



**REMEDYING THE ABYSMAL EFFECTS OF POOR PERSONAL
HYGIENE ON TEACHING AND LEARNING IN BASIC SCHOOLS,
IN THE ASSIN NORTH MUNICIPALITY, GHANA**

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Abstract:

This paper is a sequel. The authors, after seeing the positive effects of the strategies implemented to remedy poor sanitation practices in three schools in the locality, sought to review the effects of poor personal hygiene on teaching and learning in three other basic schools in the Assin North Municipality in the Central Region of Ghana and design practical workable and innovative (Water, Sanitation and Hygiene) WASH strategies to remedy them. The study, carried out within the structured school environment, used the action research for immediate solvable intervention strategies to be implemented. The main objective of the study was to examine the efficacy of three interventional strategies among these basic school pupils to minimize their feeling of discomfort and withdrawal resulting from phases of personal hygiene deficiencies. Census and purposive sampling procedures were used to select all 35 pupils for the study in each case. Three students who were members of the WASH club of the only initial teacher training institution in the municipality were chosen to help the authors in the implementation of the strategies in each school to see the extent to which the menace could be minimized. A certified medical doctor, Dr. Barbara Asare, was invited to examine the effects of the oral interview results from the pupils for needed medical

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recommendations. Observation and interview were the instruments used in each school. The pre-intervention observation carried out in school by Mr Charles Appiah Nuamah and Bismark Amoh revealed that class one pupils' uniforms were dirty even on the first day of the week. Especially after break on mid weeks, the classroom atmosphere became so saturated with stinky sweat and this did not augur well for effective teaching and learning. Intervention 1 aimed at increasing teeth and cloth hygiene by introducing the early morning inspections and mid-week cloth washing. School 2 recorded a problem of overall personal hygiene. Miss Comfort Arthur and Victoria Amoakoh identified that hand washing before and after eating, after visiting the toilet, after playing were challenges to the pupils. They were also negligent of the use of handkerchiefs. Intervention 2 took pupils through hand washing techniques, use of handkerchiefs and general batheing techniques because the odour in the classroom was indicative of the fact that pupils do not pay attention to particular parts of the body during batheing. Intervention 3, which was implemented by Ruby Jecty and Leticia Donkoh, emphasized on food hygiene. Pupils were taken through the causes and effects of food contaminations because they were not particular about washing fruits or plates before eating. The author and students used WASH resources as intervention strategies to help pupils take their baths well, cut their nails, shave private parts, and the use of anti-perspiring materials and fruits and plate washing techniques to remedy the problem. After successfully implementing the strategies in each school, a post-intervention interview was administered to evaluate the consequences of the intervention. These intervention strategies were designed by Miss Ruby Jecty upon the recommendation of Dr. Barbara Asare and implemented by each author and student in their prospective schools. The intervention procedures, pre and post intervention results were collated and analyzed by Miss Comfort Siaw and the final script prepared by Mr. Charles Appiah Nuamah.

Keywords: personal hygiene, teeth and cloth hygiene, food contamination, WASH resources

1. Introduction

Globally, the high mortality and morbidity rate due to communicable diseases among school-going children has been attributed to the neglect of personal hygiene. Children need to be taught and guided by adults to adopt some behavior as regards their health and well-being. To effectively address the issue of communicable diseases among school children, parents, teachers and other stake holders must work out modalities to encourage children to adopt good hygiene practices. However, it has been observed that little or nothing is being done to inculcate these practices in children hence the increased rate of contact/spread of communicable diseases and to the extreme, mortality from these diseases. Therefore, if adequate good hygiene measures are put in place, communicable diseases can be reduced to the barest minimum among school children.

One personal benefit of good hygiene is having better health and high self-esteem as keeping the body clean helps to prevent illnesses and infections from viruses and bacteria.

Personal hygiene among children is considered the best tool to improve community strategies and intervention practices to tackle the many communicable and infectious diseases that affect the children's development. Younger school children are more prone to poor personal hygiene than their older counterparts. Children's personal hygiene includes bathing, hand washing, cleaning hair and nails, appropriate disposal of solid tissue, brushing of teeth and clean clothes and uniforms. These should be observed and improved under parents' guidance and supervised at school by the school nurse and other teachers.

