

A STUDY ON THE STATUS OF SANITATION AND HYGIENE FACILITIES IN THE SCHOOLS OF KUMARGHAT MUNICIPAL AREA UNDER UNAKOTI DISTRICT, TRIPURA

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Abstract: Schools are the meeting point of the teacher-student-parent- community and hence the dissemination of information about healthy hygienic practices becomes easier there. It has been established that sanitation and hygiene facilities in schools affect the health, and attendance of students in a positive manner. It has a far-reaching impact on improving gender fairness and constructive influence on the communities Right of children to free and compulsory education (2009) necessitates the availability of safe drinking water and sanitation facilities in schools(DISE 2012). Keeping in view of this, ninety – three percent of schools in India have provisions for drinking water and sanitation facilities (DISE 2012). The Swachh Vidyalaya campaign was launched nationwide, in 2014, to bring about a marked change in the situation of sanitation and associated hygiene facilities in schools. Despite increasing efforts to improve school sanitation and hygiene services, management of these services in schools remains a consistent challenge that can negate the anticipated outcomes. Therefore, understanding the maintenance problems of the sanitation and hygiene facilities in order to provide quality school sanitation and hygiene services is needed to assure their effective utilization by the students. This study was conducted to understand if such provisions are available in the schools of Kumarghat Municipality under Unakoti district, Tripura. This study was conducted on the randomly selected 100 school students of Kumarghat Municipality under Unakoti district; Tripura and an Analytical survey method was used for the collection of data for this study. The mere availability of sanitation and hygiene facilities in schools does not ensure the good health of students. Therefore, an attempt has been done to inspect if the available facilities meet other necessary conditions such as functionality and accessibility. Additionally, students' awareness with regard to related illnesses and hygienic practices was also studied.

Key Words: Sanitation, Hygiene, Cleanliness, Functional, Accessibility.

1. INTRODUCTION:

The foundation of a healthy, comfortable and dignified life is laid by safe sanitation. Yet, for billions of people the reality is one in which they live in polluted environments. Around the world around 1.7 billion (around 21% of the world population) people do not have access to basic sanitation services such as private toilets or latrines. Sanitation can be defined as having access to facilities for the safe disposal of human (wastes and feces) and includes the collection of garbage, industrial and hazardous waste management and waste water treatment and disposal.

For the overall socio-economic progress of a country access to safe sanitation is mandatory. As recognized by the General Assembly of United Nations in 2015 safe sanitation has been recognized as a distinct right. Members of General Assembly of United States committed to the 2030 Agenda for Sustainable Development, including target 6.2 of the Sustainable Developmental Goals which is End open defecation by 2030 and ensure that everyone has access to sufficient sanitation and hygiene, paying particular attention to the needs of women, girls, and those in vulnerable situations. The current rate of progress to achieve this goal is very slow. At this rate, sanitation for all will only become reality in the twenty-second century.

Illnesses related to lack of clean water sanitation and hygiene facilities is one of the major health challenges in many communities of developing countries. To improve this abysmal situation the main motive is to increase the reach of maximum number people to sanitation and hygiene facilities and make them aware about how using such facilities will improve their health. In this respect schools play an important role. Schools are the meeting point of teacher-student-parent- community and hence the dissemination of information about healthy hygienic practices becomes easier there. It has been established that sanitation and hygiene facilities in schools affect the health, attendance of students in a positive manner. It has a far reaching impact on improving gender fairness and constructive influence on the communities.

In most developing countries including India, schools are the only organized institution that provides a place for children to learn and play. As schools provide the ideal setting to promote learning, it is relatively easy to teach the students about the personal hygiene and environmental sanitation in schools. This makes it easier for students to adopt good hygienic practices during their formative years. What they learn is passed to their families and trickles down to the community. For many children schools become the first place where they get to observe working toilets, well ventilated classrooms, running water and clean surroundings. This has a powerful impact on their mind as to how sanitation can improve their lives and that of their communities.

According to a study, nearly 22% of schools in India do not have appropriate toilets for girls and 58% of preschools had no toilets and water on their premises (Rapid survey on children 2013-14, UNICEF). Infrequent soap provision and poorly maintained toilets are often observed within a few months or years after the services are implemented in the school. Among the many initiatives taken by the Government of India to bring a pivotal improvement in this situation of sanitation, the Swachh Vidyalaya campaign was implemented following the Swachh Bharat Abhiyan (CLEAN INDIA MISSION). It was launched nationwide in 2014, to ensure that every school in the country has a set of functioning and well-maintained water, sanitation and hygiene facilities(WASH). These facilities included two components: 1) technical components such as drinking water, hand washing, toilet and soap facilities and 2) human development components that promote conditions within the school and practices that help to prevent water, hygiene and sanitation-related diseases.

