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ABSTRACT
Inadequate sanitation has been found to be a major problem in primary schools and now as Universal Primary Education (UPE) begins to offload pupils into the secondary school system, the same problem might begin to affect secondary schools. This study, therefore, sets out to investigate sanitation management at Bassajabalaba Secondary School Bushenyi District in Ishaka Municipality. The required information was gathered using four methods namely, in-depth interviews, surveys, focus group discussions, and observation. Two categories of respondents were used including head teachers and students. It was found that although the sampled secondary school on a variety of sanitation facilities, there is generally inadequate coverage of sanitation facilities at the school, and the phenomenon is exacerbated by the ever-increasing student population due to increasing enrolment for secondary education resulting from Universal Primary Education. The cleanliness of the available sanitation facilities is not at its best and this forms part of the reasons why some students ignore using facilities and instead opt for use of bushes around the school. It was recommended that there is a need to develop sanitation programs under which the challenge should be tackled right from the root rather than attempting to manage the resultant consequences. School administrations need to prioritize the aspect of sanitation and hygiene.

Keywords: Sanitation, management, Bassajjabalaba, pupils, sanitation and facilities.

INTRODUCTION
Hygienic sanitation is crucial for public health. Diseases related to inadequate water, sanitation, and hygiene are a huge burden in developing countries [1-6]. It is estimated that 88% of diarrheal disease is caused by unsafe water supply and inadequate sanitation and hygiene [7-9]. In 2015, 68% of the world’s population had access to improved sanitation facilities compared with 54% in 1990 [6]. Nearly one-third of the current global population has gained access to an improved sanitation facility since 1990, a total of 2.1 billion people. 2.4 billion people still don’t have basic sanitation facilities [10-16]. Among the pre-urban population of the developing countries, only about 65% have house connections and an additional 20% have access to public taps, about half of these are intermittent [17-20]. Of the rural population only about 60% have access to safe water and few of these have house connections. Population growth particularly in urban areas means that capacity must be increased simply to prevent the percentage served from falling [21-26]. Over the years, government will support from multilateral and bilateral agencies, NGOs and the private sector has supported programs aimed at improving the sanitation situation. However, the emphasis has mainly been on the provision of safe and clean water, with less emphasis on latrine construction and virtually no emphasis on other sanitation facilities[9].

While access to improved water sources has grown in urban areas, progress has stagnated at 85% [10] as urban populations grow. Between 2000 and 2010, 84 million urban Africans gained access to improved water and supply and 42 million to improved sanitation, and an impressive 3.9% average increase in access over the
millions, of which 24 million lived in rural areas [11]. Access to safe water facilities was estimated at 57% for rural and 80% for urban areas and for sanitation it was estimated at 56% for both urban and rural areas which mean almost half of Uganda’s rural population does not have adequate water and sanitation facilities [12]. Waterborne diseases, including malaria followed by diarrhea, have been identified as the main causes of infant mortality [13-17]. In 2007, Uganda formulated the Poverty Eradication Action Plan (PEAP) as the core of the government’s strategies toward its goals of poverty alleviation and poverty-focused growth, and improved water supply and sanitation services was identified among the key priority areas for poverty eradication.

Sanitation in Ishaka municipality is still not satisfactory. The district has a latrine coverage of 40% and safe water coverage of 18.3% [18]. A five-year Water and Sanitation Project (WES) has been operating in the district since 2006. It protects water sources, trains community members in the maintenance of the same, and offers demonstration units to some institutions like schools. The commonest outpatient department illnesses in Ishaka municipality are malaria, cardiovascular illnesses, diarrhea, malnutrition, skin diseases, eye infections, anemia, trauma & AIDS-related diseases [19, 20]. These greatly contribute to the poor health situation manifested by the high infant mortality of 94 out of 1000.

Lack of sanitation facilities can cause distress. Women and girls in particular face problems of distance, lack of privacy, and personal safety. Poor sanitation is also a serious threat to the cleanliness of the environment and the water resources used for the supply of drinking water [21]. But beyond being just an issue of convenience, students have a right to basic facilities such as school toilets, safe drinking water, clean surroundings, and basic information on hygiene. In addition, if sanitary conditions are created students will be more enthusiastic to come to school, will enjoy their school experiences and will learn better; and can bring concepts and practices on sanitation and hygiene back to their families [22]. Schools can play an important role in bringing about behavioral changes and promoting better health as students are potential agents of change in their homes through their knowledge and use of sanitation and hygiene practices learned at school [23]. It has been observed that in situations where sanitation is inadequate or absent, hand washing is very crucial in terms of interrupting fecal-oral disease transmission routes [24]. Diarrhea, worm infections, and skin infections are diseases related to water and sanitation. About three million children die from diarrhea each year [25]. Each of the three common worms (roundworms, whipworms, and hookworms) is estimated to infect more than 500 million people. Roughly 6 million people have become blind from trachoma, an eye disease.