Health promotion programs for improving personal hygiene should be conducted in the school setting and the community in coordination with the children's families. Such health programs would reduce morbidity and mortality among school children and improve their quality of life and longevity. Furthermore, they may improve academic performance and reduce school absence. Good hygiene plays an important part at helping feel confident about your body and yourself.

Personal hygiene refers to the practices performed by an individual to care for one's bodily health and well-being through cleanliness. Personal hygiene is a highly effective way to protect oneself from illness and infections. It is the basic concept of cleaning and caring for our bodies apart from merely cutting of nails, bathing, washing the hands when necessary but the brushing of the teeth, keeping hair neat and washing one's clothes frequently.

Drinking, eating, washing and excreting are things we do every day of our lives but the way we do them has a major impact on our health. Good hygiene practices are an essential part of daily life and we all need to understand what hygiene is, why it is important for our health and well-being and how we can change our behavior to safeguard our health. Educating pupils in a way to protect themselves and their families from ill health is one of the most important things to be done.

Apart from personal hygiene problems, food contamination is one major problem in schools in Ghana. Pupils do not take interest in washing the plates from which they eat before and after eating. These and many more are some of the causes of irregularity and absenteeism recorded in these basic schools as a result of ill-health.

2. Literature Review

2.1 Personal Hygiene

Personal hygiene generally refers to the set of practices associated with the preservation of health and living healthy (good hygiene practices-Global 2015/).It can also be defined as the process of ensuring cleanness of all external parts of the body in order to maintain and promote health. (Life worth, www.blog.lifeworthhmo.com).

The human body can provide places for disease-causing germs and parasites to grow and multiply. These places include the skin, in and around the openings of the body. It is therefore very important to educate children on the need and the benefits of exercising personal hygiene. Practicing personal hygiene helps children to wash off bacteria, sweat and dirt, hence preventing infections and filth. It also helps to prevent offensive body and mouth odour and reduce the risk of infection spread from person to person

2.2 Importance of School Feeding Program

Hunger is one of the world's major problems. The government of Ghana in 2006/ of academic year introduced the school feeding programme, most of them in rural areas which is the provision of the programme which is one hot lunch for every school child in beneficiary schools. This provision experienced overwhelming number of enrolment in those schools. It is an interacting strategy design to help pupils concentrate, participate in school activities and prevent absenteeism in schools.

It must be noted that as a result of some unfortunate incidents, food which is supposed to serve important purposes in the life of man becomes an enemy. This is when the food consumed leads to diseases. This situation is termed food poisoning.

2.3 Food Contamination

Food contamination is one major source of food poisoning. The Cambridge International Dictionary (2008) defines food poisoning as an illness usually caused by eating food that contains harmful bacteria. From the above definition, it can be recognized that food poisoning is an illness or disease which means it is an abnormal situation bacteria. According to Boahene, (2012) there are bacteria called sport-forming bacteria which may live on vegetables cell. Normal cooking would destroy the vegetable cell form, but the sport would survive. They may live when conditions are favorable and multiply rapidly. If a particular food is left in a warm kitchen overnight, the sports would develop into cells which would then be heavily contaminated and be capable of causing food poisoning. Mader (2003) identifies headache, fever, abdominal pains and diarrhea as the clinical symptoms of food poisoning. According to Oti – Mensah (2005), the clinical symptoms of food poisoning includes stomach pains, headache, general body weakness and nausea. If it is not controlled, it can eventually result to the death of the affected person. Other symptoms include vomiting nervous disorder and frequent stooling (diarrhea). Germs, according to Oti- Mensah (2005), are small creatures which because of their size cannot be seen with the naked eyes. They can only be seen with the help of a microscope. It is therefore required that every person who comes into contact with food should consciously avoid or prevent contamination of food by germs and to prevent these germs or bacteria from multiplying.

