

PROMOTING SCHOOL HYGIENE AS A TOOL FOR DISEASES CONTROL AND HEALTHY LIVING

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Abstract

A healthy school environment is one in which the school setting supports students' health and well-being and helps them build a strong foundation for learning. In this environment, good nutrition, basic safety, clean air and water, access to care, control and prevention of disease and making healthy choices allows students to thrive. In a healthy school, all students deserve access to a clean and safe environment with good air quality, schools should provide students with nutritious meals and opportunities for physical activity and teaching students about importance of hygiene. A healthy school environment (physical, biological and socio - cultural) serves as a major determinant of health and greatly influences the individual's level of intellectual growth and development. This paper therefore reviewed the school health programme, hygienic approaches for control of infection, and importance of school hygiene and sanitation. It was therefore concluded that good hygiene at school and at home keeps infectious diseases away, practice good hand hygienic, ensure food safety, clean and disinfect properly and stay away from school if infected which promotes healthful living. Therefore, it was recommended that schools should practice good personal hygiene to improve well - being of all, health educators should ensure healthful living in schools.

Keywords: *School hygiene, Tool, Diseases control, Healthy living*

Introduction

A healthy school is a place where students have many opportunities – in the classroom and in every aspect of their school experience to foster their healthy physical, mental, social and intellectual development. The physical school environment has a strong influence on the health of children, a contaminated environment can cause health problems (e.g respiratory disease, asthma, cholera, tuberculosis, flu etc.) with subsequent reduction in school attendance or learning ability whereas the reverse is the case with a healthy school environment. A healthy school environment is one that protects students and staff against immediate injury or disease and promotes prevention activities and attitudes against known risk factors that might lead to future disease or disability. It includes the physical and aesthetic surroundings and the psychosocial climate and culture of the school. Factors that influence the physical environment include the school building and the area surrounding them, biological or chemical agents and physical conditions such as temperature, noise and lighting (Moronkola, 2012).

The psychological environment includes the physical, emotional and social conditions that affects the well-being of students and staff. According to the Federal Ministry of Education (2006) in the School Health Programme (SHP) implementation guidelines as corroborated by Moronkola (2012) the condition required to meet the standard of a safe and healthful physical environment are varied. First, the schools must be located away from potential source of environmental hazards (factories, markets, airports, major highways and public motor parks). The school should be protected from biological, physical and other chemical threats such as cold or dampness, extreme heat, radiation, injuries, violence and crime, air and water pollution.

The Federal Ministry of Education (2006) indicated that the plan for a maximum of 500 learners should accommodate at least one hectare of land and that the location should be safe for living. There must be good illumination and ventilation. The school should have suitable facilities for the physically challenged. The furniture for learners and staff should be appropriate and adequate in quantity. There should be adequate number of gender sensitive toilet facilities for staff and students, (at least one toilet compartment, one water closet for 30 learners). Every school must ensure the provision of basic necessities like safe water. Each water point should serve a maximum of 250 people. The location of the water should be at least 30 metres from any soak away or toilet.

The transmission of infectious diseases in schools is a significant risk, e.g. coughs, cold, respiratory infections are relatively common especially at certain times of the year and outbreaks of serious infections such as E.coli, mumps, measles can cause severe illness. Many infectious diseases have the capacity to spread rapidly with a care provision or in schools. Staff and school management must always be vigilant to this threat. Crèche schools are an ideal environment for the spread of infectious diseases because of the difficulties in maintaining hygiene with such a young age group. In schools, children spend time together in close proximity and share food, toys and other equipment, the transfer on infection is hard to avoid. Therefore high standard of hygiene and infection control are required if transmission is to be prevented (Amoran, Kupoluyi and Salako 2017).

The objectives of healthful school environment are to create a healthy and safe learning environment in the school, provide adequate safe water supply and sanitation facilities for use in the schools. Moronkola (2012) affirmed that the physical school environment encompasses the school building and all its contents including physical structures, infrastructure, furniture and the use and presence of chemicals and biological agents; the site on which a school is located and the surrounding environment including air, water and materials with which children may come in contact as well as nearby land uses, roadways and other hazards.