In Uganda, Schools suffered a great deal of neglect during the 1970s and 80s - because of wars and political and economic mismanagement at every level, from the central government down to the community [26]. As a result, the inadequate sanitation situation in schools had been exacerbated by the implementation of this education policy which entitles all school-age children to free primary education, causing the number of students per latrine stance to exceed 700:1 when in 1995 it was 328:1 [26]. The Ministry of Education’s recommendation on sanitation requires a ratio of 40:1. A UNICEF study found that over 1,200 school children died because of poor sanitation conditions at school during the 1997 cholera outbreak [18]. Consequently, 560 primary schools around the country were closed because they lacked acceptable latrine facilities. A good percentage of the UPE pupils are now entering the secondary schools in the Bushenyi district and the increased numbers of students in secondary schools could have the same impact on proper sanitation in this section as well.

**Problem Statement**

Inadequate sanitation has been found to be a major problem in secondary schools,
especially since the introduction of UPE in the mid-1990s in primary schools. Now, as the UPE program begins to offload these pupils into the secondary school system and the Universal Secondary Education program also rolls out, which in turn affects the secondary schools. Despite the efforts that have been directed towards addressing the issue of poor sanitation in schools in Bushenyi District for example the UNICEF Water, Environment and Sanitation (WES) program 1995-2000 and The UNICEF School and Community Hygiene and Water Programme (2001-2005); and the fact that the Ministry of Education encourages and provides guidelines for sanitation in schools, little is known about the proper sanitation management at Basajjabalaba secondary school Bushenyi district Ishaka municipality.

Aim of the Study
The overall purpose of this study was to find out the sanitation management at Basajjabalaba secondary school in Bushenyi district Ishaka municipality.

METHODOLOGY

Research Design
The research was cross-sectional. It utilized both qualitative and quantitative methods of inquiry. The quantitative aspects were used to capture quantifiable patterns and the qualitative aspects were used to explore in-depth the issues at hand.

Area and Population of Study
The study was conducted at Basajjabalaba secondary school. The study population included students and teachers.

Sample Size and Selection
A total of 17 respondents participated in the study. The breakdown of this is 1 respondent (Head teacher) and 1 respondent (one class teacher) as a key informant for in-depth interview; 5 students for Focus Group Discussion (FGD) and 10 students as respondents for the survey. The Head teacher was purposively selected due to the key position he holds. For the students’ a simple multi-stage sampling technique was used. In total, 10 students were chosen by lottery: 4 students from Senior 2 and 3 and 6 students from Senior 4 and 6). For FGDs, 5 students were used from seniors 1 and 5. This is because students from Senior 2, 3, 4, and 6 have been in school for at least two years and therefore they have knowledge of the state of sanitation of the school. Thus they were competent to make independent judgments. One Head teacher and one Class teacher for the in-depth interview were got from the target school. Head teachers are chosen because of the positions they hold in schools.

| Table 1. Summary of sample selection |
|-------------------------------|-----------------|
| Headteacher                   | In-depth interviews | 1 |
| Students                      | FGDs             | 5 |
| Students                      | Survey interviews | 10 |
| Class teacher                 | In-depth interviews | 1 |
| Total                         |                  | 17 |
Data Collection Methods
As already stated they employed both qualitative and quantitative data collection instruments. And these include:

Survey Questionnaires
The sample survey questionnaires constituted the main research instrument because it is easy to use on a large number of subjects, ten students. It has the advantage of facilitating the collection of a lot of information in a relatively short time and can be answered by respondents without explanation.

In-depth interviews
The researcher conducted interviews with key informants like; Headteachers and the Class Teacher. This enabled him to come across new ideas. This interview method was appropriate as it brought the interviewer and interviewee close to each other. It enabled probing and cleared ambiguities, generated firsthand information, had a high response rate, and enabled the acquisition of data there and then.

