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Original Research Article

Utilization of adolescent friendly health services and its associated factors in Dang district of Nepal

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ABSTRACT

Background: Adolescence is a period of transition from childhood to adulthood. It is very crucial for adolescents to use the adolescent friendly health services in order to meet sexual and reproductive health needs. This study aimed to assess the factors associated with utilization of adolescent friendly health services in Dang district of Nepal.
Methods: A community based analytical cross-sectional study was conducted in Dang district of Nepal. Five adolescent friendly health facilities were randomly selected and proportionate sampling was done to fulfill the required sample size. The adolescents were selected conveniently from the areas. Verbal informed consent was taken from the participants and their parents in case of age below 16 years. Approval was taken from Institutional Review Committee of Chitwan Medical College. Bivariate analysis was performed to detect the factors associated with utilization of adolescent friendly health services.
Results: Nearly half (48.7%) of the adolescents had utilized adolescent friendly health services. Different socio-demographic factors like age of the participants, current educational status, mother's education, ethnicity was significantly associated with utilization of adolescent friendly health services. Other factors like awareness about were services, convenient opening days and hour of health facilities and shyness to utilize the services were significantly associated with the utilization of the services.
Conclusions: The utilization of the adolescent friendly services was found to be low among the adolescents of Dang district. In order to increase awareness among the adolescent regarding utilization of the services, there is need of coordination between schools, health institutions, communities etc. to conduct various awareness related program.

Keywords: Adolescence, Adolescent friendly health services, Sexual and reproductive health needs

INTRODUCTION

Adolescence is a period of transition from childhood to adulthood.[1] According to World Health Organization (WHO), "Adolescent refers to the age group 10 to 19 (early adolescent 10-14 and late adolescents 15-19)".[2] Globally, adolescents report for nearly one-fifth (19 percent) and in Nepal adolescents contain even larger proportion i.e.24 percent.[3,4] In Nepal adolescents and youth are facing traditional harmful practices such as child marriage, too early childbearing, sexual violence, unintended pregnancy, and HIV infection.[5]

The International Conference on Population and Development (ICPD) focused on adolescents to access health services because the existing services, are unable to provide health services like, reproductive health services, counseling, etc.[6] At the ICPD conference, Nepal also showed commitment to address right of young men and women to sexual and reproductive health.[7]

Adolescents require the health services in which adolescents can comfortably and easily access health services. Adolescent-friendly health services refer to the environment and condition in which adolescents can easily access and utilize health services in a friendly manner without descrimination.[8]

In the context of Nepal, Family Health Division (FHD) has developed the National Adolescent Health and Development (NAHD) Strategy in 2000, in line with National Reproductive Health Strategy, with an aim to address the health and development needs of adolescents. National Adolescent Sexual and Reproductive Health program was initiated in Nepal in 2011.[9] Under the National ASRH program, Government of Nepal targeted of scaling 1000 Adolescent Friendly Services in public facilities by 2015 in Nepal and till 2016, Adolescent-Friendly Health Services (AFHS) has been implemented in more than 1500 health facilities of Nepal.[10]

Different barriers like socio-cultural factors, unawareness of the presence of services, lack of confidentiality may hinder the utilization of adolescent friendly health services even in the case where services are provided.11,12 This study aims to assess the factors associated with utilization of adolescent friendly health services in Dang district of Nepal.

METHODS

Dang district is one of the districts in Province number 5 in Nepal which covers an area of 2955 km^2.[13] The total adolescent population in Dang district according to CBS 2011 was 65,590.[14] Dang district consists of 49 Health Institutions and out of which only 11 Health Institutions were upgraded to Adolescent Friendly Services.[15] An analytical cross-sectional study was carried out to assess the utilization of Adolescent Friendly Health Service and its associated factors in Dang district of Nepal. The study was conducted from November 2015 to March 2016.

The sample size was calculated online using formula based on single proportion for finite population.[16] As per literature, prevalence (p) was considered to be 0.34, at 95% confidence level and with 5% of precision, the calculated sample size was 344. After adding 10% non-response rate, the actual sample size was 377 which was taken as 380.[17]

By using simple random sampling techniques, five out of eleven AFHI were selected. Samples were taken from catchment area of these five AFHIs. Based on the total population of these areas, proportionate sampling was done to fulfill the required sample size (Table 1). Non-probability, convenient sampling was applied to get sampling unit/respondent. Data collection was done during non-schooling hour. Adolescents aged 10-19 years (both male and female) were included in the study. Adolescents who were unable to communicate were not included on study.