Also, flies can settle on the food that is exposed and drop some particles from their hair which usually contain germs onto food to contaminate them. As a result, they

should be prevented from entering food preparation areas. They should also be properly maintained. Human beings move from one place to another. We most at times visit places such as the refuse dump, the toilet and many others, which are generally are infected with germs. As a result, it is not unusual to find germs or bacteria on our bodies. It is therefore advisable that people suffering from an illness or those who are dirty should not handle food at all. They may introduce germs onto the food unintentionally if they do so. To avoid these situations, some precautionary measures involving cleanliness and care of the body to avoid food being contaminated and prevent the spread of infections. Moreover, the use of some poisonous plants can cause food poisoning. We must be therefore, careful about the kind of plants that are combined to prepare food. It is known that since different plants have different chemicals in them, they may respect to produce poisonous substances. For example, mushrooms are edible some are poisonous.

3. Effects of Pupils' Lack of Observing Personal Hygiene

According to www.livestrong.com, one of the first and most prominent consequences of bad hygiene is body odour. Body odour occurs due to the interaction of bacteria and sweat produced by the apocrine glands. As bacteria thrive in unwashed sweat, over time their by-products produce the smell commonly associated with body odour. Body odour may also come from poor bathroom habits, resulting in faeces or urine odour.

Bad breath proves another easily recognizable consequence of poor hygiene. It commonly develops from not regularly brushing and flossing your teeth. Bad breath results because of two main reasons. First, bacteria thrive on particles of food that can stick to your teeth. As the bacteria digests this food, their by-product results in odour. Food can also get stuck in your teeth and rot over time, producing a foul odour, according to the American Dental Association.

Not only can poor dental hygiene lead to bad breath, it can also lead to dental disease. As you allow food particles and bacteria to build up on the teeth, a coating called plaque begins to form. The bacteria in this plaque release acids, which break down the enamel on your teeth. As this process continues over time, a hard substance called calculus can form on the teeth, irritating the surrounding gums. This irritation can progress into gingivitis, leading to inflammation of the gums, which can later lead to gum disease. Gum disease causes infection, and eventually may destroy your teeth.

4. What is WASH?

According to UNICEF, WASH is the collective term for water, sanitation and hygiene. Due to their interdependent nature, these three core issues are grouped together to represent a growing sector. While each has a separated field of work, each is dependent on the presence of the others, example without clean water basic hygiene practices are not possible. UNICEF's work in water focuses on the ability of children to access safe

water, the quality of the water they can access and the journey they must take to collect it. UNICEF is at the forefront of exploring innovation ways to access water and building climate resistant infrastructure.

5. Methodology

5.1 To what extent can Inspections be used to Remedy the Problem of Teeth and Cloth Hygienic Practices?

(Meeting with Health Personal from Assin Foso Polyclinic).

Session topic: Health talks on body, clothes and oral hygiene.

This meeting was scheduled for parents. Using technology and mother tongue lecture parents were told to watch the video and tell the idea it portrayed. After taking the feedback from them, the discussion which followed covered:

- **Personal Hygiene**

Good Personal Hygiene Habits include:

- a) washing the body often; concentrating on the hair, back of the ear drum, the regions around the nose and mouth, armpit, genitals and buttocks, in between toes and fingers etc.
- b) cleaning the teeth at least twice a day;
- c) washing hands with soap after going to the toilet;
- d) washing hands with soap before preparing and/or eating food;
- e) changing into clean clothes;
- f) hanging clothes in the sun to dry;
- g) good oral health habits.

a. How Do We Take Care of the Mouth?

