

## Common School Health Problems Among School-going Adolescents in A Rural Area of Bangladesh

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### Abstract

School health is the comprehensive efforts of developing, implementing, and evaluating services, both within the school and the community, that provide each student with the resources needed to thrive within a healthful environment. A cross-sectional, descriptive study was conducted among 125 school-going adolescents to observe the common school health problems in a selected rural area of Bangladesh. This study was done in Aftabuddin High School and College, Bhagalpur at Bajitpur upazila under Kishoreganj district, between October and December of 2019. A purposive type of nonprobability sampling method was adopted. For collection of required data, face-to-face interview using a semi-structured questionnaire. Out of the 125 respondents, mostly 91(73%) adolescents belonged to the age group of 13-15 years and mostly 88(70%) were male. Among all respondents, 50(40%) were from class-X, followed by 28(22%) from class-VIII, 41(33%) from class-IX and rest 6(5%) from class -XI. The majority of the students 43(34.4%) suffered from dental carries in the last six months, while 21(16.8%), 7(5.6%), 6(5.2%), 11(8.8%), 10(8%) mentioned about diarrhoea, chicken pox, conjunctivitis, and respiratory infections respectively. Regarding skin problems, 23(18.4%) had head lice (pediculosis), and 12(9.6%) had ringworm and 7(5.6%) had scabies. Among eye problems, 26(20.8%) reported short sightedness (myopia), 5(4%) mentioned having hypermetropia and 4(3.2%) had squint. Regarding ear problems, 11(8.8%) had earache, 4(3.2%) reported discharge from ears and 4(3.2%) had difficulty in hearing. Among injury incidents, 25(20%) had fall from height, 2(1.6%) reported acid/alkali burn and 6(4.8%) mentioned about injuries due to fighting with friends. Among mental health issues, 54(43.2%) students reported difficulties to continue studies, while 12(9.6%) and 3(2.4%) mentioned about negligence of parents and of teachers respectively. 7(5.6%) students mentioned about physical assault by teachers or classmates and 6(4.8%) mentioned about experienced other situations like indulge in smoking/bad behaviour. Among bad habits, 17(13.6%) mentioned about their thumb sucking and 31(24.8%) had nail biting. Among the respondents, 122(97.6%) students had intentions to participate in any education/campaign related to school health problems and 3(2.4%) declined.

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### Introduction

The health of the school children is a common concern of the school, parents and the community. A child must be healthy to learn, and the school is an important place next to home, where a child learns to be healthy.<sup>1-3</sup> At the time of entering school the children are in the most formative period. The schools are particularly important because these institutions represent gathering place for children who are particularly prone and susceptible to many communicable diseases and vulnerable to physical, mental and moral hazards with which the students may come in contact in connection with their school experience. School health is an important branch of community health. School health services are based on the local problems of the school children, the culture of the community and the available resources

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in terms of money, material and manpower. The health problems of school children vary from one place to another. Some surveys indicate that the main emphasis fell into categories like malnutrition, infectious diseases, intestinal parasites, diseases of skin, eye, ear and dental carries.<sup>2</sup> School Health includes physical education, health education that covers a range of developmentally appropriate topics taught by knowledgeable teachers, programmes that promote healthy physical, social and emotional development and remove barriers to students' learning.<sup>3</sup> Children spend more time at school than anywhere else except home. Schools can have a major effect on children's health. Schools can teach children about health and promote healthy behaviour. Physical education classes give children a chance to get exercise. Overall, most schools work to prevent risky behaviour such as alcohol and tobacco use or bullying and cyber bullying, encourage healthy habits like exercise and healthy eating, deal with specific health problems in students, such as asthma, obesity and infectious diseases.<sup>2,3</sup> The school building and environment should be a safe and healthy place for the child. Getting sick is part of being a kid. Their immune systems have not been exposed to as many germs as those of adults. Hence, they get sick more often. There are some illnesses and infections that are very common in children. Most of them are relatively harmless and can be cared for at home. It is important to know what illnesses and infections are common during childhood and adolescence.<sup>4</sup> Students in high school and college are subject to an insane number of germs throughout the day. Poor ventilation and handsy students leave bacteria lying around everywhere. Besides, they may suffer from mental health issues, specifically depression, anxiety, and substance abuse.<sup>5</sup> Taking all those in our consideration, this study was designed to observe the

common school health problems among school-going adolescents in a selected rural area of Bangladesh.

## Methods

This cross-sectional, descriptive study was conducted in Aftabuddin High School and College, Bhagalpur at Bajitpur upazila, a rural area under Kishoreganj district of Bangladesh. This study was done among 125 school-going adolescents selected through Purposive type of nonprobability sampling method. The study was conducted between October and December of 2019. An semi-structured questionnaire was used for collection of required data. At first, the researchers explained the purpose of the study to the subjects and then written consent was taken from the respondents before the data collection. Face-to-face interview was conducted among those 125 rural school-going adolescents.

After compilation of data, the obtained data were checked for completeness, consistency and coded for reducing error and verified as well. Then the data was analyzed from using MS-Excel sheet. Data was shown in graphical and tabular forms. The study was approved by the Ethical Review Committee of Jahurul Islam Medical College, Bhagalpur, Bajitpur, Kishoreganj.

## Results

Out of 125 respondents, 28(22%), 91(73%), and 6(5%) belong to the age group of 10-12 years, 13-15 years and 16-19 years respectively. Among them, 88(70.4%) were male and 37(29.6%) were female. Most of the respondents i.e., 50(40%) were from class-X, followed by 28(22%) from class-VIII, 41(33%) from class-IX and rest 6(5%) from class -XI (Table-I). The majority of the students 43(34.4%) suffered from dental carries in the last six months, while 21(16.8%), 7(5.6%), 6(5.2%), 11(8.8%), 10(8%)

mentioned about diarrhoea, chicken pox, conjunctivitis and respiratory infections respectively. 33(26.4%) students had no history of infectious disease in the last six months (Table-II).

