

Factors Associated with Adolescent Friendly Health Services Utilization among Public Higher Secondary School Students of Dang District of Nepal

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ABSTRACT

Introduction: Adolescent friendly health services play an important role in helping ill adolescents get back to good health through diagnosing health problems, detecting problem behaviors and managing or referring them elsewhere. Adolescent health needs are growing due to intrinsic and extrinsic factors but health services in developing countries are not well organized to provide appropriate care. There are still many adolescents who don't know about adolescent friendly health services. The aim of this study was to assess the utilization of adolescent friendly health services among public higher secondary school students of Dang district.

Methods: An institutional based cross-sectional study was conducted among 372 adolescents of Ghorahi sub-metropolitan city of Dang district. Multistage sampling technique along with simple random techniques was adopted to reach the respondents. Univariate, Multivariate logistic regression was performed to test the existing significant association between utilization of adolescent friendly services and independent variables.

Results: One in tenth (14.8%) of respondents had utilized adolescent's friendly health services. About four-fifth (78.5%) of respondents got information regarding service from their teachers. Age of respondents, awareness about the facilities providing services, awareness about location of health facility, satisfaction of service, types of health facility visit, sufficient time provided by health service provider was found statistically significant with adolescent friendly health service utilization.

Conclusion: The utilization level of adolescent friendly health services among respondents is poor. The major reasons for not utilizing the service were due to lack of information about the centers, perceived no necessity of service, unaware about the services. Great effort and attention of all concerned bodies to design and implement appropriate adolescent friendly health information, education and communication strategies in schools as well as out of schools to increase utilization of adolescent friendly health services is mandatory.

Keywords: *Adolescent, Health service, Student, Utilization*

INTRODUCTION

Adolescence (10-19) is a unique period of physical, psychological, emotional, and social maturation from childhood to adulthood.¹⁻⁵ Adolescent health needs are growing due to intrinsic and extrinsic factors but health services in developing countries are not prepared to provide appropriate care due to lack of awareness of adolescent health needs and inadequate training and capacity of the service providers.⁶

Adolescent-friendly services (AFS) include the availability of trained staff and information on adolescent sexual and reproductive health, the delivery of services in a confidential way, adolescent

friendly opening hours and the display of the AFS. Adolescents represent a positive force in society, now and for the future. They faced danger and more complex than previous generations faced, and often with less support.⁷ Government of Nepal had launched a national programmes in 2010 to provide adolescent-friendly sexual and reproductive health services which had included counseling, provision of contraceptives and screening for sexually transmitted infections which had been already rolled out at 1331 health facilities

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in 74 of Nepal's 77 districts and had targeted to covered remaining districts by 2021. According to Annual report 2076/2077, 104 health facilities has been certified as adolescent friendly sites. Services are provided in a range of health facilities or recognized institutions that provide health services.⁸

Adolescent friendly health services play an important role in helping ill adolescents get back to good health through diagnosing health problems, detecting problem behaviors and managing or referring them elsewhere. They play an important role in helping healthy adolescents stay well and develop into healthy adults, by providing information, advice and preventive services (or products). The development needs of adolescent are a matter for the whole of civil society. Health services play a specific role in preventing health problems and many changes are needed in order for health services to become adolescent friendly.⁷ Adolescents do not have adequate access to appropriate information and services about adolescent and sexual reproductive health (ASRH) issues. Little sex education is offered in schools regarding sex and reproductive health.⁹ The utilization of AFHS was found to be low. There has been limited research published on adolescent health and health service utilization in Dang district. Adolescent health is a major issue for overall reproductive health and development, the study findings might be helpful to identify the level of utilization among public higher school students and associated factors for utilization which might be helpful in drawing the attention of policy makers, health planner, curriculum planners and educators towards adolescent health.

METHODS

The study design was institutional based cross-sectional study done among public higher secondary school students of Ghorahi sub metropolitan city of Dang district. Adolescents (15-19 years of age) who were studying at Grade 11 and 12 were selected as study population.

Sample size was calculated by using Cochran formula where prevalence rate was taken as 16% (adolescent health services utilization by adolescents) (10), along with design effect (2) and 10% non-response rate and using finite population (1054); the total sample size was 385. Only 372 students had been included in the study as per the exclusion/inclusion criteria.

A multistage random sampling technique was employed to select the study respondents. Firstly, Dang district was selected randomly from Lumbini province. From Dang district with simple random techniques, Ghorahi sub metropolitan city was selected. Among seven higher secondary public schools of Ghorahi sub metropolitan city, three schools were selected randomly. Study respondents were selected in equal proportion from each schools based on the sample size. Simple random technique was used to reach the required number of respondents. Self-developed questionnaire with self-administered techniques was used to collect the information. Ethical approval was taken from Nepal Health Research Council. Written consent was also taken from public higher school secondary schools committee as well as from the study respondents.

