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Assessment of health care practices of students in agazi elementary school, Adigrat town, Northern Ethiopia

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Abstract

There is no documented evidence which describes either the practice of hygiene by the community in Agazi Elementary School, or their knowledge of the subject. The purpose of this study was an exploration and description of the knowledge and the practice of hygiene among these school communities. An explorative, qualitative study was done. The research sample was comprised of students and communities of Agazi Elementary school of Adigrat. Face-to-face interviews were conducted and the participants' statements were recorded by the researcher. The following research ethics were observed during the study: informed consent, permission from school, confidentiality and voluntary participation. Twenty (n=20) Agazi Elementary school communities participated in the study, with 13 females and 7 males interviewed as subjects. The following themes emerged during the analysis: household hygiene and in the surroundings; disposal of human waste; household refuse removal; personal hygiene, including hand washing, water source knowledge and knowledge of hygiene-related diseases. Generally, although the school communities have some general knowledge about hygiene, the extent of that knowledge is quite limited. The knowledge of hygiene is usually not carried out in practice for various reasons, which include insufficient water supply, insufficient knowledge and lack of access to sanitation facilities. Therefore, the school community Council should be advised to formulate strategies that will address issues of water, sanitation and hygiene in the school.

Keywords: personal hygiene; human waste; elementary School; informed consent

Introduction

Personal hygiene covers the aspect of hand hygiene, clean clothing, personal health and personal habit or behavior. Food handlers with poor personal hygiene can be sources in spreading the food-borne diseases directly, or due to cross-contamination. These factors are influenced on the knowledge and practices of the food hygiene (Mead *et al.*, 1999) [5].

Personal hygiene requires the cleaning of all parts of the body (face, hair, body, legs and hands). The face and hair have to be cleaned because they accumulate grime, emit bad odors and make one's self-worth. Skin diseases such as ringworm, scabies, sweat fungi, etc., can also occur. The hands and finger nails have to be cleaned because the germs in between the fingers and finger nails cause contagious diseases such as diarrhea, worms, etc., and epidermophytosis. The teeth and mouth have to be cleaned because they emit bad odors, cause mouth and dental diseases such as cavities, gingivitis, etc., and stomach disorders due to indigestion. Thus, one's face hair, body, legs and hands should be cleaned thoroughly, and the teeth brushed properly. Ears, an important part of the human body, should be kept clean and carefully protected from injury (Mead *et al.*, 1999) [5].

According to World Health Organization (2011), it is important to make sure that information about health is accessible in public places. Such information should be made available in an eye-catching, uncomplicated and accurate fashion. School children and college students could be involved in preparing educational posters and notices for display in public places. Practice of personal hygiene should be carried out as daily, weekly, and monthly activities. In addition to one's personal hygiene and cleanliness of one's home and its surroundings, the classrooms and the school surroundings should also be clean. Drinking impure water can cause cholera, diarrhea, dysentery, typhoid and hepatitis. Therefore, pure drinking water free from germs and dirt should be used. Improper sewage and garbage disposal can lead to the spreading of contagious diseases through rats, mosquitoes, flies, cockroaches and stray dogs.

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Only fly proof latrines should be used and garbage disposed of properly (United Nations Children's Fund (UNICEF), 2012) [8].

In Ethiopia, especially in the rural areas, scabies, typhoid, fungus, skin infections, ulcer, trachoma, relapsing fever, intestinal parasites, diarrhea and other communicable diseases are predominantly seen due to poor personal hygiene. The reasons for poor personal hygiene are lack of knowledge on the part of communities, poor access to clean and adequate water supply, weak economic capacity of communities, backward lifestyle and culture and working behavior also contribute a lot to this. The same characteristics and lack of knowledge on the community and students of Agazi elementary school and poor personal hygiene practices are obviously observed. The importance of personal hygiene in preventing the dispersal of microorganisms via various food contact surfaces has been demonstrated in various studies. The importance of personal hygiene in preventing the dispersal of microorganisms via various food contact surfaces has been demonstrated in various studies. As there has been no data has been published on food handlers hand hygiene practices in primary schools in Adigrat (Agazi), this study is crucial to determine the knowledge of food handlers in good personal hygiene practices.

