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Factors that Trigger Girls' Absenteeism in School

An Analysis from Menstrual Health and Hygiene Management Study in Nepal

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Introduction

Menstrual taboos are common in many low and middle-income countries (LMICs) including Nepal (University of Bath, Centre for Development Studies, 2019). Further, menstrual health and hygiene for girls is a neglected area in countries like Nepal. It was estimated that about 15 to 22 percent of girls missed school (S. B. Dhakal, 2018) due to menstruation, which directly affects their educational status. According to the World Bank, the adult literacy rate of females (15-24 years) stands at 82.7 as compared to 92.8 of males (The World Bank, 2019). The studies carried out by WaterAid in four districts (WaterAid, March 2019) and Deepmala Rana Bhaatt in Kalikot district (Deepmala Bhatta, 2019) of Nepal were mostly descriptive in nature and were limited to a small sample with limited geographical coverage. These studies mostly focus on the prevalence of adolescent girls who miss school during menstrual period but lack the analysis that explore the factors associated with girls' absenteeism in school during menstrual period using advance statistical analysis. Hence, this further analysis highlights the factors associated with girls' absenteeism in school during menstrual period.

Methods

World Vision International Nepal (WVI Nepal) conducted the study on status of menstrual health and hygiene management among adolescent girls of Nepal in collaboration with the Nepal Health Research Council (NHRC). This is a further analysis of the quantitative section of this study where cross-sectional mixed-method study was conducted in all seven provinces of Nepal which includes a population-based national representative sample of 3,495 adolescent girls aged 10-19 years. Two-stage random sampling method was used to select the sample for the study. A list of schools with at least grade 10 was prepared from each province and 15 schools from each province were selected randomly using simple random method. Once the schools were finalized, the list of adolescent girls aged 10-19 years were prepared and adolescent were selected using systematic random method.

A structured questionnaire was used to collect the data from each of the adolescent girl using self-administered questionnaire. The questionnaire for the study was adopted from the MR-SSS tool utilized by CREHPA and University of Bath UK in Nepal (CREHPA and University of Bath., July 2019). Data was entered into Epi-Data version 3.1. Data cleaning and editing were done subsequently after data entry and descriptive statistical analysis (frequency and percentage) and cross-tabulation were done for background variables. Binary logistic regression analysis was carried out to identify factors associated with school absenteeism. Forward stepwise logistic model was used a p value of 0.20 for entry and 0.10 for exit. Hosmer and Lemeshow goodness of fit was used to test the fitness of model and Variance Inflation Factors (VIF) was used to measure the multi-collinearity among independent variables. All the predictor variables have VIF less than 2.

The study objectives, methods, risks and benefits, need of this study, expected outcome of this research were well explained to all the adolescent girls with the assurance of confidentiality. Before administration the questionnaire, we receive informed written consent from the adolescent girls. But for the girls under 18 years old, written consent was taken from their parents. The study was ethically approved by NHRC.

Findings

Prevalence of girls missing school during menstruation

It was found that more than one in four adolescent girls (26.7%; 95% CI: 25.2-28.2) missed school due to menstruation during last menstrual period. This finding somewhat resemble with the study conducted by Ranabhat D. in Kalikot district where 22% adolescent girls miss schools during menstrual period (Deepmala Bhatta, 2019). However, the prevalence of school absenteeism is much higher (53%) in study conducted by WaterAid in four districts of Nepal (WaterAid, March 2019) in contrast to this study.



More than one in four (26.7%) adolescent girls miss school due to menstruation.

Factors associated with girl's absenteeism in school during menstruation

The following were not found to be significantly associated with girls' absenteeism in school:

- Age, Religion, Education Status
- Knowing about menstruation before experiencing it
- Restrictions from any usual things
- Practice of Chhaupadi¹
- Able to change menstruation materials as often as you like
- Share the sanitary materials with someone else
- Worried that sanitary materials will be seen by other people while drying and washing and
- Menstrual self-efficacy status

Disadvantaged Janajatis² adolescent girls were nearly three times more likely (AOR: 2.79; CI 95%=1.43-5.42) and relatively advantaged Janajatis girls were nearly two times (AOR: 1.67, CI 95%=1.09-2.54) more likely to be absent in school during menstruation period compared to Upper caste groups. However, there was no association between caste/ethnicity and school absenteeism in a study conducted by Ranabhat D. in Kalikot district (Deepmala Bhatta, 2019). The higher proportion of school's absenteeism among these groups might be because of poverty and socio-cultural barriers within such caste/ethnic groups.