Focus Group Discussions (FGDs)
These are group discussions with students. They were adopted so as to complement the quantitative method by soliciting explanations that cannot be quantified through a sampling view.

Data Analysis and Management
Quantitative data: After collection, survey data was edited and coded. This is where data is examined for errors and omissions and corrected where necessary and possible. In the coding process, data is organized into categories after which, numerals were assigned to each item before entering them into the computer. After entering using the SPSS program, the computer was used to generate quantitative results including the percentages.

Qualitative data: After collection, is coded and analyzed. Editing involved examining data for errors and omissions after which, corrections were done accordingly where possible. Coding involved organizing data into classes/categories in relation to the themes of the study. After this, interpretations were made before making conclusions.

RESULTS
Sanitation Facilities and Materials Available at the School
This was the first objective of the study. Through observations and inquiries with administrative authorities, the table below presents data regarding the actual sanitation facilities and materials available in the sampled school:
The table 2 below indicates that three pit latrines were found, two for students and one for teachers

Table 2: Sanitation Facilities and Materials
<table>
<thead>
<tr>
<th>Pit latrines</th>
<th>Flush toilets</th>
<th>Urinals</th>
<th>Sources of water facilities</th>
<th>Hand washing facilities</th>
<th>Toilet papers</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>For teachers</td>
</tr>
</tbody>
</table>

The majority of the students at school indicated that their school has pit latrines as their toilet facilities. Besides the pit latrines and urinals, information from the key informant interviews revealed the availability of bathrooms, open rubbish dumping pits, and composite pits for solid waste but these were not mentioned by students.

Students’ awareness of the consequences of poor sanitation
Reflecting on the fourth objective, the study endeavored to establish whether students have knowledge of the consequences that would arise from poor sanitation and hygiene practices. The responses are tabulated as follows:
### Table 3: Types of diseases from poor Sanitation and Hygiene

<table>
<thead>
<tr>
<th>Response</th>
<th>Senior 1 and 2</th>
<th>Senior 3 and 4</th>
<th>Senior 5 and 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stomach worms</td>
<td>15</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>26</td>
<td>18</td>
<td>17</td>
</tr>
<tr>
<td>Others</td>
<td>9</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
</tbody>
</table>

The majority of the students from seniors one and two mentioned that poor sanitation and hygiene practices may lead to contracting stomach worms while the majority of students from seniors five and six indicated that poor sanitation and hygiene may lead to diarrhea. Others from seniors three and four mentioned that the adoption of poor sanitation and hygiene practices like drinking unsafe water would lead to contracting typhoid fever. Students are therefore knowledgeable of the dangers of poor sanitation and hygiene practices. However, students added that such diseases have not been common at their school a study indicating fair standards of sanitation and hygiene. Efforts were also made to establish whether students have knowledge of the diseases that would arise out of using unsafe water. The findings are tabulated as follows:

### Table 4: Knowledge of Diseases acquired through the use of unsafe water

<table>
<thead>
<tr>
<th>Diseases</th>
<th>Senior 1 and two</th>
<th>Senior 3 and 4</th>
<th>Senior 5 and 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage</td>
<td>8</td>
<td>25</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

Most of the students (25% of seniors 3 and 4) mentioned diarrhea followed by 17% (seniors 5 and 6) who indicated scabies and eye infection followed by 8% of seniors 1 and 2. This reveals that students are fairly knowledgeable about the dangers of using unsafe water. Students are therefore less likely to use unsafe water in an effort to avoid catching related diseases as mentioned. In conclusion, therefore, as stated in the studies reviewed two, improving water and sanitation facilities does not necessarily lead to a decrease in water and sanitation-related diseases. To bring about real improvement in health, the installation of facilities has to go hand in hand with their proper use and maintenance, hygiene promotion aims to ensure the proper use and maintenance of facilities by motivating people to change their behavior [25].
DISCUSSION

Availability of Sanitation Facilities
Generally speaking, there is fair availability of sanitation facilities at the sampled school (see Table 2). However, there is inadequate availability of the related materials such as anal cleansing tissues as indicated in the table. The number of the different sanitation facilities and materials as given in the table reveal fair availability of pit latrines (3) and water sources (2) at the sampled school while the availability of flush toilets is very low (0). Hand washing facilities (2) are also relatively inadequate and therefore inadequate to effectively serve the population in the sampled school while the urinals (3) also need to be increased in number.