The following were the responses from the pupils after the facilitators adapted to their level and gave detailed explanation:

- Brush twice a day –morning, as soon as you get up from the bed and at night before going to bed. Coal powder, salt, rough tooth powder, etc., when used for brushing lead to scratches in the outer layer of the teeth.
- Wash your mouth with clean water after eating any food. This prevents food particles from settling between the teeth which produces bad smell, spoil the gums and leads to tooth decay.
- Take nutritious diet. Eat less of sweets, chocolates, ice cream and cakes.
- When you see signs of tooth decay consult a dentist immediately.
- Regular and proper brushing methods help you prevent tartar settling on the teeth. Consult a dentist for regular cleaning of your teeth
- Showing pictures of people suffering from bad skin care. This served as a prelude to the discussion on good clothe hygiene. The technical terms were explained and pictures of turmeric and neem were shown pupils

b. Talk on Causes of Poor Body, Oral and Clothes Hygiene

Dirty clothes, unkempt hair, and other slips in personal hygiene may be a sign of limited energy or abilities. Sometimes they point to bigger issues, such as depression, hidden health problems, or the beginning of dementia or cognitive decline. Sometimes the change stems from lack of energy, which may be tied to poor nutrition, trouble sleeping, progression of a chronic medical problem, or a new health concern, such as anemia or a thyroid disorder. Other times, medications are at fault.

c. Seminar on Effects of Poor Body, Oral and Cloth Hygiene

- **Body Odour** - One of the first and most prominent consequences of bad hygiene is body odour. Body occurs due to the interaction of bacteria and sweat produced by the apocrine glands. As bacteria thrive in unwashed sweat, over time their byproducts produce the smell commonly associated with body odour. Body odour may also come from poor bathroom habits, resulting in feces or urine odour.
- **Bad Breath** - Bad breath proves another easily recognizable consequence of poor hygiene. It commonly develops from not regularly brushing and flossing your teeth. Bad breath results because of two main reasons. First, bacteria thrive on particles of food that can stick to your teeth. As the bacteria digests these foods, their byproduct results in odour. Food can also get stuck in your teeth and rot over time, producing a foul odour, according to the American Dental Association.
- **Dental Disease** - Not only can poor dental hygiene lead to bad breath, it can also lead to dental disease. As you allow food particles and bacteria to build up on the teeth, a coating called plaque begins to form. The bacteria in this plaque release acids, which break down the enamel on your teeth. As this process continues over time, a hard substance called calculus can form on the teeth, irritating the surrounding gums. This irritation can progress into gingivitis, leading to inflammation of the gums, which can later lead to gum disease. Gum disease causes infection, and eventually may destroy your teeth.
- **Social Impact** - A person with poor personal hygiene might be isolated from friendship because telling the person about the situation might be sensitive and culturally difficult. The success of a job application or the chance of promotion could be affected by poor personal hygiene.

d. A Workshop Facilitated by Author and Student

i. Community Voice: Benefits of Personal Hygiene

- germs are removed from body;
- removes bad smell of body;
- personal relaxation, decrease in muscular tension;
- increases skin health;
- better appearance.

e. Author: Health Benefits

Keeping your body and clothes clean is vital in combating and preventing illness -- both for you and for those around you. Washing your hands can prevent the spread of germs from one person to another or from one part of your body to another. Flossing and brushing your teeth can reduce the likelihood of oral and other diseases.

f. Author: Social Benefits

After the interactive discussion, the parents were informed that every Monday, Wednesday and Friday would be used for inspection exercise. The pupils' fingernails, hair and teeth would be checked during the morning inspection. With the help of the doctor in all the inspection exercises, nine pupils four girls and five boys, with tooth decay and seventeen with white teeth and good smell from their oral cavity, three pupils with white teeth but bad breath and six pupils with yellowish teeth but good smell from their oral cavity. After the 3 days successful inspection, pupils were briefed on how to take care of their oral hygiene by the supervisor.



Figure 1: Morning Inspection of Teeth and Cloth Hygiene
(Source: field work)

5.2 Recommendations

- 1) Pupils who dress neatly to school should be praised.
- 2) Teachers should set aside some time to educate pupils about personal hygiene like (how to wash the hand, bath, brush the teeth, clean the environment) and its benefits.
- 3) Teacher - Parent Association (PTA) should provide the school with sanitation facilities like dust pin and dust pan to help pupils keep their environment clean.
- 4) Teachers should education parents about the important and benefits of helping their wards to practice proper hygiene during PTA meeting.