Despite increasing efforts to improve school sanitation and hygiene services, management of these services in schools remains a consistent challenge that can negate the anticipated outcomes. Therefore, understanding the continued management of the sanitation and hygiene facilities in order to provide quality school sanitation and hygiene services is needed to assure their effective utilization by the students. This study focuses on the current status of sanitation and hygiene facilities in the schools of the Kumarghat Municipality area under the Unakoti district in Tripura.

2. OBJECTIVES OF THE STUDY:

The study has been conducted for the fulfilment of the following objectives:

- To find about the availability, functionality and accessibility of sanitation and hygiene facilities in the selected schools.
- To assess student's awareness about related illness and hygienic practices.

OPERATIONAL DEFINITION OF THE TERMS USED:

- **Sanitation:** Behaviors, facilities and services that come together to provide a hygienic environment to live a healthy life.
- **Hygiene:** Behaviors that lead to good health such as hand washing and bathing with soap and water, covering hands and nose while coughing or sneezing etc.
- **Cleanliness:** Cleanliness here denotes no visible feces, urine and no foul smell in the toilets and urinals.
- **Functional:** Functionality here denotes that the locks on doors and windows work properly providing privacy, waste is easily flushed and the passage of waste to go out of the facilities are clear, necessary repair work such fixing broken tap, looking after the maintenance of the facilities.
- **Adequacy:** The number of toilets, urinals and hand washing facilities in the school meets the needs of the students.
- **Accessibility:** It includes the easy movement of students in and out of the toilets and urinals during school hours, all the toilets and urinals are in usable condition.

3. LITERATURE REVIEW:

Access to safe sanitation is a human right. It plays an essential role in the fulfilment of child rights and in the achievement of good physical, mental and social well-being. As recently as 2015, nearly 568 million people in India suffered due to a lack of toilets. In 2019 an estimated 19% of schools worldwide had no sanitation services. Around 367

million children study in schools worldwide where there is no sanitation facility.(UNICEF&WHO2019,)In accordance to the data sheet by WHO (WHO 2013) diarrhoea was the leading cause of child mortality and morbidity killing an estimated 760,000 children every year. A study titled “School environment and sanitation in India” carried out by Majra & Gurin Mangalore Taluk in Daksahan Kannada district of Karnataka showed that 18 out of 20 selected government schools had adequate drinking water points, however, latrines were available only in half of the selected school and 60% of the schools were requiring latrines for girls. In the same study, it was seen that none of the selected schools had any separate urinal facilities and the students of the school were using latrines for the purpose of urination. The study reported that the hand washing facilities in most of the schools were in pitiable condition with only two (10%) of the schools having appropriate hand washing points along with soap.

In the study titled “Water sanitation hygiene knowledge, attitudes & practices among school settings in rural Chennai” conducted by S.Vishnupriya et al ., in a single government school, the students reported that the drinking water of the school was from groundwater and 71 % of the students found toilets facilities in their satisfactory,80% of the students used water and soap for washing hands,41.4% of the students felt that the drinking water facility in their school was not enough for meeting their daily water requirements,30% of the students practiced washing hands after defecation though the majority of them practiced washing hands before eating food (80%) and after eating food(63%) and whenever their hands were dirty (40%).

The authors of the study "Effect of Menstruation on Girls and Their Schooling, and Facilitators of Menstrual Hygiene Management in Schools" discuss these issues. Surveys in Government schools in three states in India, 2015 Sivakami et al., 27% of the respondents reported that the disposal facility for menstrual waste was good in their schools. In the same review it is stated that 81% of the respondents reported that they were regularly given pads in schools.

In a study conducted in two urban and two rural schools of Nepal by Shrestha et al., titled “Study on Knowledge and Practices of Water, Sanitation and Hygiene among secondary school students When compared to urban schools, it is demonstrated that rural schools' toilets are inadequate, with one rural school having improper access to the toilets. hand washing practices was seen in both urban and rural schools though its prevalence was higher in the urban schools. The knowledge about the route of transmission of waterborne diseases like diarrhea was also seen to be lower in students of rural schools in comparison to their urban counterparts.

In a study performed in three government schools of Kollam district, Kerala, titled “Sanitation facilities in government schools and associated health problems in adolescent girl students” by Dr.Giji Francis and R. Reshma, 72% of the respondents had adequate knowledge about health and hygiene, 68% of the students responded that the toilets were cleaned only once a month as a result of which the toilets were smelly and dirty,58% of the students reported the toilet conditions to be poor and unhygienic with lack of privacy in them.

According to the study titled “Water Supply and Sanitation Facilities in primary schools of Gaibandha Districts in Bangladesh” by Islam et al.,82% of the schools had one or two functional toilets whereas 69% of the schools had separate toilet facilities for girls,31% of the schools had soap inside the toilets and 20% of the schools surveyed had hand washing facility outside the toilet with no school having any hand washing facility inside the toilet.