In agreement with these findings, the reviewed literature shows that a study conducted by Child Health and Development Centre, Makerere University [27], found that almost all schools surveyed did not meet the minimum sanitation and hygiene school.

Consequences of Poor Sanitation
Regarding illnesses related to poor sanitation and hygiene practices, the literature reveals that diarrhea diseases in Uganda rank second among the five killer diseases being transmitted mainly through swallowing fecal germs [28]. This has been mainly because of the poor disposal of a fecal and unprotected water source. As Richford suggested, this study agrees that the provision of safe water resources and sanitation is very important, but constructing latrines and digging wells will have little effect on health unless people use these facilities. Drawing from the reviewed literature, one gram of feces can contain ten million viruses, one million bacteria, one thousand parasite cysts, and a hundred warm eggs that is what makes the safe disposal of feces the most important of all public health priorities. Still today, the majority of illnesses in the world are caused by the fact that fecal matter enters the human body because of a lack of safe sanitation and lack of hygiene. To prevent this huge burden of illness, safe water, and sanitation are only half of the answers. The other half is getting people to use them wisely and well. Millions of people have still not been adequately informed about the link between feces and diseases [29].

The majority of the people living in developing countries are suffering from diseases, hunger, and ignorance. In most cases, problems are interlinked. Due to a lack of knowledge, people are exposed to hunger while having enormous resources around them. Over half of the population suffers from diseases caused by poor sanitation when simple sanitary measures can make a difference.

CONCLUSION

Although the secondary schools in Bushenyi District own a variety of sanitation facilities, there is generally inadequate coverage of sanitation facilities in the schools in the District and this is particularly worse in rural-based schools. The phenomenon is exacerbated by the ever-increasing student population due to the increase in enrolment for secondary education resulting from the output of Universal Primary Education. School administrations seem to find a big challenge with increasing the quantity of the facilities saying that it required relatively large budgets to set up the facilities.

There is considerable congestion for students trying to access the school latrine in most of the secondary schools in the Bushenyi district. This leads to unhygienic conditions and greatly increases the risk of cross-contamination and infection. The useful life of a latrine is reduced to a fraction of what it should be; a ratio of 180:1 rather than 40:1 which means a feeling rate or five times faster, thus a pit that should have a designed life of five years is reduced to one year. Land availability becomes a problem if latrines need to be replaced so frequently (after every 1 to 5 years).

In addition, the few sanitation facilities are poorly utilized which is a result of many
factors including students’ background and upbringing, discipline regarding personal hygiene and school, and weakness in the implementation of sanitation and hygiene policies. For instance, key informant interviews and physical observations revealed poor disposal of solid waste especially where dustbins were ignored but disposed of solid materials /waste just outside the bins yet the bins were not necessarily full.

**Recommendations**

There is a need to develop sanitation programs under which the challenges should be tackled right from the root rather than attempting to manage the resultant unpleasant consequences. School administrations need to prioritize the aspect of sanitation and hygiene. The excuse for inadequate financial resources is not genuine enough to explain the inadequacy of the sanitation facilities in the schools. It is expected that the increase in enrolment comes with an increase in income for the schools. It is therefore strongly recommended that a separate budget is put aside and strictly observed by the schools to cater to this indispensable service in the schools. Proper planning for the schools’ carrying capacity needs to be considered. This should guide the recruitment of students into the schools where school administrations should not only focus on the income benefits but the well-being of the students who enroll. The Ministry of Education itself should conduct regular monitoring and evaluation of school sanitation and hygiene standards as part of its regulatory roles. Schools that do not meet the standards should be closed until they upgrade to desirable and acceptable sanitation standards.

Fundraising drives can be ensured by school administrations, especially through school parents, networks of old student associations, sanitation and hygiene program funding agencies, the Ministry of Education, and several external links that may include friends of the schools and corporate institutions. Fundraising dinners and auctioning can be some of the strategies to be used in this endeavor. Regular cleaning of the latrines and urinals should be ensured. The school should be encouraged and facilitated to put wall painting, word curving, and clay portraits that depict hygiene and sanitation messages. This can be installed in such a manner that they are not easily removed.

There is a need to train teachers with suitable sanitation and hygiene practices while they are still at University or Teachers Training College. This will ensure that by the time they come out, they are already acquainted with sanitation and hygiene issues, strategies for their promotion, and the roles they have to play.

**REFERENCES**


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