

Report on

**Study on Health and Hygiene Practise Among the
School Going Children in Bangladesh**



Submitted to :
Social Marketing Company (SMC)
SMC Tower, 33 Banani C/A, Dhaka-1213

Submitted by :
MRC-MODE Limited
House No. 119, Road No.1, Block No. F
Banani, Dhaka-1213

Date : January 17, 2008



Executive Summary

This study seeks to investigate SMC, a social marketing company's, understanding of the knowledge attitude and practices of health and hygiene of secondary school children in Bangladesh.

SMC has targeted secondary school children in this study, as this is the age when these individuals experience adolescence. Hence, children learn to embrace new and innovative ideas and concepts demonstrating ingenuity in this profound juncture, which includes learning about cleanliness.

The broad objectives of this study are exploring the demographic characteristics of secondary school-going children, discovering their knowledge and awareness on health and hygiene and its practices, finding out the level of knowledge of the target group towards nutrition/micro nutrition, determining their awareness of common diseases and general knowledge on puberty and reproductive health.

The study administers a quantitative method of investigation i.e., a Baseline Survey conducted in order to extract the major findings. Interviews of children and observations of various schools were administered accordingly, in structured form. A total of 1251 boys and 1253 girls were separately selected for the questionnaire survey. The number of students from urban and rural areas is 904 and 1600 respectively. Six hundred schools were selected across the divisions (roughly 100 in each division). The survey for this study was a cross sectional one and, as mentioned, assesses the health and hygiene practice of the school-going children. A large number of children from different age ranges (from class 6 to class10) were selected as a sample population, across districts. The sampling method used was Multistage Probability Sampling.

Field Supervisors/Quality Controllers were selected upon satisfying some criteria, such as possessing 2-3 years of experience of working with sensitive issues such as health and hygiene, and also equivalent experience of working with children. These workers were trained in context of conducting a field investigation. Data was checked and cross checked to ensure accuracy, consistency and of course, quality.

Firstly, the report ventures into the sanitation facilities at the schools being observed. The schools visited had 403 students and 14 teachers with 4 toilets per vicinity. 2342 latrines were visited in total. The latrines were checked whether they had proper accessibility, cleanliness privacy as well as facilities present inside. Great discrepancy is seen between urban and rural areas i.e., 82 per cent urban and 65 per cent rural. The highest number of septic tank/modern latrines was found in Dhaka (48%), Khulna (96%), Chittagong (88%) and Rajshahi (82%). The lowest number of septic tank/modern latrines was found in Sylhet (34%). As for their accessibility, 99 per cent of the 600 schools visited had a latrine. 75 per cent of the latrines were found to be accessible i.e., not under lock and key. More latrines in the urban areas were found to be accessible than in rural ones i.e., 81 per cent vs. 72 per cent. Latrines in Rajshahi and Sylhet had very low user rates as compared to the other districts. In 83 per cent of the cases the latrines were found to be ventilated. 80 per cent of all latrines had access to water inside them. There were a higher percentage of latrines in urban areas with water tanks. Only 69 per cent of all latrines were found to be clean. The level of cleanliness was observed via the extent to which remains were left after defecation; urination, dirt, stagnant water, etc. were present. Barisal had the lowest percentage of clean latrines. Almost 80 per cent of all the latrines were discovered to have no cleaning material inside e.g., soap, soil and coal. Rural areas were worse off than urban ones 46 per cent vs. 82 per cent. Only 18 per cent of the latrines had soap available for washing hands. 94 per cent of the latrines in Dhaka have a cleaner. 96 per cent of all latrines had a proper door and 96 per cent can also be locked from the inside. 93 per cent can be locked from the outside.

The proceeding section focuses on the source of drinking water that the various schools observed have. Tube-well water was found to be the main source of water in 600 schools. Tap water was only found in 10 per cent of the schools. Only 4 per cent of rural schools have taps as compared to 20 per cent in urban areas. 75 per cent of the schools that use tube-wells had them tested for Arsenic and 91 per cent proved to be Arsenic-free. These tests were done in higher numbers in rural areas than in urban ones 58 per cent vs. 84 per cent. 78 per cent of the schools had a glass or mug available for drinking water along with a higher percentage of these in urban areas than rural ones 80 per cent vs. 77 per cent.

General Facilities were looked into in the following section. A good number of schools were either very filthy (16%) or very clean (27%). In other divisions, the cleanliness of school vicinities was at a moderate level. Only 20 per cent of all the schools examined have first aid

boxes including other necessary materials. Approximately 90 per cent of the schools do not have any magazines available on health education. 34 per cent have posters or calendars based on health education. More rural areas than urban ones have posters and calendars available.