Data was coded, cleaned and entered in EPI data and then transferred into Statistical data Package for Social Science (SPSS) for the analysis. Univariate analysis was computed to describe demographic profile of respondents and accessibility of adolescent friendly services. Bivariate Logistic regression, chi-square and fisher exact were performed for testing the existing significant association between utilization of adolescent friendly services and selected independent variables. Multivariate logistic regression model was carried out to identify the most independent and utilization of adolescent friendly services related factors. The odds ratio and 95% CI was reported while showing the association between utilization of adolescent friendly services and independent variables. This results were considered significant at 5% level (i.e. p value <0.05). Respondents were fully informed regarding study objectives and written consent was obtained prior to the initiation of the data collection.

RESULTS

Altogether, 380 students were participated in the survey, out of which only 372 completely fill up the questionnaire.

Table 1: Socio-demographic Characteristics of the Respondents (n=372)

Variables	Frequency	Percentage
Gender		
Male	126	33.9
Female	246	66.1

Age		
More than 16	206	55.4
Less than or equal to 16 years	166	44.6
Mean age (+SD) = 17.29+1.06 years		
Religion		
Hindu	361	97.0
Buddhist	4	1.1
Christian	6	1.6
Islam	1	0.3
Ethnicity		
Upper Caste	166	44.6
Janajati	168	45.2
Dalit	37	9.9
Religious Minorities	1	0.3
Perceived Family Economic Status		
Very Good	25	6.7
Good	114	30.6
Satisfactory	212	57.0
Poor	15	4.0
Very poor	6	1.6
Father's Education		
Illiterate	44	11.8
Read and Write	49	13.2
Primary	57	15.3
Lower Secondary	89	23.9
Secondary level	98	26.3
Higher Secondary and Above	35	9.4
Mother's Education		
Illiterate	98	26.3
Read and Write	109	29.3
Primary	55	14.8
Lower Secondary	52	14.0
Secondary level	45	12.1
Higher Secondary and Above	13	3.5

Table 1 shows about two-third (66.1%) respondents were female. Almost all (97%) followed Hinduism. More than half of the respondents (57%) had satisfactory family economic status.

Majority (85.2%) of respondents had never received/ utilized any type of AFHS and more than one in tenth (14.8%) of respondents had utilized Adolescents Friendly Health Services

Table 2: Information regarding Adolescent Friendly Health Services (n=372)

Variables	Frequency	Percentage
Source of Information regarding AFHS		
Teacher	230	78.5
Mass media (Radio/TV)	26	8.9
Poster in Health Centre	24	8.2
Friends	17	5.8
Parents/Guardian	9	3.1
Internet	7	2.4
Reasons for not utilization of AFHS		
Do not have enough information about the AFHS		
Centre	118	49.6
No Need of service	75	31.5
Unaware about the Services	70	29.4
Shyness	15	6.3
Inaccessibility of such centre	14	5.9
Afraid of parents	8	3.49
Afraid of Parents	8	3.4
Don't trust centre's staff members	7	2.9
Don't think those centre can really help	6	2.59
Reasons for missing the utilization of AFHS		
If there is need, will respondents use AFHS from the available service centre		
	42	97.7
Working days and hours of ADHS comfortable for respondents		
	33	76.7
Experience of dissemination of information without respondents permission		
	15	34.9
Queue was long	14	32.6
Services centre was closed	12	27.9
No money for the services	6	14.0
Factors influencing utilization of AFHS		
Mass Media	24	44.4
Advice from other	20	37.0
Illness of close relatives due to HIV, STI or Abortion		
	15	27.8
Death of closed relatives due to HIV, STI or Abortion		
	7	13.0

Table 2 revealed around four-fifth (78.5%) of respondent get information regarding AFHS from teacher. About half (49.6%) of the respondents didn't utilized AFHS services due to lack of information followed by no need of service (31.5%).

Table 3: Factors associated with Adolescent Friendly Health Service utilization and independent variables (n=372)