- 5) Washing stands , washing bowls, clean water and soap should be available in schools to help pupils wash their hands.
- 6) Tippy taps should be erected in all schools for safe, hygienic and contact-free hand washing.

5.3 Hand washing Techniques

Steps:

- step 1: wet your hands and apply enough soap (coin size);
- step 2: rub your palms together;
- step 3: rub the back of each hand;
- step 4: rub both your hands while interlocking your fingers;
- step 5: rub the back of your fingers and rub the tips of your fingers;
- step 6: rub your thumbs and the ends of your wrists;
- step 7: rinse both hands properly with water.

5.4 Demonstration and Practice

This technique is among the techniques that were used in bringing out the result of the problem. It helps in aiding information which is reliable enough to support the findings. A video recorded demonstration was used to introduce pupils to

- How food poisoning occurs and how it could be prevented. Several measures were demonstrated, followed by processes that could be adopted to prevent food poisoning to pupils.
- How good personal hygiene and environmental hygiene could be adopted to prevent food poisoning to pupils.
- How food hygiene practices could be also be depended upon to avoid food poisoning.

The second activity was to practice what had been seen. Through dramatization and role lay, pupils were given different scenarios for them to show how to prevent food poisoning.

Scenario 1: you have been given a list of items to buy from the market. This includes some vegetables, fruits and meat. Let's see how you will go about your buying at the market. Expectations: pupil should examine the environment and ingredients very well in terms of freshness, wholesomeness, colour, etc.

Scenario 2: show how you will prepare both the fruits and vegetables for use.

- Thoroughly washing their hands.
- Using fresh water to wash the vegetables and fruits and then using salty water to do same.
- Ensuring the plate or pan to receive the washed items is very well washed and then the knife and chopping board for the cutting are equally clean. Because pupils learn best through activities and what appeals to their senses, the choice of video-based activity meant to arouse the interest of the pupils in relations to topic was appropriate and very well understood.

5.5 Overview of the Strategy Used Discussion Approach

The author and student initiated a discussion process to explain the concept of food poisoning to the pupils. The next step was when the author and student put the pupils into groups of Five (5) with each group having six members and given differentiated task. From the discussion, they were made to present their reports to the class as a whole. The author and student therefore used series of class discussions with the pupils to discuss the reports presented by the various groups. She therefore led the class discussion. Pupils had the opportunity to ask questions and contribute to the discussion and this enriched the discussion process.

5.6 Group Work Strategy

The author and student initiated the discussion with the question: What is Food Poisoning? After much deliberation, it was established that food poisoning is an acute illness, usually of sudden onset, brought about by eating contaminated or poisonous food. The symptoms normally include abdominal pain, diarrhoea, nausea, vomiting and fever. Pupils were then put into 5 groups of six. Each group was to have a group name, group leader and group repertoire with a camera man to video the discussion process.

Their tasks and answers provided by groups were as follows:

- **Researcher Group:** Causes of Food Poisoning and Type of Bacteria;
- **Nutritionist Group:** Type of food poisoning and associated symptoms;
- **The Biologists:** Type of Food Poisoning, Incidents of Food Poisoning and Environmental Sources:
 - High-Risk Foods;
 - Low-Risk Foods;
 - Environmental Sources:
 - Water: food-borne diseases are also carried by contaminated water.
 - Soil: dust and dirty is made up from soil. It is easily blown on to food after being carried into the kitchen on clothes and shoes, soil contains the food poisoning bacterium *clostridium perfringens* as well as many others.
 - Insects: they carry bacteria on their bodies. Crawling insects such as cockroaches, beetles and flies crawl over kitchen surfaces & utensils.
- **Investigative Group:** Ten Main Reasons for Outbreak of Food Poisoning;
- **Quality Control Group:** Control Measures.

5.7 Field Observation

In view of the practical nature of the situation, the author and student adopted a field observation as one of the techniques to solve the problem. The author and student identified some specific places in the community where the pupils could have direct observation or situation that are potential source or causes of the discussed research problem. A place where the environment was unclean, sites where the sale of food

items like bread uncovered, Sugar cane, mangoes, were well patronized, places closer to gutters, refuse dumps, and stagnant waters with flies hovering and some landing on the food. As pupils observed the activities of the people in the area, they felt irritated and ashamed of themselves as some pupils confessed that if not for the education given, they would not see anything wrong with them. They said they had then understood why diseases were common at the place and how children die frequently. They promised to be ambassadors to educate the people of the area.

