%), Bhaktapur (24.7%) respectively [9,10,7]. Similarly, the findings of this study contradict with the findings of the study done in Bhaktapur where only 9.2% had utilized SRH services and Kathmandu (17.2%) [2,4]. In the study, the proportion of utilization of SRH service is higher in female (24.5%) than in male (23.8%) which supports with the study conducted in Kathmandu where 19.8% were females and 15.3% were males and contradicts with the findings of the study conducted in Bhaktapur where 12.5% were male and 4.3% were females [2,4].

In the study, half (50%) of the respondent utilized family planning services and more than one third (39.6%) utilized service for menstrual problems which contradicts with the study done in Kathmandu where 44.3% utilized service for family planning and 50% for menstrual problems and Ethiopia where 80.10% utilized service for counseling and information, 25.80% for family planning [2,12].

The finding of the study concluded that one third (33.8%) of the respondent responded that lack of sufficient information and 12.9% responded that no need of SRH services as a barrier for utilization which contradicts with the study conducted in Kathmandu where only 6.9 responded lack of sufficient information and more than two third (69.7%) responded No need of SRH service ad a barrier for service utilization [2]. Likewise, study conducted in Bhaktapur concluded that majority (71%) responded lack of confidential service as a barrier to utilize SRH service whereas, lack of adolescent reproductive health services, Harmful Traditional Practices, lack of privacy and inconvenient service hour were reasons for not utilizing the service in Anchar, East Ethiopia [4,13].

Study shows that utilization of SRH services were found to be strongly associated with marital status, occupation of father, know SRH service nearby, sexually active in the past 12 months, had more than one sexual partner in the past 12 months, had unplanned/unintended sex in the past 12 months which is similar to the study in Kathmandu where being sexually active in 12 months is associated with SRH utilization but contradicts with other variables where respondent's interaction with parents, availability of SRH service within 30 minutes of walking distance and being sexually active in 12 months was associated with SRH utilization. The finding of the study coincides with the findings of the study conducted in Bhaktapur where marital status, nearby SRH services and being sexually active in past 12 most is strongly associated with SRH service utilization. Similarly, the findings of the study is similar with the study conducted in Eastern Ethiopia where being sexually active within 12 months is associated with SRH utilization [2,4,14].

LIMITATIONS

The study is limited to only the adolescents studying at Karnali Higher Secondary School of Jumla. Since, the study is cross sectional the cause effect relationship of significant associations could not be established.

CONCLUSION

The present study showed that the overall utilization of SRH services was low which is slightly higher among females than male. The study reveals that there is significant association between the utilization of SRH service with marital status, occupation of father, know SRH service nearby, sexually active in the past 12 months, multiple sexual partners in the past 12 months, and Unplanned/unintended sex in the past 12 months.

ADDITIONAL INFORMATION AND DECLARATIONS

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Author Contributions: Concept and design: RM, ML, ST and SB; data collection, analysis: RM and SB; Reviewed and writes up of final manuscript: RM; All authors contributed to analysis, interpretation of results, literature review, and revision of the manuscripts and have read and agreed with the contents of the final manuscript.

Data Availability: Data will be available upon request to corresponding authors after valid reason.

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