After going through all of the above papers it came to the forefront, that even though sanitation and hygiene facilities were present in most of the schools in India and in neighboring countries they are many underlying issues affecting the effective implementation of these facilities which have to be analyzed and necessary solutions for these problems have to be worked out in order to improve the situation.

4. RESEARCH METHODOLOGY:

Analytical survey method was used for the present study. In this survey research, data is collected form a large sample and analysed representing a specific population. Through this study researcher aiming to get a picture of the present state of the sanitation and hygiene facilities in the a few selected schools in the Kumarghat Municipality under the Unakoti district of Tripura. Researcher also assessing student’s awareness about hygienic practices and their knowledge about diseases that occurs as a consequence of not following healthy practices. The method of inquiry for this survey was quantitative and qualitative in nature.

POPULATION OF THE STUDY:

All the students studying in the Government and Government aided schools of Kumarghat subdivision was taken as the population for this study.

SAMPLE AND SAMPLING OF THE STUDY:

For this study, Researcher used simple random sampling method and selected five Governments and Government aided schools in Kumarghat Municipality. schools, from which we have taken 10 students each from standard VIII and IX respectively i.e. total 100 students are selected as sample for the present study.

TOOLS AND TECHNIQUES USED FOR THE STUDY:

The data for this study was gathered using questionnaire, interview of the students. The survey was filled by the students themselves. Around 20-30 minutes were taken to fill up the survey.

ANALYSIS & INTERPRETATION OF THE DATA:

Data pertaining to Objective 1: To find about the availability, functionality and accessibility of sanitation and hygiene facilities in the selected schools

TABLE 1 & TABLE 2 Showing the facilities available in the school

Facilities Available	Yes	No
Toilets	100	0
Urinals	98	2
Separate toilets & urinals for boys and girls	76	24
Hand washing facility	76	24

Table: 1

FACILITIES AVAILABLE	RESPONSES
Only water	69
Only soap	0
Both soap and water	25
None	6

Table: 2

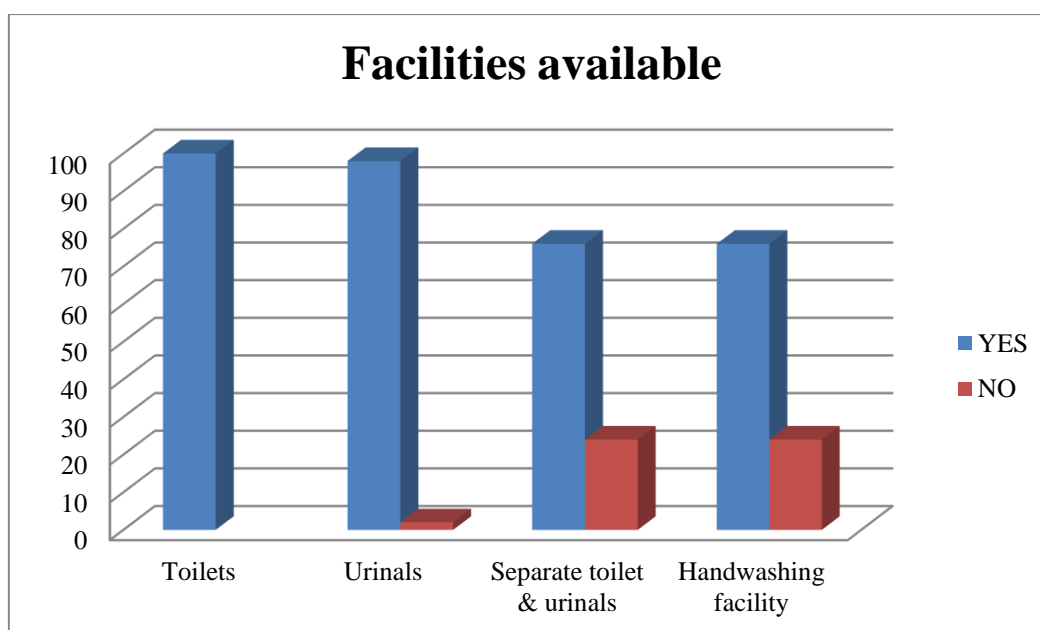


Fig 1: Graph showing the data of table 1

From Fig 1, it is found that toilets and urinals are present in all schools. Majority of students have responded that the provision of separate toilets and urinals for boys and girls are present in their school. Also, most of the students have

responded that their schools have hand washing facilities. From table 2, it shows that majority of the students have responded that only water is available in their school which points to the lack of soap in the toilets and urinals.