In terms of the conditions of the classrooms, 95 per cent of the schools had a ventilations system inside. There was again variation found between urban and rural schools in this regard. 4 per cent of the schools were damp and filthy. 65 per cent of them were dry and clean.

In chapter four, the actual knowledge and practice of the children towards health and hygiene is explored. Here, a series of demographic characteristics are initially presented to discover the kind of backgrounds that these children originate from. The average age range of the students is almost 14 years. Over 14 per cent of the students' fathers and 20 per cent of their mothers are uneducated. Urban boys come from relatively higher socio-economic statuses than urban girls. In rural areas, more girls attend school from relatively higher income families than boys. Girls come from a marginally larger family than boys. 65 per cent of the children's mothers are homemakers, while 33 per cent are children of peasants and 26 per cent of petty traders. 45 per cent of the children's homes have pit latrines. 27 per cent have modern ones. 34 per cent children watch educational shows. 42 per cent listen to the radio. Children's exposure to the media shows that 94 per cent had watched BTV in the last month along with 64 per cent watching various private channels.

As a source of drinking water at home, tube-well seems to be the most common for children (85%) along with uses such as washing hands before eating (79%), making *Pantha Bhaat* (77%), washing fruits and vegetables (67%), etc. Use of tap water and deep tube-well in rural areas is very low. 18 per cent homes in rural areas use pond water for washing fruits and vegetables. 73 per cent children drink tube-well water at school. Children's perception about safe drinking water is germ-free water (52%), 47 per cent children mentioned Arsenic-free water, pure water (29%), (11%) boiled water, etc. As a safe source of drinking water, 76 per cent chose tube-well, followed by 64 per cent mentioning rainwater, etc. More than half (52%) of the children apparently learnt about safe water sources from TV. 49 per cent got to know this from their school teachers and 29 per cent from textbooks. A higher percentage of girls learnt these facts from TV than boys. The knowledge of tube-well as a safe water source

increases by income and class. When asked about water storage and treatment 80 per cent agreed that water is to be treated once collected from a source. 81 per cent of all the children stated that their families boil water while 45 per cent said that they use purifying medicines.

Then, the personal hygiene practices of the respondents were analyzed. Most children wash their hands after defecating with soap and sufficient water and rubbing thoroughly. 68 per cent wash their hands thoroughly after defecating while 40 per cent wash their hands thoroughly before taking food. 39 per cent vs. 41 per cent boys to girls rigorously clean their hands with soap and water. Rural children are less frequent in clipping their nails than urban ones. 77 per cent children learnt about the importance of clipping their nails from the family while 23 per cent got to know about this practice from television and 11 per cent from text books. 88 per cent of the target group washes their uniforms once a week. Boy's clothes are washed more often than girls 70 per cent vs. 66 per cent girls. This is probably because boys play outdoors more than girls. The importance of keeping clothes clean was primarily learned from the family (78%), 40 per cent from teachers and from television (18%). 63 per cent of the children brush their teeth twice a day, while 33 per cent brush once. Girls brush more frequently than boys 62 per cent vs. 64 per cent. Those who brush their teeth also clean their tongues (53%). Children were found to urinate in other places inside the home besides a latrine. 97 per cent of the children use water to clean themselves. 88 per cent use a pair of sandals or shoes while using a latrine. 49 per cent said that latrines should be clean and hygienic. 39 per cent of the children said that toilets should be sanitary; there should be a proper water system with soap in them. Knowledge of a sanitary latrine comes from parents with more education and income. The children have also stressed that hygienic latrines should not spread germs and bad odors, latrines should be neat and clean. Rice fish, some meat, vegetables and *daal* are eaten as popular dishes. As part of their health needs, milk is drunk by children (37%) everyday. In the same way, 26 per cent of the children eat eggs twice a week. However, the intakes of these two items are dependent upon their family incomes. 51 per cent children drink eight glasses of water per day. Children recognized starch (97%) the most, followed by vitamins (64%), etc as vital nutrients of a balanced diet.

Some common diseases that children contract are diarrhea (57%) caused by drinking unsafe water and eating stale food, lack of cleanliness (31%), taking food from outside (20%) and the lack of sanitary latrines (16%). Television (60%) is the largest media source to the awareness of diarrhea, 49 per cent was family or relatives. The prevention of diarrhea

includes drinking safe water (51%), washing hands before eating (44%) and avoiding stale food (34%). 74 per cent of the children are aware that it is necessary to take oral saline. Many of the children mentioned liquid intake (30%). Other such diseases include Anemia and TB.