Table 1: List of adolescent friendly health facilities selected and total samples taken.

Name of municipality and VDCs (health facilities)	Total 10-19 year population	Sample based on population
Lamahi Municipality	8404	183
Seuja V.D.C	1122	24
Manpur V.D.C	3616	79
Hekuli V.D.C	2245	49
Pawannagar V.D.C	2041	45
Total	17428	380

Data collection procedures

Data was collected through interview schedule by using semi-structured questionnaire. The questionnaire was translated into local language and were administered to the respondents by the investigators themselves. Ethical approval was taken from Institutional Review Committee of Chitwan Medical College. Respondents' verbal informed consent was taken prior to data collection. Parental consent was taken for the respondents below 16 years of age. Confidentiality was assured by using code number and restricting the access to the filled questionnaire to researcher only.

Data management and analysis

Completeness and consistency of the filled questionnaires was ensured at field level on the same day of the data collection. Collected data was edited manually to check completeness and accuracy and entered in Epi data. Data analysis was done in IBM Statistical Package for Social Science (SPSS) 20. To identify the factors bivariate analysis was done to see the association between outcomes variables with the level of significance less than 0.05.

RESULTS

Table 2 shows the socio-demographic characteristics of the participants in which more than half (50.5%) were male and more than one-third (70.5%) were of late adolescent group (15-19 years). Almost all (95.0%) of the participants followed Hindu religion and almost half (48.9%) were of Dalit ethnicity. Among the participants, 91.6% were unmarried and majority (90.3%) were enrolled in school. More than three quarter (83.4%) studied in public schools and most (81.6%) of the participants were from secondary level. Regarding educational status of fathers of the participants, almost one in five (17.1%) were illiterate and only 31.3% could read and write. Among the mothers of the participants, almost one third (31.5%) were illiterate and 37.6% could read and write only. Almost half (48.9%) of the adolescents were from advantaged group. Of the total participants, three in five (60.0%) had heard about adolescent friendly health services and almost two-third (65.3%) had heard about the services from the schools followed by radio (28.9%).

Table 2: Socio-demographic characteristics of the participants.

Variables	Frequency	Percentage
Age of respondents		
Late adolescents	268	70.5
Early adolescents	112	29.5
Sex of respondents		
Male	192	50.5
Female	188	49.5
Religion of respondents		
Hindu	361	95.0
Christian	8	2.1
Buddhist	7	1.8
Ethnicity of respondents		
Advantaged group	186	48.9
Janajati	168	44.2
Dalit	26	6.8
Marital status of respondents		
Unmarried	348	91.6
Married	32	8.4
Current education status of participants		
Enrolled on school	343	90.3
Left schooling	35	9.2
Not enrolled in school	2	0.5
Level of education (n=343)		
Secondary level	280	81.6
Higher secondary level	63	18.4
Types of School (n=343)		
Government school	286	83.4
Private school	57	16.6
Fathers' education (n=377)		
Illiterate	65	17.1
Formal education	119	31.3
Primary education	52	13.7
Secondary education	93	24.5
Higher education	30	7.9
Mother's education (n=378)		
Illiterate	119	31.5
Educated	142	37.6
Primary education	46	12.2
Secondary education	56	14.8
Higher education	12	3.2
University	3	0.8
Heard/ know about AFHS		
Yes	228	60.0
No	152	40.0
Source of information about AFHS *		
School	149	65.3
Radio	66	28.9
Friends	29	12.7
TV	25	11.0
Notice board	23	10.1
News paper	22	9.6
Relatives/ neighbor	12	5.3

Continued.

Variables	Frequency	Percentage
Utilization of AFHS in the last 12 months		
Yes	185	48.7
No	195	51.3
Services utilized in the last 12 months		
Counseling services	108	58.3
Reproductive health problems (menstrual problems)	74	40.0
Family planning services	22	11.9
ANC check up	17	9.1
Others	11	5.9

* Multiple responses

Table 3: Access and services related characteristics.