TABLE: 3

Facilities Available	Yes	No
Clean water	75	25
Sanitary napkin	57	43
Napkin disposal facility	5	95
Adequate no. of toilets and urinals	46	54

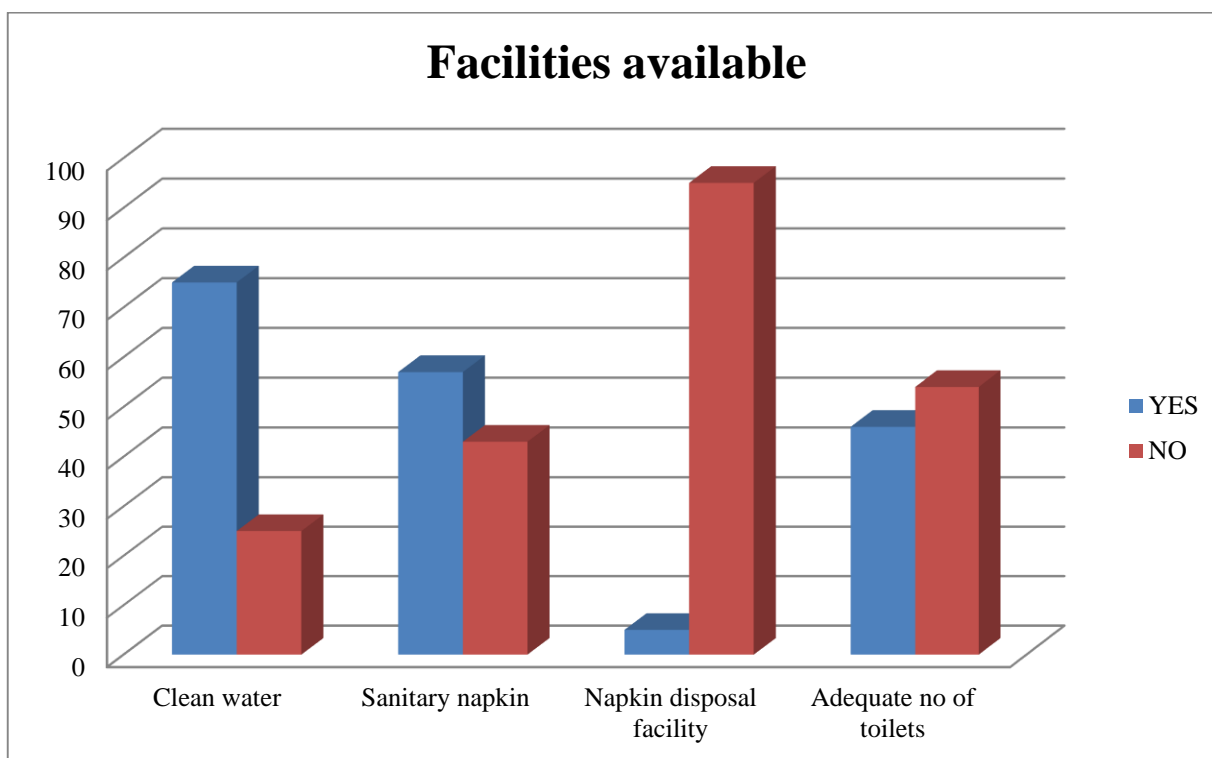


Fig 2: Graph showing the data of table 3

From Fig 2, it shows that majority of the students have responded to having clean water and sanitary napkins for emergency use in their schools. However, their response to having proper sanitary napkin disposal facility in their school is clearly in the negative. Their reply with respect to having adequate number of toilets and urinals differs by a small margin, with majority of them not being satisfied with the number of toilets and urinals in their school campus.

TABLE: 4

Functionality Of Facilities	Always	Sometimes	Never
Door locks working	65	20	15
Clogged urinals & toilets	21	64	15