The American Academy of Paediatrics (1993) defined a healthful school environment as one that protects students and staff against immediate injury or

disease and promotes prevention activities and attitudes against known risk factors that might lead to future disease or disability. WHO (2004) estimates that 25% and 33% of the global burden of disease can be attributed to environmental risk factors. It was expressed further that respiratory infections, pneumonia, diarrheal are major causes of death which are closely linked with poor sanitation, poor hygiene and lack of access to safe and sufficient supplies of water and food.

The Importance of Infection Control

Infection control is the procedure to prevent the spread of infectious diseases. According to World Health Organization (2019) infection prevention and control is a scientific approach and practical solution designed to prevent harm caused by infection to patients and health workers. Staff and students in school are at risk of spreading infection if they do not take sensible precautions. People who come into contact with bodily fluids such as urine, faeces, vomit or sputum, are at most risk, such substances may contain micro-organisms, such as viruses and bacteria. Also at risk of spreading infection are those involved in food preparation. To combat the spread of diseases in schools, the school managers must ensure that the environment is kept in a clean and hygienic state and that staff and students must comply with effective hygiene practices (A Moran, Kupoluyi and Salako 2017).

Hygiene Requirements in Control of Infections

In safeguarding the health and welfare of staff and students in schools, the management should care for them in safe and hygienic premises. The following are required:

i. Hand Washing: Hand washing is the act of cleaning one's hands with soap and clean water to remove bacteria, viruses, microorganisms, dirt, grease or other harmful and unwanted substances stuck to the hands. Unwashed or poorly washed hands provide an effective transfer route for micro-organisms such as bacteria. Effective hand washing is therefore perhaps the single most effective way to prevent the spread of disease. It removes the micro – organisms from the hands and prevents them from being transferred to another person or to a toy or piece of equipment. Samuel (2012) opined that personal hygiene is aimed at promoting standards of personal cleanliness which include bathing, clothing, washing hands and toilets, care of nails, feet and teeth, personal appearance and inculcation of clean habits in children. The training in personal hygiene is an important task of the school. All staff and children should be encouraged to wash their hands regularly and thoroughly, including after going to the toilet, before and after caring for someone with vomiting or diarrhea, before and after treating a cut or wound, after touching animals, after touching garbage, after handling any

body fluids, waste or soiled items, before handling foodstuffs and after dirty play, indoors or outdoors (Centers for Disease Control, 2016).

Hand washing is one of the most important ways we can use to prevent the spread of illness in the classroom and elsewhere. When kids come in contact with germs, they can easily spread those germs, especially if they rub their eyes or scratch their nose. Frequent hand washing can help slow this spread of germs. Hand washing along with other personal hygiene rudiments are the best way to stop the spread of infections. This can be done by teaching the children how to wash their hands properly, after blowing their nose, using the bathroom, and before eating; you can help them reduce the risk of getting sick, and keep them from infecting others if they catch an infection or illness (Adams, 2015).

ii. Sinks and Soaps: Sinks must be appropriately situated within the school grounds, to enable effective hand washing, the school management should ensure that the premises are equipped with an adequate number of sinks that are easily accessible, should not be at risk of harassment by people or attacks by animals such as snakes, scorpions or spiders, access routes must be open and clear, must have robust, easy-to-use dispensers for liquid soaps, have a supply of disposable towels disposable paper towels are preferable to linen towels which can also become soiled and damp. Thorough drying of the hands should be encouraged after washing as this further reduces the number of micro-organisms that remain on the hands (Hodgson, 2017) Chabo (2018) recommended that, school should place signs and posters by sinks reminding people of the importance of effective hand hygiene.

i. Maintaining a Clean Environment

To combat the spread of infection in school, management must ensure that the environment is kept clean. All staff have a responsibility to help keep the premises clean and tidy and to identify areas that fall below acceptable or safe standards. Amoran, Kupoluyi and Salako (2017) opined that in maintaining a clean environment, effective cleaning arrangement should be in place. These should be supported by regular quality assurance checks to ensure standards are being met, suitable trained cleaning staff should be employed, and either directly or through a contractor arrangement and schedule of cleaning should be set up. Chabo (2018) affirmed that poor standards of cleanliness in school are associated with ill-health and it was recommended that separate cleaning equipment should be used in the classrooms, kitchen and toilets during active outbreaks of disease in school.

ii. Cleaning of Toys and Equipment

Playing with toys or using equipment such as climbing apparatus and slides are important part of what students play with. However, these items

can quickly become soiled or unhygienic and a child's habit of putting toys in his/her mouth can lead to a situation where disease can be spread. Park (2007) opined that school managers should always ensure that toys and equipment are inspected and cleaned regularly. This should be done at the end of each working day and can be done with ordinary soap and hot water. It was stressed further that toys should be replaced when unhygienic.