Therefore, in order to prevent and control communicable diseases that occur due to poor personal hygiene, practicing personal hygiene becomes necessary. This knowledge and practice of personal hygiene package was therefore, developed for the promotion of knowledge and practice of personal hygiene for the prevention and control of transmissible diseases. In summary, research's overall study is that the Knowledge and Practice of Personal Hygiene in Agazi Elementary School is defined as its ability to improve and aware the elementary students and community to prevent from personal hygiene contamination problems.

Agazi Elementary School community have problems in good Personal Hygiene, this is due lack of knowledge of the school children, and low practical motivation to learn, and a close profile of the school reveals that Elementary school education with no hand wash water has had personal hygiene. The major problem encountered in Agazi Elementary School is known from the inputs of school personal hygiene as a source of water and there are no toilet facilities Objects of the Study. Here therefore, this study was aimed to assess the knowledge, attitude and practice of personal hygiene in Agazi Elementary School and to suggest possible measures to improve their outcome by making this assessment main objective of the school.

Material and Methodology

Research Methods and Design

An exploratory qualitative research design was used to produce the knowledge and practice of the respondents in terms of personal hygiene and hygiene in general. The study is interpretive in nature; explorative descriptive strategies were used. Creswell (2003) stated that, qualitative research is interpretative research, with the inquirer typically involved in a sustained and intensive experience with participants. The following steps were used in this study. Determine a focus for the inquiry. This was done by starting a location for the study, namely: the Elementary School Agazi informal settlement. Determine how the research paradigm fit the research focus. The researcher compared the characteristics of a qualitative paradigm with the goals of the research. Determine where, and from whom, data would be collected. The data was collected from the community of Agazi Elementary school.

Plan for data collection and recording has been made. These include how detailed and specific research questions were formulated and how faithfully data was reproduced.

Mack (2006) stated that the method outlined above is appropriate for the kind of survey represented by the current study because exploratory research uses open-ended and probing questions, giving participants the opportunity to respond in their own words, rather than forcing them to choose from fixed responses, as quantitative methods do.

Sampling and sample size

According to William (2006, p.1) "Sampling is the process of selecting units from a population of interest and by studying these units, to draw conclusions, through generalization, about the population from which they were chosen". Purposeful sampling was used in this study. The idea behind qualitative research is that the purposeful selections of participants were best help the researcher understand the problem and the research questions. With help from the school community leaders, the researcher approached individuals from Agazi Elementary who are grade one to grade 8. The researcher interviewed 20 participants for the assessment of knowledge & practice of personal hygiene over the school.

Research methods and instruments

Face-to-face, in-depth interviews were conducted with the participants. The researcher interviewed them by asking questions that had been formulated and spoken before the interviews. An interview guide, containing key questions, was used as a data collection instrument. For example, participants were asked: How do you practice personal hygiene? The researcher then wrote into notebooks to record the statements made by the respondents during the interviews in answer to the questions.

Procedure for data collection

Before entering on the study, the director of Agazi Elementary School informally was interviewed and the purpose of the study was fully explained to him. The researcher then proceeded from grade level to grade level to interview students who were 7 years or older. To begin, the first participant that the researcher approached was randomly selected. Before interviews were conducted the researcher asked prospective respondents how old they were. If they replied that they were minors they were asked to call a person of maturity age; if one was not present in the house at the time, the researcher moved on to find other respondents. The participants were interviewed in Amharic & Tigrigna language except for four respondents who felt that they were fluent enough to use English. The researcher personally translated the responses from Amharic to English during the write-up phase of the field notes. Participants were asked questions in relation to their knowledge and practices regarding personal hygienic behavior, sanitation, source of water and hygiene-related diseases. The researcher took notes during the interviews.

Data Analysis

In a qualitative study, the process of data analysis begins during data collection. This may take the form of a skillful help of discussions, which in turn generates rich data. It may take the form of complementary discussions with observational notes and other outlying information or data. This process itself may be complemented or extended as the researcher familiarizes with data by reading both

observational notes, which accompany interviews, and summary notes, which are written immediately thereafter supporting subjects and explanations, were identified during this process and are described in the report.