**Table-I:** Demographic characteristics of the respondents (n=150)

Variables	Frequency	Percentage
<b>Age group</b>		
10-12 years	28	22
13-15 years	91	73
16-19 years	6	5
<b>Gender</b>		
Male	88	70.4
Female	37	29.6
<b>Education</b>		
Class -VIII	28	22
Class -IX	41	33
Class -X	50	40
Class -XI	6	5
Class -XII	-	-

**Table-II:** History of any infectious diseases in last six months

Infectious diseases	Frequency	Percentage
Diarrhoea	21	16.8
Dysentery	0	0.0
Chicken pox	7	5.6
Measles	-	-
Hepatitis	-	-
Dengue fever	-	-
Otitis media	-	-
Conjunctivitis	11	8.8
Dental carries	43	34.4
Respiratory infections	10	8

Regarding skin problems, the majority 83(66.4%) had no skin problems; however, 23(18.4%) had head lice (pediculosis), and 12(9.6%) had ringworm and 7(5.6%) had scabies (Table-III). The majority 90(72%) of the respondents had no eye problems, while 26(20.8%) reported short sightedness (myopia), 5(4%) mentioned having hypermetropia and the rest

4(3.2%) had squint. Regarding ear problems, 11(8.8%) had earache, 4(3.2%) reported discharge from ears and 4(3.2%) had difficulty in hearing; most of them 106(84.8%) had no ear related problems (Table-IV).

**Table-III:** Distribution of skin problems

Skin problems	Frequency	Percentage
Head lice (pediculosis)	23	18.4
Ringworm infection	12	9.6
Scabies	7	5.6

**Table-IV:** Distribution of eye and ear problems

Variables	Frequency	Percentage
<b>Eye problems</b>		
Myopia	26	20.8
Hypermetropia	5	4.0
Squint	4	3.2
<b>Ear problems</b>		
Earache	11	8.8
Discharge from ear	4	3.2
Difficulty in hearing	4	3.2

Among injury incidents, 25(20%) had fall from height, 2(1.6%) reported acid/alkali burn and 6(4.8%) mentioned about injuries due to fighting with friends (Table-V). Among mental health issues, 54(43.2%) students reported difficulties to continue studies, while 12(9.6%) and 3(2.4%) mentioned about negligence of parents and of teachers respectively. 7(5.6%) students mentioned about physical assault by teachers or classmates and 6(4.8%) mentioned about experienced other situations like indulge in smoking/bad behaviour (Table-VI). Among bad habits, 17(13.6%) mentioned about their thumb sucking and 31(24.8%) had nail biting. Among the respondents, 122(97.6%) students had intentions to participate in any education/campaign related to school health problems and 3(2.4%) declined.

**Table-V:** Reported injuries among the respondents

Injuries	Frequency	Percentage
Fall from height	25	20.0
Acid/alkali burn	2	1.6
Fighting with friends	6	4.8

**Table-VI:** Mental health issue among the respondents

Mental health issues	Frequency	Percentage
Difficulties to continue studies	54	43.2
Negligence of parents	12	9.6
Negligence of teachers	3	2.4
Physical assault by teachers/classmates	7	5.6
Others	6	4.8

## Discussion

A health-promoting School fosters health and learning with all the measures at its disposal, engages health and education officials, teachers, teachers' unions, students, parents, and community leaders in efforts to promote health, and strives to provide a healthy environment, school health education and school health services along with school/community projects.<sup>6,7</sup> The school strives to improve the health of school personnel, families and community members as well as students; and works with community leaders to help them facilitate community contributions to health and education.<sup>8,9</sup> Going by the maxim that it is better to be safe than to be sorry, the management of educational institutions can ensure the well-being of their wards by being watchful of the symptoms of health complications.<sup>10</sup> The study findings in a rural school showed that among the 125 respondents, the majority 43(34.4%) mentioned in the last six months they suffered from dental carries and the rest 21(16.8%), 7(5.6%), 6(5.2%), 11(8.8%), 10(8%) mentioned diarrhoea, chicken pox,

conjunctivitis, asthma accordingly, while 33(26.4%) had no diseases. 90(72%) had no eye problems, 106(84.8%) had no ear problems and 92(73.6%) had no injuries. 122(97.6%) mentioned that they would like to participate in any school arranged health campaigns related to school health problems. Among mental health issues, 54(43.2%) students reported difficulties to continue studies, while 12(9.6%) and 3(2.4%) mentioned about negligence of parents and of teachers respectively. 7(5.6%) students mentioned about physical assault by teachers or classmates and 6(4.8%) mentioned about experienced other situations like indulge in smoking/bad behaviour. Regarding bad habits, 17(13.6%) mentioned about their thumb sucking and 31(24.8%) had nail biting. These findings may raise the issue of addressing the different aspects of health with more cautious coordinated policies and strategies by all sectors related to the education of the country. Mental health, sexual health, and physical health are all concerns for middle and high school students.<sup>9-11</sup> Luckily, many of these issues can be avoided simply by having open conversations with the children. If parents are worried for them, finding a professional help should be in place.<sup>4,5</sup>

## Conclusion

Education and health are the cornerstones of human development. Healthy school environments play a key role in promoting student physical, mental and emotional health and well-being. A school health status assessment can reveal the need for a comprehensive health program like a Behavioural and Cognitive-Behavioral (BCC) program, particularly for addressing mental health challenges among students, especially in rural settings of a developing country like Bangladesh.

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