6. Results and Discussion

6.1 The Post-Intervention Observation

This is the stage where the author and student evaluate the outcomes of the strategies implemented to solve the problem. At this stage, the author and student set out to ascertain whether the pupils had actually been able to identify the causes and effect of poor oral and cloth hygiene and would take pragmatic measures to observe good personal hygiene. After the planned intervention had been implemented there was the need to assess its effectiveness. The author and students employed observation to evaluate the intervention strategies. With this the author and student chose five continuous days (Monday to Friday) to observe pupils. The author and student was particularly interested in observing the same attitudes and practices as was done in the pre intervention era through the use of a diary, the author and student was able to keep accounts of observations that were recorded for the five-day period. The subject observed were the pupils who had been taken through the intervention process. A consideration of the records revealed that:

- 1) Quite a greater number of the pupils washed their clothes in the middle of the week.
- 2) The majority of the pupils rinse their mouth with water after eating in school and floss with mouth wash when at home.
- 3) The pupils put off sweat on the body after playing.
- 4) The pupils bring mufti to school which they wear to play.
- 5) Parents take their awards to hospital for dental check up every month.
- 6) There is a health- personnel who gives pupils hygiene talk on Wednesdays every two weeks.

After the observation, the author and student went further to interview some of the pupils on one-on-one basis to assess their knowledge on how to keep your oral cavity and clothes clean.

The interview guide used was the same one used at the pre intervention stage. The findings from the interviews suggested that the pupils had acquired a fair knowledge of the causes and effect of poor oral and cloth hygiene and remedies to overcome them. The findings from the interviews strengthened and confirmed the situations observed at the post intervention stage. The detail reports of the findings from this research are presented at the next chapter of this essay.

6.2 Pre and Post Intervention Observation on Good Hygienic Practices

The table presents a report on a five-day period observation undertaken by the author and students to monitor the effectiveness of the strategies implemented at the intervention stage. The same 90 pupils observed during the pre-intervention stage were observed throughout the week. On Monday, nineteen (19) pupils were observed. Fifteen (15) representing 79% of the pupils behaved in adherence of good oral and cloth hygiene while the remaining four (4) representing 21% did not do so. On Tuesday, out of sixteen (16) pupils observed fourteen (14) representing 87.5% adhered to good oral and cloth hygiene principles while only two (2) pupils representing 12.5% did not do so. On the third day eighteen pupils (18) were observed. Out of the eighteen sixteen (16) pupils representing 88.9% adhered to the principles while the remaining two (2), a percentage representation of 11.1% failed to follow the principles. Thursday which was the fourth day the observation made on seventeen (17) pupils showed that sixteen (16) adhered to the rules representing 94.2% and only one person representing 5.8% failed to do so. The fifth day, that is Friday being the final day, 20 pupils were observed out of the twenty, fifteen (15) pupils representing 80% of the total adhered to the principles whilst the remaining five(5) a percentage representation of 20% failed to follow. In sum, 76 pupils representing 82.6% obeyed good oral and cloth hygiene principles but the remaining 13 representing 14.4% failed to do so within the period of five days.

Table 1: Pre and Post Intervention Observation on Good Hygiene Practices

Day	Number Observed	Adherence to Hygiene		Percentage		Adherence to Hygiene		Percentage	
		Yes	No	Yes	No	Yes	No	Yes	No
Monday	19	14	4	79	21	02	17	11	89
Tuesday	16	14	2	88	12	04	12	25	75
Wednesday	18	16	2	89	11	03	15	17	83
Thursday	17	16	1	94	6	06	11	35	65
Friday	20	15	5	75	25	06	14	40	60
Total	90	76	14	84	16	21	69		