Data analysis is an ongoing process of continual reflection about data, asking analytical questions and writing notes throughout a study. Analysis is not separated from the other activities involved in the process, such as data collection. It also employs open-ended questions which facilitate the collection of subjective information for analysis. This process involves asking general questions of the participants and developing an analysis from the information they supply. The researcher was responsible for data analysis and used an open-coding process, by which data was organized in subjects to facilitate analysis. Once data was organized to place emphasis on the main subjects were discussed in detail, the data was interpreted in the final step.

As summary qualitative research method was used to explore the knowledge and practices of school community in Agazi Elementary school with regards to personal hygiene. The population under study was comprised of participants living in Adigrat, near Agazi Elementary school with total of twenty (n=20) respondents meeting the addition criteria were interviewed and were selected.

Result and Discussion

Data analysis and its integration into literature

Presentation and Interpretation of the data

Findings from the interviews regarding the table, the personal hygiene knowledge and the practices of school community in Agazi Elementary school, are illustrated using description based on identified subjects. The respondents (n=20) distribution data are presented and analyzed below.

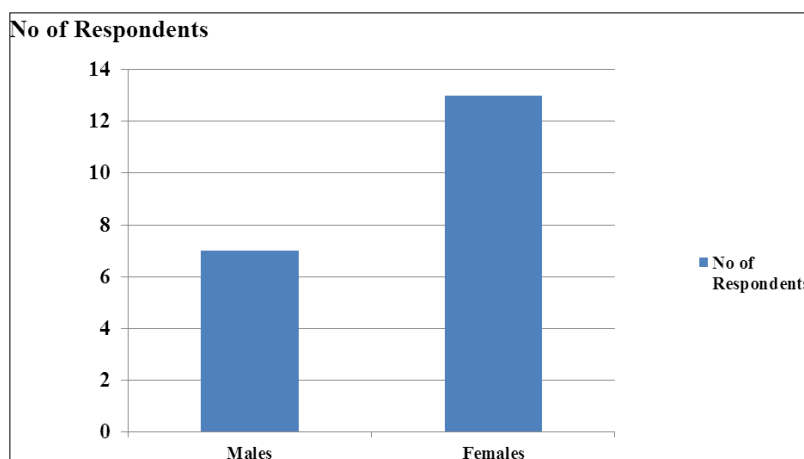


Fig 1: Gender distribution of the respondents is represented in Figure below

As indicated in Figure -1 above 7 Male (35%) and 13 Female (65%) respondents, participated in the study. According to the school data, there are generally more females than males exist in Agazi elementary school.

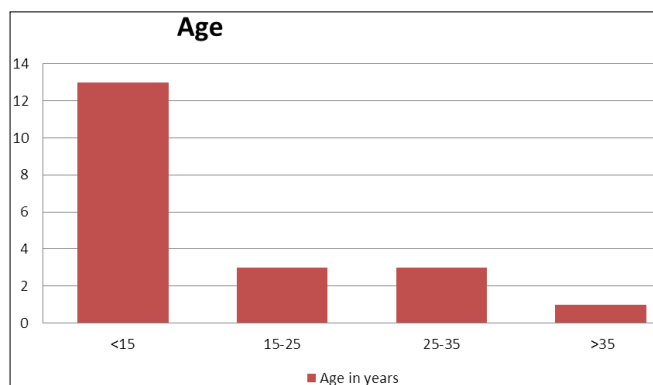


Fig 2: Age Distribution of Respondents

The age distribution of the respondents (n=20) is presented in Figure 2.

The majority of the respondents (65%) were between the ages of 7 and 15 years. Respondents between 15-25 years of age comprised 15%, between 25-35 year of age 15% and >35 age 5% of all the age groups and were the least interviewed age group. For the purpose of the study, it is assumed that the study-population sample indicated in Figure 2 is representative of the age distribution of participants in Agazi School.

Personal Hygiene Knowledge and Practices

Respondents were given the opportunity to explain their attitudes concerning to knowledge and practice of personal hygiene beyond what was caused through the questions. They were encouraged to answer the questions from a personal perspective. The main subjects and sub-themes emerged during the analysis of the data, namely: Environmental condition, waste removal, personal hygiene and knowledge of hygiene-related diseases; under the type of toilet used, human waste disposal was considered; and under water source, water for the community and water for hand washing was ordered.