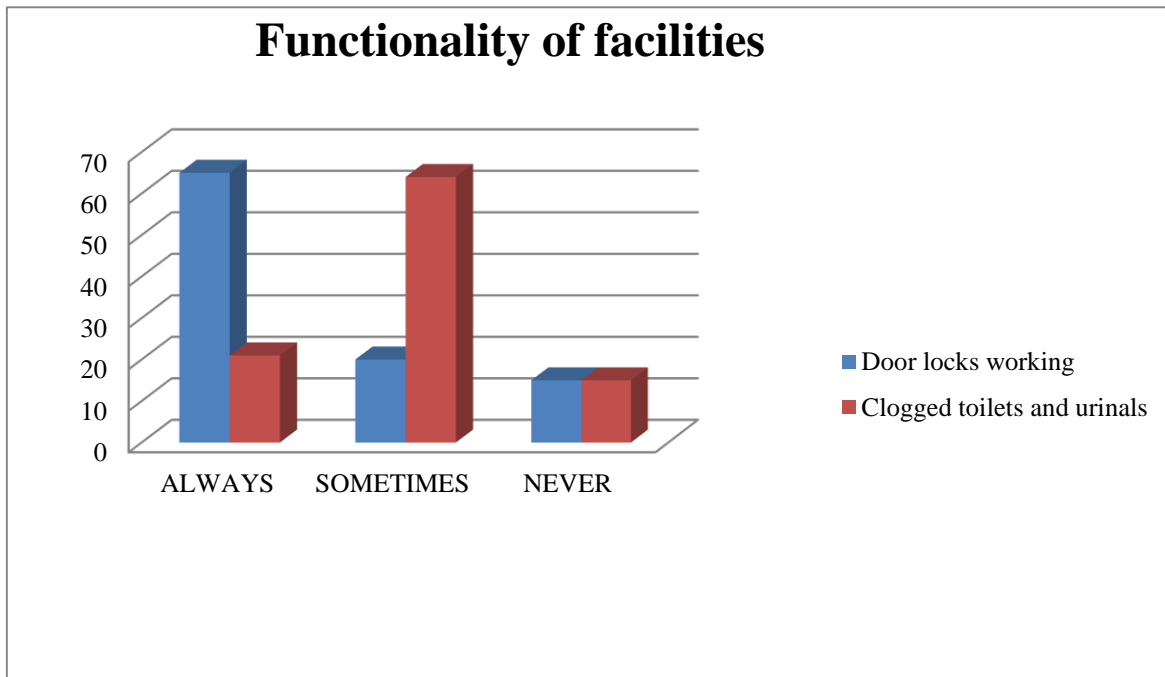


Fig 3: Graph showing the data of table 4

From the Fig 3, it shows that majority responses agree with the proper working of locks of doors of the toilets while majority students responded that the toilets and urinals of their schools remained clogged sometimes.

- Students were asked “Who is responsible for the maintenance of toilets and urinals in the school?”

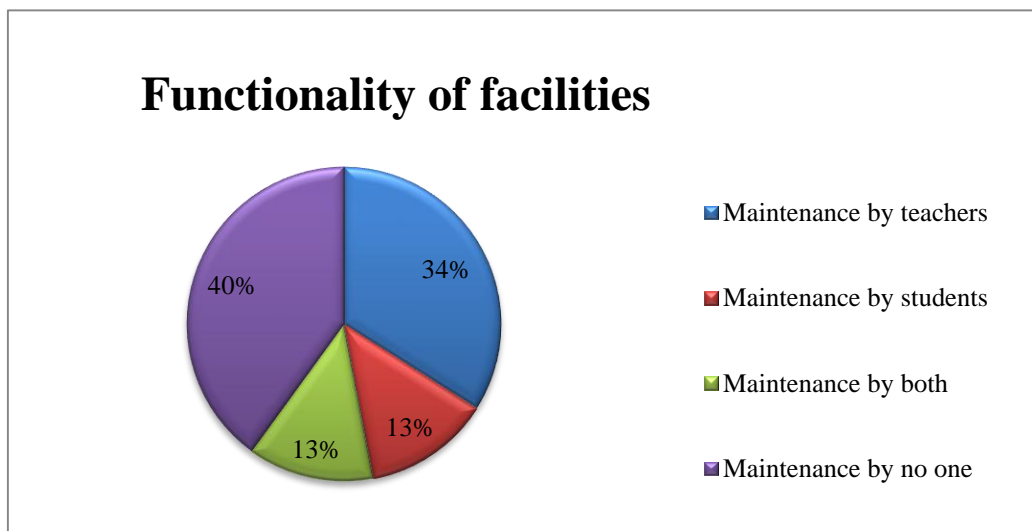


Fig 4: Graph showing the people responsible for maintenance of toilets and urinals in school.

From Fig 4, it shows that the majority of students replied that there was no authority responsible for the maintenance of toilets and urinals in the school.

- Students were asked “How will you rate your accessibility to the toilets and urinals?”

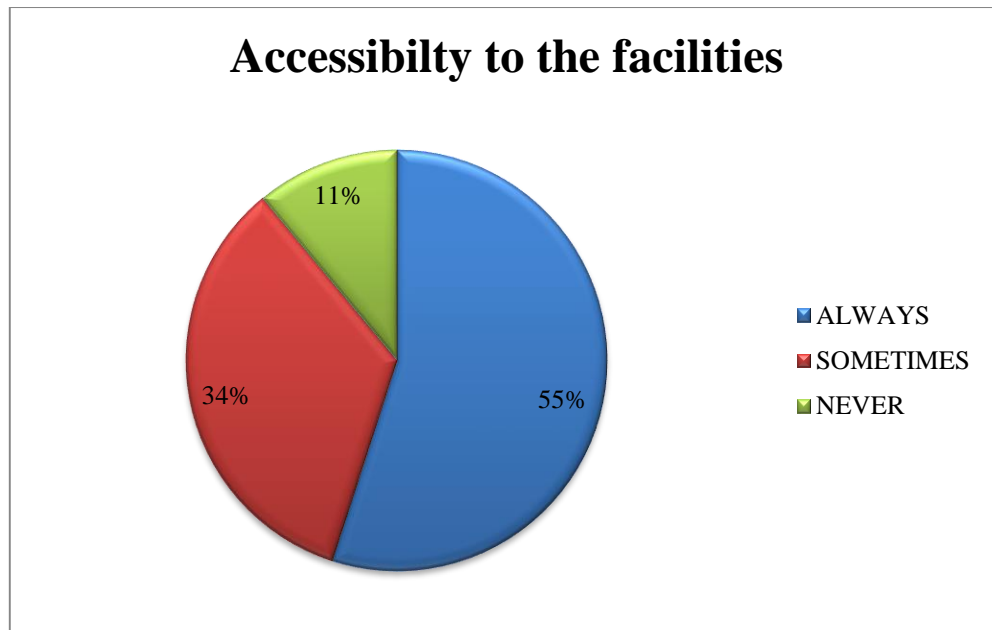


Fig 5: Graph showing the accessibility of students to the sanitation & hygiene facilities in school.