The final segment of this study covers puberty and reproductive health. The study intends to find out more about STI/STD and reproductive health. 92 per cent children are apparently aware of STD/STI while 95 per cent are aware of HIV/AIDs. 49 per cent stated that refraining from illegal sex is a preventive method to the above phenomena. 44 per cent said that not sharing needles could be an ideal method of prevention. 87 per cent children reported that they knew nothing about reproductive health. Of those who do know, textbooks and television are main sources of information. The low awareness related to condom use could be a result of an information gap simply because the above issues are socio-culturally taboo. 75 per cent of girls use rags during menstruation. Family is the main source of this feature. Most girls wash their rags with soap and water.

Conducting a baseline study into the significant issue of health and hygiene creates a platform for interventional measures to be taken by concerned stakeholders such as the central and local governments, development organizations and the society as a whole in order for children to prosper in an utmost happy and healthy environment in an ever-changing world.

Table of Contents

CHAPTER 1	1
THE BACKGROUND AND CONTEXT OF THE STUDY	
1.1 Background	1
1.2 Objective of the Study	2
CHAPTER 2	3
STUDY METHODS	
2.1 Study Approach	3
2.2 Study Design	3
2.3 Sampling Method And Sample Size	4
2.4 Field Data Collection	5
2.5 Data Entry, Checking, Cleaning And Analysis	6
CHAPTER 3	7
SCHOOL FACILITIES AND THEIR HYGIENE CONDITION	
3.1 Condition of Latrine	7
3.2 Drinking Water Source	11
3.3 General Facilities	13
3.4 Condition of Classroom	14
CHAPTER 4	15
KNOWLEDGE AND PRACTICE OF SCHOOL CHILDREN	
4.1 Demographic Profile of the Respondents	15
4.2 Drinking Water Source and its Use by Respondents	24
4.3 Personal Hygiene Practices of Respondents	28
4.4 Dietary Habits	33
4.5 Common Diseases	35
4.6 Puberty And Reproductive Health	41
CONCLUSION	45

Chapter 1

The Background and Context of the Study

1.1 Background

Health and Hygiene issues have always remained a major concern in countries like Bangladesh where infrastructures to ensure good public health is inadequate, and where a large proportion of the population is uneducated. As the awareness on health and hygiene issues are now spreading across the globe everyday, developing countries like Bangladesh are trying within their capacity to address to such issues. Since the time of the Independence of Bangladesh, social marketing has been playing a major role in shaping reproductive and child health related awareness and practices among the Bangladeshi population, especially the lower income segment. Social marketing can also bring behavioral changes among the target audience for the well being and betterment of the society and country as a whole. Today's children are tomorrow's future. For a healthy and prosperous nation in future, it is very important that today's children have the right knowledge and skill on proper health and hygiene practices.

SMC, a social marketing company, plans to have a thorough understanding of the current knowledge, attitude and practices of high school going children of Bangladesh. The key target of SMC for this study are students from the secondary schools as their age range is a critical one- the adolescent time of a person's life. It is a time when a person goes through a variety of physical, psychological, emotional, and situational changes. As they strive to cope with these changes, their creativity and openness to new ideas increases. So adolescents are more receptive for concepts and ideas of innovations and improvements. The population of secondary school going children in Bangladesh is very large in comparison to that of students in higher studies. There are 17,386 secondary schools in Bangladesh with 8,126,362 students. Out of these students, 46 per cent are male and 53 per cent are female. These children are being equipped with institutional education which will not only help them to absorb the message of health and hygiene better, but also will also spread the message among family members and society more efficiently. Awareness regarding various health and hygiene issues like drinking safe water, proper hand-washing habits, awareness about common diseases, eating a balanced diet etc. are the basic health and hygiene issues that every child

should be aware of and practice properly. Reproductive health and issues of puberty need special care and emphasis and are just as important even though it is harder to reach out on these issues in a society where most consider these issues as taboo. An overall understanding health and hygiene of high school going children was felt necessary to devise and implement any intervention for them. The current study commissioned MRC MODE to carry out such a research.

1.2 Objective of the Study

The study has been a baseline survey to assess the health and hygiene practices among the adolescent children who are going to the secondary schools that are mostly situated in the rural areas of Bangladesh.

The broad objectives of the study therefore seeks to analyze the following aspects of the school going children in Bangladesh:

- Demographic profile
- Knowledge and awareness on health and hygiene
- Practice of health and hygiene
- Knowledge and awareness on nutrition/ micro nutrition
- Knowledge and awareness on common diseases
- Knowledge and awareness on puberty and reproductive health