Personal Hygiene & Environmental Conditions in the School

The researcher asked the respondents to explain how they practiced hygiene in their surroundings. Most respondents responded “the whole yard is thoroughly cleaned by sweeping to prevent the breeding of mosquitoes and occurrence of hygiene-related diseases. The respondents, whose homes have earthen floors, wet the floor with water before sweeping to prevent rising dust in the air.

Waste Removal

Respondents from Agazi School were asked how they disposed of their domestic waste. Most of them responded that they put their garbage inside the school plastics or cartons and in turn the students removed the refuse once a week as punishment for late comers. By contrast, another respondent maintained: “the school council does not provide us with plastic bags to store rubbish. I therefore resort to dumping my

rubbish across the road.” Some respondents stated that they were not happy with the service provided because the school Council did not give them plastic bags as well and therefore most of the time they resorted to dumping the waste in open spaces. It might be deduced from some of the comments made by respondents, that the service of refuse removal in Agazi School is unsatisfactory. The researcher noted that the area is surrounded by masses of waste; these can become a breeding ground for vectors, and other disease-causing agents, or micro-organisms.

Personal Hygiene

Respondents were asked how they practiced personal hygiene. Most of them stated: “I take a water hand and face washing and brush my teeth every morning”. Others said “I wash my kids before they go to school”. Most of the respondents felt “it is important to keep my body clean and wash my clothes regularly in order to look good and prevent sicknesses”. Others expressed they felt that “being clean describes someone’s image as a neat and healthy one”. One respondent said, “Every day I bath in the evening and in the morning. I brush my teeth and wash my face. When I bath I use soap and a face cloth”. Although respondents show an interest in personal hygiene, the facilities they use are stagnant water, poses a threat to health. In addition, because it is openly exposed, children can play in that dirty water. Stagnant water can easily become a breeding ground for mosquitoes that cause malaria. It was discovered through the study that respondents did not place much importance on personal training. Evaluation revealed the following among possible reasons: lack of knowledge, poverty and lack of water. Water for personal use is purchased from the local council. The majority talked of taking a bath or brushing their teeth, but personal hygiene needs to go beyond these activities.

The majority of respondents spoke of taking a bath, brushing their teeth, washing their children and washing clothing. These are habits that are important because the lack of personal hygiene can also affect others. People who do not wash their hands can pass infections or viruses to other people. Personal hygiene involves bathing regularly, keeping hair clean, trimming fingernails and toenails, and brushing teeth.

Knowledge of personal hygiene diseases

Respondents were asked whether they knew of any hygiene-related diseases. Almost all did so. An example being: “...diseases like Scabies, diarrhea, tuberculosis, malaria, flu and cholera can result from staying in dirt areas or by eating contaminated food”. One respondent stated that “People maintain good hygiene in order to prevent the outbreak of diseases like cholera and diarrhea”. Although some respondents were aware of the importance of keeping themselves and surroundings clean, several were not able to name any diseases associated with hygiene. Some resorted to guessing, stating that flu and diarrhea could be regarded as hygiene-related diseases. When the researcher probed further most respondents related that they have had someone in their family who suffered from diarrhea, flu, eye infections and coughing during the past three month. From the findings it is clear that community in Agazi School have general knowledge regarding personal hygiene, although the deepness of that knowledge is not sufficient.

Types of Toilets

Most of the respondents were not aware of two major types of

toilet: a flushable water-system and a latrine. The respondents all stated they would prefer using a flushable water-system toilet. However, one respondent admitted that, “I would prefer a pit latrine because here in Agazi School we do not have the sewerage system, but the school council should provide the material for the latrine.” Another respondent said, “I want a flushable toilet because human excreta will be flushed through the sewerage pipes to the sewerage ponds and there is no smell. The findings of the current study also reveal that there is a lack of knowledge about types of toilets, as respondents could only identify flush toilets and pit latrines.