From the Fig 5, it shows that majority of the students are able to access the sanitation and hygiene facilities available in the school.

- Students were asked “Can you use all the toilets and urinals in the school?”

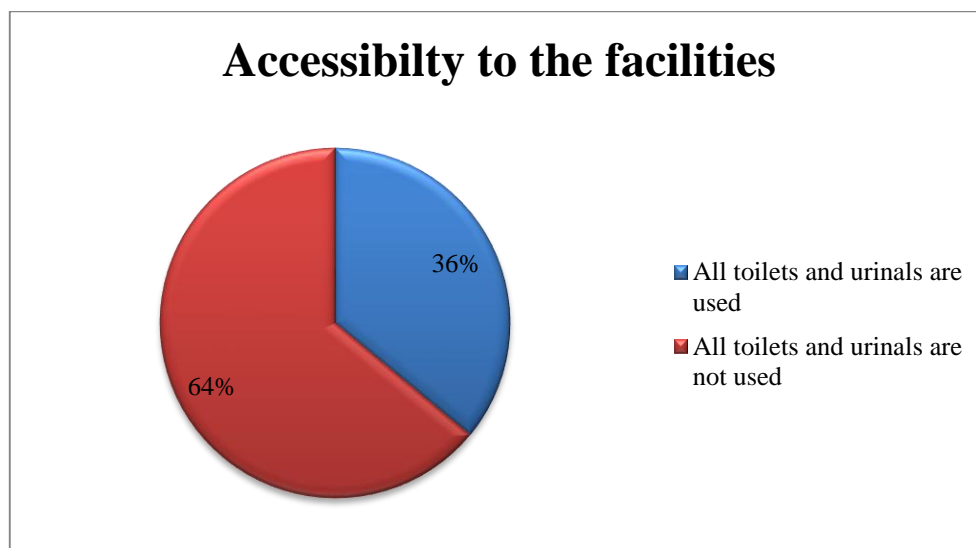


Fig 6: Graph showing the usability of toilets and urinals by students

From the graph in Fig 6, It can be conclude that most students are not able to use all the toilets and urinals present in their school campus.

Data pertaining to Objective 2: To assess student’s awareness about related illness and hygienic practices.

- Students were asked “Do you wash your hands after using the toilet?”

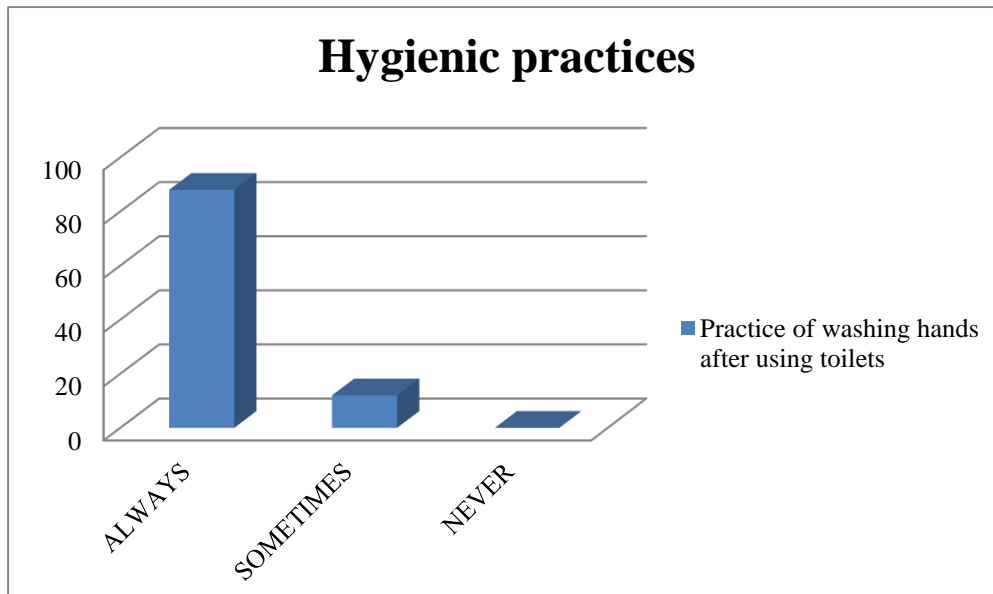


Fig 7: Graph showing the prevalence of hand washing in students

From Fig 7, it shows that majority of students always washed their hands after using toilets.