Variables	Frequency	Percentage
Appropriate opening days of health institutions		
Yes	300	78.9
No	80	21.1
Convenient opening hour of health institutions		
Yes	279	73.4
No	101	26.6
Distance of health facility from home		
<30 minutes	241	63.4
30-60 minutes	79	20.8
>1 hour	60	15.8
Feel shy to get sexual and reproductive health services		
Yes	171	45.0
No	209	55.0

Table 3 shows access and services related characteristics of the participants. More than three quarters (78.9%) of the participants agreed that the opening days of the health institutions were appropriate and almost three quarters (73.4%) agreed on the opening hours of the health institutions to be convenient. For almost two-third (63.4%) of the participants, time taken to reach the nearby health institutions took less than 30 minutes. Almost half (48.7%) of the participants had utilized adolescent friendly health services and of them 58.3% had used it for getting counseling services followed by reproductive health problems like menstrual problems.

Table 4 shows the association between different characteristics of the participants and the utilization of Adolescent Friendly Health Services. Age of the participants was significantly associated with utilization of adolescent friendly health services with p value less than 0.001. Sex of the participants, marital status, religion of the participants was not statistically significant with the utilization of adolescent friendly health services. Current educational status was significantly associated with the utilization of adolescent friendly health services (p value: 0.001) but education level and type of school (public and private) of the participants were not significantly associated.

Table 4: Bivariate analysis between adolescent friendly health services utilization and different characteristics of the respondents.

Variables	AFHS utilization		P value
	Yes (%)	No (%)	
Age of respondents in years			
Early adolescents	39 (21.1)	73 (37.4)	<0.001
Late adolescents	146 (50.4)	122 (62.6)	
Sex of respondents			
Male	85 (45.9)	107 (54.9)	0.082
Female	100 (54.1)	88 (45.1)	
Marital status			
Married	13 (7.0)	19 (9.7)	0.341
Unmarried	172 (93.0)	176 (90.3)	
Religion			
Hindu	174 (48.2)	187 (51.8)	0.838
Other than Hindu	11 (57.9)	8 (42.1)	
Ethnicity			
Advantaged group	107 (57.8)	79 (40.5)	< 0.001
Janajatis	64 (34.6)	104 (53.3)	
Dalit	14 (7.6)	12 (6.2)	

Continued.

Variables	AFHS utilization		P value
	Yes (%)	No (%)	
Current education status			
Currently not reading	8 (4.3)	29 (14.9)	0.001
Currently reading	177 (95.7)	166 (85.1)	
Education level of respondents			
Secondary	146 (82.5)	134 (80.7)	0.673
Higher secondary	31 (17.5)	32 (19.3)	
Type of school			
Private	23 (13.0)	34 (20.5)	0.063
Government	154 (87.0)	132 (79.5)	
Father's education			
Illiterate	36 (19.5)	28 (14.7)	0.237
Formal education	56 (30.3)	63 (33.0)	
Primary education	30 (16.2)	22 (11.5)	
Secondary education	46 (24.9)	47 (24.6)	
Higher education	10 (5.4)	20 (10.5)	
University	7 (3.8)	11 (5.8)	
Mother's education			
Illiterate	59 (31.9)	60 (31.1)	0.022
Formal education	63 (34.1)	79 (40.9)	
Primary education	33 (17.8)	13 (6.7)	
Secondary education	24 (13.0)	32 (16.6)	
Higher education	6 (3.3)	9 (4.6)	
Heard about AHFS			
Yes	136 (59.6)	92 (40.4)	< 0.001
No	49 (32.2)	103 (67.8)	
Heard/ know about AFHI			
Yes	129 (62.3)	78 (37.7)	< 0.001
No	56 (32.4)	117 (67.6)	
Convenient opening hour of health institutions			
Yes	146 (78.9)	133 (68.2)	0.018
No	39 (21.1)	62 (31.8)	
Appropriate opening days of health institutions			
Yes	157 (84.9)	143 (73.3)	0.006
No	28 (15.1)	52 (26.7)	
Distance of health facility from Home			
< 30 minutes	110 (59.5)	131 (67.2)	0.151
30-60 minutes	46 (24.8)	33 (16.9)	
>1 hour	29 (15.7)	31 (15.9)	
Feel shy to get sexual and reproductive health services			
Yes	55 (29.7))	116 (59.5	< 0.001
No	130 (70.3	79 (40.5))	

*Significant (p-value less than 0.05)

Educational status of mothers of participants was significantly associated with utilization of adolescent friendly health services (p value 0.022) but educational status of participants' fathers was not associated. Ethnicity (p value 0.001), heard about adolescent friendly health services (p value <0.001) and heard about adolescent friendly health institutions (p value <0.001) were significantly related to utilization of adolescent friendly health services. Distance of nearest health facility form the residence of participants was not associated with utilization. Convenient opening hour of the health facilities, appropriate days of opening of the health facilities and shyness of getting sexual and reproductive health services were significant with utilization of adolescent friendly health services (Table 4).