Water Source for the community

Respondents were asked to describe how they source and use water. They indicated that they sourced water from communal taps and stored it in Roto containers for use later, for drinking, washing, cleaning and bathing. Most of the respondents indicated that the containers of stored water are not safe. A few indicated that they do not cover their water. One respondent stated: “I collect water from taps we share with others and I only cover water we use for drinking and cooking”. Others also indicated that they only covered drinking and cooking water. The respondents mentioned that they do not treat the water from communal taps because it has already been treated and therefore fit for human consumption. The only complaints they had related to sharing taps, to the dangers involved turns in fetching water and the shortage of water.

Hand Washing

The respondents were asked to explain their hand-washing techniques. A few respondents indicated they do not use the bowl they use to wash hands for other purposes. A cup or jar is often used to pour water. One of the respondents stated: “We put water in a small dish and wash our hands. Adults share the same dish and sometimes we use soap whereas sometimes we just use water, but most of the time we use soap to wash our hands after answering the call of nature.”

Conclusion and Recommendations

Conclusions

Conclusions are presented in the context of the objectives of the study was met because the communities of Agazi School do practice a supportable level of hygiene, a fact which indicates that they have general knowledge regarding the subject. A “level of knowledge” is better understood, or verified, when evaluated relative to the practical application of that knowledge. In this particular case study, it was noted that the community may not put into practice their knowledge of hygiene because of a number of limiting factors, such as poverty (some people cannot afford soap), or the lack of enough clean water or adequate sanitary facilities. Because they often do not practice good hygiene, the students of Agazi School are prone to suffer from hygiene-related diseases.

The findings revealed that the students and school communities’ knowledge and practice of hygiene-related washes and diseases were not satisfactory. On the other hand, some respondents clearly indicated that they could not name a hygiene-related disease. Because it was observed that most of them in Agazi suffer from hygiene and sanitation -related diseases, it was concluded that one contributable cause would certainly be their lack of knowledge on this subject. Conditions at the settlement were indicated in the problem statement.

An obvious conclusion that can be drawn from the data

produced by the current study is that the school council and the Adigrat Health Center should organize public information movements in which the people of Agazi could be trained: how to properly dispose of waste, maintain school conditions, how to store and handle water properly, proper hand washing techniques, personal hygiene, and how these practices relate to the prevention of hygiene-related diseases.

Recommendations

- Meeting between the school council has to be arranged on how to keep one's personal hygiene.
- Hygiene information campaigns need to be implemented in Adigrat informal settlement
- The council should devise projects for the alleviation of poverty
- Future research, as foundation for a holistic approach for improving hygiene would be advisable.

References

1. Department for International Development. Breaking the Rules, New Approaches to Promoting Health through Water and Sanitation in South Africa. Available online: www.soulcity.org.za/training/water-and-sanitation-materials accessed on 2010.
2. Department of Water Affairs and Forestry. Minimum Requirements for Ensuring Basic Water Supply and Sanitation in Schools and Clinics. Available online: www.childrencount.ci.org.za/indicator.php?id=6&indicator=47 accessed on 2010.
3. Duncker, L. *Hygiene Awareness for Rural Water Supply and Sanitation Projects*; Water Research Commission: Pretoria, South Africa, WRC Report No. 819/1/00, in English summary. 2000, 103.
4. DWAF. Water Services National Information System (WS-NIS), Sanitation Backlog. Available online: http://intertest.dwaf.gov.za/dir_ws/wsnis/default.asp Accessed on 2010.
5. Mead PS, Slutsker L, Dietz V, Mc Caig LF, Bresee JS, Shapiro C *et al.* Food-related illness and death in the United States. *Emergence Infectious Diseases*. 1999; 5(5):607-625.
6. Skhosana, M. The Impact of Multi Media in the Education and Promotion of Health Awareness A Pilot Study in *Mamelodi*, Water Research Commission: Pretoria, South Africa, WRC Report KV 277/01, in English Summary. 2003, 29.
7. UNICEF. Programme of Cooperation, Master Plan of Operations, Banjul. Available online: www.unicef.org/french/evaldatabase/files/GAM_2002_800.pdf (accessed on 2007).
8. UNICEF, School Water Sanitation and Hygiene Knowledge, Attitudes and Practices Survey. United Nations Children's Fund Office, Palestine. 2012.
9. United Nations Department of Economic and Social Affairs, 2010. The Millennium Development Goals Report New York, USA, 2010.