- Students were asked “Which of the following diseases occur as a result of drinking unsafe water?”

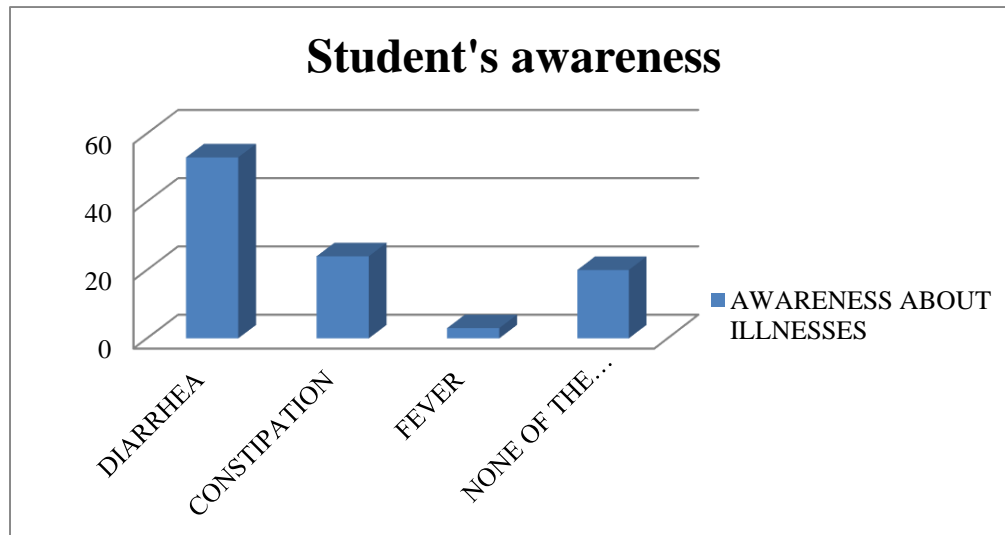


Fig 8: Graph showing student's awareness about different illness

From Fig 8, it shows that majority of the responders are aware about the diseases such as diarrhoea that happens due to drinking of unsafe water though a measurable responses also show the lack of knowledge of water borne illnesses among students.

5. FINDINGS OF THE STUDY:

Availability of Sanitation and Hygiene Facilities:

- All the participants reported having toilet facilities in their schools.
- 98% of the respondents reported having urinal facilities whereas only 2% reported as having no toilet facilities.

- 76% replied having separate toilet and urinals for boys and girls in their schools.
- 76% respondents replied having hand washing facilities in their schools and 24% students replied in negative.
- 54% of the students replied that the number of toilets was not adequate to meet their requirements and 46 % replied that the number of toilets in their schools was adequate in number for them.
- 69% students replied that their school toilets and urinals had only water but no soap in them, 25% responded that both soap and water were available and 6% replied that neither soap nor water was available.
- 42% students responded that enough water was always available in the school toilets and urinals to meet their needs 28% replied that enough water was sometimes available while 30% replied that there was never enough water.
- 75% responses stated that the water available in their school was clean and 25% responses were in the negative.
- 57% of responses stated that sanitary napkin was available in the school for emergency use.
- 95% students responded that no facility was available in the school for the disposal of sanitary napkins 5% responded in positive.

Functionality of Sanitation & Hygiene Facilities:

- 65% of the total responses stated that the locks on the doors of the toilets were always working, 20% replied that the locks worked sometimes and 15 % replied that the locks never worked.
- 64% students responded that they found the toilets and urinals to be clogged sometimes, 21% students found that they always found the toilets and urinal always clogged and 15 % students responded that they never found toilets and urinals clogged.
- 74% of the responses stated that there was no repair work done in the toilets and urinals in the last 6 months.
- 34% of the feedback stated that the responsibility of maintaining school toilets and urinals was under the care of teachers, 13% students responded that they were responsible for maintenance, 13 % replied that both students and teachers were responsible and 40 % replies mentioned that no one in their school was assigned this responsibility.
- 55% of the students rated the cleanliness of their school toilets and urinals as poor, 37% of the replies stated the cleanliness as average, 8% of the students responded the cleanliness as good.

Accessibility to the Sanitation & Hygiene Facilities:

- 55% of the students gave the feedback that the toilets and urinals were always accessible, 34% of them replied that the toilets and urinals were sometimes accessible and 11% responded that the toilets and urinals in their schools was never accessible.
- According to 76 % of the responses the toilets and urinals were cleaned twice a year, 11% responded that they were cleaned twice in 6 months and 13% responded that the school toilets and urinals were cleaned twice in 1 month.
- 64% of the responses stated that they were not able to use all the toilets and urinals in the school 36% of the responses were in the positive.