Adolescent girls from Province 1 and Lumbini province were 53 and 46 percent respectively less likely to miss school than adolescent girls from Sudurpashchim Province. The possible reasons for high school absenteeism in Sudurpashchim are high prevalent of socio-cultural taboos like Chaupadi (World Vision International Nepal and Nepal Health Research Council, 2020) (Ministry of Education Science and Technology, 2017), and low literacy rate compared to Province 1 and Lumbini Province (Ministry of Education Science and Technology, 2017). Adolescent girls who said or done something against menstruation taboos/restrictions in community and feel they can do something against menstruation restriction/taboo in communities are 34 and 54 percent respectively less likely to miss school than their counterparts. This reflects empowering the adolescent girls can be helpful to reduce the absenteeism in school which is supported by the study conducted by Center for Universal Education at Brookings (Centre for Universal Education at Brookings, 2016). Those adolescent girls with higher menstrual stress were nearly 1.4 times more likely (AOR: 1.4, CI 95%= 1.02-1.81) to miss school than those girls with low menstrual stress. Likewise, adolescent girls with higher menstrual annoyance and higher shame and secrecy were 1.5 times and 1.7 times respectively more likely to miss school during menstruation than their counterparts. Mental stress is also common, particularly due to constant worry that others may know about their menstruation which hinder their attendance in the school and also affect the quality of their presence in school in terms of attention and concentration in curricular activities even they attend the school (WaterAid, March 2019). However, there was no statistical association of menstrual self-efficacy with absenteeism in school as shown in Annex-1.

¹ Chhaupadi is a form of menstrual taboo which prohibits women and girls from participating in normal family activities while menstruating, as they are considered "impure". ² This includes marginalized people who are affected from different social taboos.

Key Findings

Adolescent girls with higher menstrual stress were nearly **1.4 times** more likely to miss school than those girls with low menstrual stress.

Adolescent girls from Province 1 and Lumbini province were **53%** and **46%** respectively less likely to miss school than girls from Sudurpashchim Province.

Disadvantaged Janajatis were **3 times** more likely and relatively advanced Janajatis were nearly **2 times** more likely to miss school during menstruation period compared to Upper caste groups.

Adolescent girls who had said or done something against menstruation taboos/restrictions in their community and felt they can do something against menstrual restriction/taboo were **34%** and **54%** respectively less likely to miss school than their counterparts.

Adolescent girls with higher menstrual shame and secrecy were nearly **1.7 times** more likely to miss school than those girls with low menstrual shame and secrecy.

Adolescent girls with higher menstrual annoyance were nearly **1.5 times** more likely to miss school than those with low menstrual annoyance.

Conclusion

There are several factors that are associated with girls' absenteeism from school during menstruation. Several studies highlight different interventions such as MHM friendly WASH facilities in schools, training to girls to prepare and use sanitary pads, mobilization of child clubs on raising awareness on MHM, MHM focal teachers (female) for psychological support to girls (S. B. Dhakal, 2018) (Deepmala Bhatta, 2019) should be planned to reduce girls' absenteeism. Furthermore, provision of adequate information and counseling to adolescent girls on menstruation can be helpful to reduce the menstrual stress, annoyance and shame and secrecy. Likewise, improving girl's empowerment to respond to menstrual taboos and restriction on community help to reduce the school absenteeism among adolescent girls during menstruation.

The study highlights that special provisions should focus on Sudurpashchim Province and disadvantaged Janajatis where there is high rate of school absenteeism during menstrual period. Furthermore, the practice of Chaupadi in Sudurpashchim should be discouraged by execution of law against Chaupadi in close collaboration with local government. Moreover, menstruation related awareness and advocacy program should not only be limited to the adolescent girls but also should target the household head, religious leaders and other social leaders to reduce the stigma related to menstruation. Additionally, development and implementation of gender responsive education plans and policies by local government could be further helpful in reducing the girl's absenteeism in school.

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Annex-I: Factors Associated with School Absenteeism