Variables	AFHS utilization		p-value	Bi-Variate		p-value	Multivariate	
	No (%)	Yes (%)		UOR	95%,CI		AOR	95%, CI
Ethnicity								
Upper Caste	143(86.1)	23 (13.9)		1.143	0.640-2.042	0.497	0.752	0.330-1.714
Marginalized Caste	174(84.5)	32 (15.5)	0.650	1			1	Ref
Educational Status								
Grade 11	72 (86.7)	11 (13.3)	0.656	1		0.216	1	Ref
Grade 12	245 (84.8)	44 (15.2)		1.176	0.577-2.393		0.500	0.167-1.500
Father's Education								
Illiterate	36 (81.8)	8 (18.2)	0.500	1		0.210	1	Ref
Literate	281 (85.7)	47 (14.3)		0.753	0.330-1719		0.367	0.077-1.759
Mother's Education								
Illiterate	82 (83.7)	16 (16.3)	0.617	1		0.220	1	Ref
Literate	235 (85.8)	39 (14.2)		0.851	0.451-1.603		1.870	0.688-5.084
Economic Status								
Good	301 (85.8)	50 (14.2)		0.532	0.186-1.516	0.645	1.590	0.221-11.439
Poor	16 (76.2)	5 (23.8)	0.237	1			1	Ref
Age of Respondents								
<17 Years	178 (86.4)	28 (13.6)	0.041*	1		0.372	1	Ref
≥17 Years	139 (83.7)	27 (16.3)		1.235	0.696-2.191		01.493	0.619-3.597
Awareness about the Facilities providing Services								
No	196 (93.3)	14 (6.7)	0.001*	1		0.217	1	Ref
Yes	121 (74.7)	41 (25.3)		4.744	2.482-9.065		3.871	0.452-33.143
Awareness about Location of HF								
No	236 (93.3)	17 (6.7)	0.001*	1		0.314	1	Ref
Yes	81 (68.1)	38 (31.9)		6.513	3.486-12.169		2.151	1.213-3.541
Distance of HF (N-122)								
<30 Minutes	35 (71.4)	14 (28.6)		0.732	0.330-1.583	0.358	0.683	0.303-1.540
≥30 Minutes	47 (64.4)	26 (35.6)	0.723	1			1	Ref
Satisfaction of Service								
No	91 (97.8)	2 (2.2)	0.001*	1		0.316	1	Ref
Yes	226 (81.0)	53 (19.0)		1.091	0.023-6.292		3.432	1.014-10.134
Types of HF Visit (n=55)								
Public	39 (79.6)	10 (20.4)	0.004*	1		0.362	1	Ref
Private	2 (40.0)	4 (60.0)		5.850	0.858-39.876		15.878	8.551-291.835
Sufficient Time provided by Health Service provider								
No	311 (93.5)	22 (6.5)	0.001*	1		0.046*	1	Ref
Yes	6 (5.9)	33 (94.1)		47	4.891-62.207		1.213	0.035-6.123

Table 3 shows age of respondents (p=0.041), awareness about the facilities providing services (p=0.001), awareness about location of health facility (p=0.001), satisfaction of Service (p=0.001), types of HF visit (p=0.004), sufficient time provided by health service provider (p=0.001) were found statistically significant with adolescent friendly health service utilization.

DISCUSSION

The study showed the utilization level of Adolescents Friendly Health Services was 14.8% which is comparatively low compared with the findings of the study done in Ethiopia (38.5%).¹¹ Another contrasts findings was found in study done in Kapilvastu and Arghakhanchi districts of Nepal which showed none of the respondents were aware about the services and none had ever utilized any services.¹² Another study done in Puducherry, India resemble with our findings which showed 15% adolescent had utilized the services.¹³ Another study done in Nekemte town Ethiopia showed the utilization was 21.2% which is higher than the present study.¹⁴ Another contrasts findings shows utilization of services in Southwest Oromia, Ethiopia as 36.5% which was higher than the present study.¹⁵ The adolescent friendly health services is comparatively low in our country compared with other, this might be due to lack of awareness about the adolescent services availability.

In the present study the major reasons for not utilizing the AFHS was found lack of information about the AFHS centers (49.6%), no need of services (31.5%), unaware about the services (29.4%) where other studies showed poor awareness and misconceptions about the clinic, lack of adolescent reproductive health services, harmful traditional practices, lack of privacy and inconvenient service hour, social stigma, service quality and service provider behavior were reasons for not utilizing the service.^{12,13,16}

In this study majority of the respondents first heard about the services from schools/teachers (78.5%) whereas a study in Lagos, Nigeria showed that the majority (83.2%) of the respondents first heard from parents, guardians and friends.¹⁷ It might be lack of awareness among the parents in our country. Our study showed no statistically significant association of gender with AFHS utilization which is similar with the findings of study done in Ligos Nigeria, Giri N et al, Napit K et al.¹⁷⁻¹⁹

Our study found statistical association of age ($p=0.041$) with AFHS utilization which is similar with the findings of the study done by Giri N et al., ($p=0.001$), Napit K et al., ($p=0.001$), Ethiopia.¹⁸⁻²⁰ The present study shows no statistical association between economic status and utilization of AFHS which contradicts with the study of Ethiopia which showed signification association of economic status and service utilization.²⁰ This might be due to differences of the classification of economic status of the intercountry.

In our study distance or time taken to reach the health facilities from the residence of the respondents ($p=0.723$) was not significantly associated with the utilization of adolescent friendly health facilities which was found similar with the study done by Giri N et al., ($p=0.151$).¹⁸ Another contradicts findings was found in the study done by Pokhrel S et al., ($p=0.001$) and Pandey PL et al., which showed distance was a barrier for utilization of health services.^{2,21}

CONCLUSION

The utilization level of adolescent friendly health services among respondents is poor. Nearly one in tenth of respondents had utilized adolescent friendly health services. The major reason for low utilization of adolescent friendly health services were lack of information about the centers, perceived no necessity of services, and unaware about the services. Great effort and attention of all concerned bodies to design and implement appropriate adolescent friendly health information, education and communication strategies in schools as well as out of schools to increase utilization of adolescent friendly health services is mandatory. Existing AFHS should be emphasized to make it friendlier.

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