Student's Awareness about Related Illness & Hygienic Practices:

- 88% of the total responses stated that they always washed their hands after using the toilets and urinals.
- 53% of the students replied that as a result of drinking unsafe water diarrhea could inflict them, 24% of the replies were in favor of constipation, and 3% responses stated fever, 20% the students chose none of the stated diseases.

6. DISCUSSION ON THE STUDY:

Right of children to free and compulsory education (2009) necessitates the availability of safe drinking water and sanitation facilities in schools (DISE 2012). Keeping in view of this, ninety – three percent of schools in India have provisions for drinking water and sanitation facilities (DISE 2012). This study was conducted to understand if such provisions are available in the rural schools of Tripura. The mere availability of sanitation and hygiene facilities in schools does not ensure the good health of students. Therefore, an attempt has been done to inspect if the available facilities met other necessary conditions such as functionality and accessibility. Students' awareness with regard to related illnesses and hygienic practices was also studied.

The study was carried out in five Government and Government Aided schools of the Kumarghat Municipality area, under the Unakoti district of Tripura. The students of standards VIII and IX were selected for the study. The total number of students studying in both classes from the selected five schools was 610 out of which 100 students participated in the study. The survey for the study was done using a self-made questionnaire that was given to the students.

From the findings of the study we can see that that all the schools had toilet facilities in their school. Urinal facilities were present in all schools with the exception of one school where urinal facilities was not available for the boys. 76% of the students agreed to having separate toilet and urinals for boys and girls as well as hand washing facilities in the school. 54% students perceived that the number of toilet facilities was not enough to meet their needs and that constructing a few more toilets would assist them, as they had spent more time due to long lines during recess periods. 64% of the students complained about having no soap in the toilets which points to the unmet condition of appropriate sanitation and hygiene facilities in the schools. Previous studies have also shown similar outcomes (Islam et al., 2015). 42% students perceived that enough water was always available in the schools and 75% students considered the water as clean. However, the students added that that they never drank the water as they did not think it to be safe enough for drinking but used it only for washing hands, feet and utensils of mid-day meal. While most schools availed water from Government supply facility, in one school the students reported that the water available in their school had a full smell. When enquired further they responded that the source of water in their school was groundwater which was not purified accordingly, and a few of them reported facing stomach related issues upon drinking this water. In four out of the five schools selected for the study, the girls responded that sanitary napkins were available in their school and they had to procure it from an assigned teacher in the school whereas in one school sanitary napkin dispenser was installed for them. Previous studies showed that sanitary was available to most of the girls in the school (Sivakami et al., 2019). The responses of boys regarding the availability of sanitary napkins in their school was not encouraging as most of them were unaware about it. With the exception of one school, the students of four schools responded having no facility for the proper disposal of the sanitary napkin. Prior studies also reported the lack of sanitary disposal facility in most schools (Sivakami et al., 2019)

The locks on the doors of the toilets were working according to 65% of the responses which shows that most of the school toilets and urinals offered privacy to the students. However the students were not satisfied with the cleanliness of the toilets and urinals as 55% responded that the cleanliness to be poor. According to 76% of the responses the toilets and urinals were cleaned twice a year which is very less, 40% of the participants replied that the no one in their school was assigned with the duty of maintenance toilets and urinals, 64% of the students found the toilets and urinals to be clogged sometimes as no repair work was done 6 months, according to 74% of the responses. The students complained about foul smell in the toilets and urinals. Due to poor cleanliness 64% of the students could not use all the toilets and urinals in the school. Prior studies have shown similar findings (Islam et al., 2015) 34% of the responders were sometimes able to access the toilets and urinals and 11% could never have access them. When enquired further they stated the reasons such as the toilets and urinals remaining locked, the path had overgrowing vegetation in the surrounding or it was littered with garbage.

The students were well aware of hygienic practices as 88% of the participants always washed their hands after using toilets. Prior studies have shown a lesser percentage of such practices in students after defecation (S. Vishnupriya et al., 2015). 53% of the participants had knowledge about the cause of diarrhoea which is caused by drinking unsafe water.

Therefore, we can conclude that while all the selected schools had sanitation and hygiene facilities, they were not being utilized by all the students at the maximum. The participant students were well aware of the hygienic practices and the cause of common diseases like diarrhoea. The study was conducted as an attempt to understand the problems that hindered the appropriate utilization of these facilities by the students.

7. CONCLUSION:

Individual health and hygiene is largely dependent on adequate availability of clean water and proper sanitation. Therefore, a direct relationship between water, sanitation and health. Providing students with clean water options and better functional toilets and urinals are essential. This will increase school attendance, reduce disease and improve hygienic behaviors among students. Although the schools in Kumarghat Municipal Area have sanitation and hygiene facilities, there is generally inadequate management of these in the schools. The schools authorities should pay more attention to the improved management of the facilities so that the students can take full benefit of the facilities.

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