Background Characteristics	School Missed due to Menstruation			AOR (CI 95%)
	Yes N (%)	No N (%)	P-value	
Age Category				
Early aged adolescent girls (10-14)	439 (24.8)	1328 (75.2)	0.87	0.95 (0.48-1.86)
Mid aged adolescent girls (15-17)	455 (28.5)	1144 (71.5)	0.58	0.83 (0.42-1.62)
Late aged adolescent girls (18-19)	38 (29.5)	91 (70.5)	1	1
Religion				
Hindu	804 (27.2)	2156 (72.8)	0.92	1.09 (0.19-6.25)
Buddhist	79 (26.2)	223 (73.8)	0.44	0.49 (0.80-3.06)
Christian	22 (27.5)	58 (72.5)	0.55	0.56 (0.83-3.77)
Kirat	19 (16.8)	94 (83.2)	0.61	1.67 (0.23-11.97)
Muslim	8 (20)	32 (80)	1	
Ethnicity				
Dalit	131 (26.7)	359 (73.3)	0.61	1.11 (0.75-1.64)
Disadvantaged Janajatis*	69 (24.6)	212 (75.4)	0.002	2.79 (1.43-5.42)
Disadvantaged non Dalit Terai Caste	102 (38.8)	161 (61.2)	0.05	0.62 (0.37-1.01)
Religious Minorites	8 (25.8)	23 (74.2)	0.55	2.32 (0.14-37.9)
Relatively Advantaged Janajatis*	164 (21.3)	605 (78.7)	0.017	1.67 (1.09-2.54)
Upper Caste groups	458 (27.6)	1203 (72.4)	1	
Education Status of Adolescent				
Primary	39 (27.5)	103 (72.5)	0.27	0.7 (0.37-1.32)
Secondary	835 (26.6)	2308 (73.4)	0.32	0.78 (0.49-1.27)
Higher secondary	58 (27.6)	152 (72.4)	1	
Provincial Distribution				
Province 1*	134 (25.7)	388 (74.3)	0.03	0.53 (0.29-0.95)
Province 2	175 (37.6)	290 (62.4)	0.47	0.8 (0.44-1.47)
Bagmati	124 (23.8)	397 (76.2)	0.15	0.65 (0.37-1.16)
Gandaki	99 (19.1)	419 (80.9)	0.79	1.08 (0.59-1.97)
Lumbini**	175 (32.2)	368 (67.8)	0.009	0.46 (0.26-0.82)
Karnali	121 (26.9)	328 (73.1)	0.43	0.82 (0.49-1.35)
Sudurpashchim	104 (21.8)	373 (78.2)	1	

Annex-I: Factors Associated with School Absenteeism (continued)

Know about menstruation before experiencing it				
Yes	694 (27.4)	1838 (72.6)	0.69	1.07 (0.74-1.56)
No	238 (24.7)	725 (75.3)	1	
Restricted from anything usual during menstruation				
Yes	504 (25)	1511 (75)	0.34	1.16 (0.85-1.59)
No	428 (28.9)	1052 (71.1)	1	
Said or done anything against menstruation taboos/restrictions at home				
Yes	493 (27.4)	1306 (72.6)	0.52	0.9 (0.67-1.22)
No	436 (26)	1243 (74)	1	
Feel you can do anything against menstruation restrictions/taboo at home				
Yes	385 (28.8)	952 (71.2)	0.65	1.34 (0.98-1.84)
No	544 (25.4)	1597 (74.6)	1	
Said or done anything against menstruation taboos/restrictions in communities				
Yes*	456 (27.3)	1216 (72.7)	0.04	0.34 (0.27-0.87)
No	476 (16.1)	1347 (73.9)	1	
Feel you can do anything against menstruation restrictions/taboo in communities				
Yes*	225 (30.3)	517 (69.7)	0.001	0.54 (0.39-0.76)
No	707 (25.7)	2046 (74.3)	1	
Practice Chaupadi				
Yes	75 (24.6)	230 (75.4)	0.78	0.93 (0.56-1.53)
No	857 (26.9)	2333 (73.1)	1	
Able to change your menstruation materials as often as you would like at school/college				
Yes	477 (24.8)	1448 (75.2)	0.14	1.22 (0.94-1.58)
No	450 (28.8)	1114 (71.2)	1	
Share the sanitary materials that you use with anyone else in the household				
Yes	116 (29.7)	275 (70.3)	0.12	0.73 (0.49-1.08)
No	811 (26.2)	2287 (73.8)	1	
Worried that your sanitary materials will be seen by other people while washing and drying				
No	237 (25.7)	685 (74.3)	0.37	1.14 (0.86-1.51)
Yes	166 (24.1)	522 (75.9)	1	
Menstrual Stress status*				
High	460 (23)	1538 (77)	0.038	1.4 (1.02-1.81)
Low	472 (31.5)	1025 (68.5)	1	
Menstrual Annoyance Status**				
High	422 (23.1)	1408 (76.9)	0.006	1.5 (1.12-1.98)
Low	510 (30.6)	1155 (69.4)	1	
Menstrual Shame and Secrecy status**				
High	426 (23.3)	1405 (76.7)	0.001	1.7 (1.29-2.24)
Low	506 (30.4)	1158 (69.6)	1	
Menstrual self-efficacy status				
Low	307 (25.1)	917 (74.9)	0.76	1.04 (0.79-1.35)
High	484 (26.9)	1316 (73.1)		

1-Reference value; * significant at 95%; ** significant at 99%; AOR= Adjusted Odds Ratio; CI= Confidence Interval; Adjusted R2=0.57

Annex-II: Access to Full Report https://www.wvi.org/sites/default/files/2021-03/Report_MHM_Final.pdf