DISCUSSION

The aim of this study was to assess the factors associated with utilization of adolescent friendly health services in Dang district of Nepal which consisted of 380 adolescent

participants selected conveniently from different catchment areas.

The finding of this study showed that utilization of adolescent friendly health services was 48.7% in this study which is almost similar to study conducted in Pyuthan district of Nepal, the utilization rate was similar to this study.[18] Pilot study conducted by Ministry of Health and Population (MoHP) with the help of GIZ in August 2012 in Nepal showed that AFHS utilization rate of 35 percent which is lesser than finding of this study.[17] Studies conducted in Ethiopia had lower utilization of adolescent friendly health services than this study and the differences may be due to study setting.[19,20]

The finding of this study revealed that female adolescents utilized the health services more than males. The finding of this study was supported by a study conducted in Bir Hospital adolescent friendly center.[21] In general females need more SRH services as compared to males which may have contributed to higher utilization rates among females. In the study, age was significantly associated with utilization of AFH services which means that late adolescents were more likely to use the AFH services.[22,23] This study showed that those adolescents who were attending school utilized more AHF services than other school non going adolescents and this finding is supported by different studies of Ethiopia.[22,23] High utilization of AFHS by adolescents who were attending school could be because of monthly orientation class by health workers on school, committee formation about adolescent health with coordination of health teacher of school in Dang district.

Type of school was not significantly associated with AFH services in this study and was in agreement with a study conducted in Nekemte town, Ethiopia.[24] Fathers' education was not significantly associated with AFH services utilization and is supported by a cross-sectional study conducted in urban, Nepal and Mecha District, Northwest Ethiopia.[25,26] Mothers' educational status of the participants was significantly associated and was in an agreement with a similar study.[24] In the study, ethnicity was significantly associated with utilization of AFH services. A similar type of study conducted in urban Nepal is in disagreement with the findings of this study.[25] The study was conducted in rural parts of Dang district, the underprivileged adolescents may face different challenges to utilize the health services. The adolescents who were aware about the AFH services used the services significantly more than the adolescents who had not heard and is in agreement with the study conducted in urban Nepal.[25] Another study also supports the finding.[27]

Majority of the adolescents had heard about adolescent friendly health services from the school and is supported by a finding of Nepal and Ethiopia.[25,27] High utilization of AFHS by adolescents who were attending school could be because of monthly orientation class by health workers on school, committee formation about adolescent health with coordination of health teacher of school in Dang district. This study showed that convenient hour and days of opening of health institutions were the strong factors for utilization of adolescent friendly health services. If the opening hours of health services coincide with the school hours, work or other activities, it might be difficult to utilize the AFH services.[28,29] Adolescents in a study conducted in urban Nepal preferred the holidays and school times/study days as convenient time and days for SRH services.[25]

In the study distance or time taken to reach the health facilities from the residence of the participants was not significantly associated with the utilization of health facilities. A study conducted among adolescents in urban Nepal concluded that distance was a barrier for utilization of health services.[12,25] The different result may be due to study setting and transportation facilities in the study areas. Due to socio-cultural characteristics, many adolescents in Nepal feel shy for getting sexual and reproductive health services and this study shows the same findings. The finding of this study is supported by some studies conducted in Nepal.[30,31]

CONCLUSION

In the study, the prevalence of utilization of adolescent friendly health services was 48.7% which means that more than half have not utilized the services. The major factors affecting the utilization of AFH services were age of the participants, current educational status, mother's education, ethnicity, awareness about the services, convenient opening days and hour of health facilities and shyness to utilize the services. Different health facilities are upgraded to adolescent friendly health services but the utilization is low. So, adolescents and the communities should be made aware of the services through schools, health institutions, different health clubs etc. The local government in coordination with the health instructions also need to allocate special days and hours for adolescents.

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