6.3 Causes of food poisoning

On table two, pupils were to identify with which of the listed causes they think is the result of the contamination of food in the school. Out of the twenty – one (21) pupils, two boys representing 9.5% identified with Dirty Environment. They said that they did not mind eating anywhere and especially if they felt their friends would want to join them, they went hiding by the rubbish dump to eat. Not washing hands before eating swept 4 pupils representing 19%. These pupils claimed that most often than not, their teachers did not allow them to respond promptly to the break time bell but immediately it is break over, the next teacher is punctual in class so for fear that they might be late for the next class, they did not bother washing their hands sometimes at all or not thoroughly before eating. 6 other pupils representing 28.5% said that they had been warned from home not to eat food prepared outside so they only buy fruits at school but according to them, they had not thought of ever washing the fruits before eating.

Not observing personal and food hygiene practices of food vendors was attracted by 5 pupils representing 24% confirmed that once the school had allowed these vendors to sell, they were assured that the leaders had taken all hygienic matters into consideration so they did not see it as a duty to check on a vendor as to how the food is served or how she keeps herself before buying the food. Lastly, four other pupils representing 19% said they often ate cold food. These students said that they always ate in the morning before coming to school so usually during the first break when the food was hot, they did not patronize it but do so during the second break by which time, if the food was not finished, then they had to buy it cold and eat.

Table 2: The Causes of Contamination of Food

Parameter	Frequency of pupils	Percentage
Dirty Environment	2	9.5
Not washing hands before eating	4	19
Not washing fruits before eating	6	28.5
Not observing personal and food hygiene	5	24
Eating cold food	4	19
Total	21	100

6.4 Strategies to Prevent Food Poisoning

Since modern education insists teaching and learning should be brought to the door steps of the pupils, the researcher, after a vivid explanation of the concept of food poisoning, asked pupils to suggest ways by which they would want to be assisted to prevent food poisoning. Surprisingly 6 pupils representing 29% chose field trips while seven (7) pupils representing 33% suggested discussion and 8 pupils representing 38% selected demonstration and practice. Considering the close range of the figures and seeing that these were the traditional methods their teachers had used in their teaching since time immemorial, decided to use all three of them but modify them by integrating technology, group work, gallery walk and some talk for learning strategies.

Table 1: Strategies to Prevent Food Poisoning

Parameter	Frequency of pupils	Percentage
Field trip	6	29
Demonstration	8	38
Discussion	7	33
Total	21	100

The pre-intervention observation chart itemized four parameters to serve as the focus for the observation of health practices among the pupils. Five days were used for the observation. All 21 pupils were observed on Monday; on Tuesday, 19 pupils were observed; 18 pupils were observed on Wednesday; 17 pupils on Thursday and 20 pupils were observed on Friday. The parameters were: washing hands before eating; washing fruits; eating cold food and eating at a clean place. The results were as follows.

Table 2: Pre –Intervention Observation on Health Practices

Day	Number Observed	Washing Hands Before Eating		Washing Fruits		Eating Cold Food		Eating at a Clean Place	
		Yes	No	Yes	No	Yes	No	Yes	No
Monday	21	1	5	1	3	3	0	2	6
Tuesday	19	0	4	0	4	4	0	2	5
Wednesday	18	3	4	1	3	4	0	1	2
Thursday	17	3	5	2	5	0	0	2	4
Friday	20	3	5	0	3	1	0	3	4
Total	95	10	23	4	18	12	0	10	21

7. Conclusion

Strategies to remedy poor personal hygiene and food poisoning among JHS pupils in Ghanaian Basic Schools should concentrate on modifying some traditional teaching strategies like the often used discussion, demonstration, practice and field trips. Efforts should also be made by stakeholders and teachers to tackle dirty environment which is a major cause to pupils' inability to observe personal and food hygiene practices as these factors could undermine the realization of achieving good food hygiene

7.1 Recommendation

The present research was carried out with pupils in one particular class from each of the three specific schools. The researcher therefore recommends that there is the need for further research to be undertaken on the same issue involving pupils in the different areas, classes and in different geographical areas. This will make the findings general.

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