- iii. **Cleaning Spillages:** Spillage of body fluids such as urine, vomit, faeces or blood should be cleared up as quickly as possible. School managers or leaders should be encouraged to treat every spillage of body fluid or body waste with caution as potentially infectious. Hodgson (2017) highlighted the following as a typical key steps in cleaning body spillages:
 - i. Staff should assess any spillage first and make arrangements to secure the area so that children and visitors do not enter it.
 - ii. They should wear appropriate personal protective equipment, such as disposable gloves and aprons.
 - iii. Disposable paper towels and a suitable product that combines both a detergent and a disinfectant should be used to clean up the spill.
 - iv. Used towels should be disposed off in a leak-proof plastic bag according to the services waste disposal policy.
Hodgson (2017) stressed further that carpets and upholstery should be thoroughly cleaned with warm soapy water or a proprietary liquid carpet shampoo, rinsed and where possible, dried. Mops should never be used for cleaning up blood and body fluid spillages.
- v. **Alcohol Rubs and Gels:** Antibacterial gels and rubs were originally introduced to provide higher levels of infection control in hospital but these have now become popular as an additional form of defence against infections. However, they must be used with care. Antibacterial gels or hand sanitizers are useful in circumstances where normal soap, water and paper towels are not available, such as during farm visits or where additional protection is required. However, they should never take the place of routine hand washing with soap (Adams, 2015).

Prevention and Control of Infections in Schools

Schools are key avenues for learning healthy behaviour including those that can help prevent infectious diseases. There are many opportunities in school settings for children to learn good health practices such as washing their hands before meal and after toilet use. This can happen in the classroom and also in the context of other school activities. Teachers and peers can be good models for children. The control of infection in school is very important. Parents should be made

aware that children who are unwell should be kept at home. Those with a temperature and other specific signs and symptoms should be excluded until they are better. The school should as soon as possible report any serious or unusual illness. Infectious diseases such as mumps, measles, meningitis, whooping cough, cholera, tuberculosis, gastrointestinal disease are common diseases which can be very contagious and severe. They are caused by many different infectious agents, including bacteria, parasites or viruses. These diseases can affect people at any age, though the symptoms may appear depending on the causing agent, it can be more severe in infants, school age child and the elderly. During any infection outbreak in schools, Hodgson (2017) highlighted the following for providers:

- i. Increase environmental cleaning (especially toilets and door/flush handles).
- ii. Reinforce good hand hygiene with children especially after going to the toilet and before eating and drinking.
- iii. Ensure that toys are cleaned and dried after use
- iv. Exclude children with symptoms and advise staff members with symptoms to refrain from work until they have been symptoms - free for 48 hours.
- v. Staff handling food or working in a food handling area should report to their manager if they have symptoms of diarrhoea or vomiting. Managers should exclude staff with these symptoms from food handling, in most cases for 48 hours from the natural cessation of symptoms.
- vi. Teach good hand washing practices.
- vii. Provide reminders in daily announcements about preventing the spread of germs and illnesses.

An Approach in Addressing Prevention of Diseases

The whole school community should be involved in the practice of health promotion and therefore health is built into all aspects of life at school for those who learn and work there. European Centers for Disease Prevention and Control (2013) recognises that there is a link between the school's policies and practices in the following areas which are acknowledged and understood by the whole community:

- i. A participatory and action-oriented approach to health education in the curriculum
- ii. Taking into account student's own concept of health and wellbeing
- iii. Developing health school policies
- iv. Making effective link with home and the community
- v. Making efficient use of health services
- vi. Developing the physical and social environment of the school.

In an approach in prevention of infection, schools and childcare facilities, public health authorities working together with the school sector should consider the following contributions of activities in order to create a supportive environment; as highlighted by European Centers for Disease Prevention and Control (2013).

- i. Involvement of the whole school community: Decision making and substance action in different areas require the collaborative involvement of school administrators, teachers and students, as well as school staff (e.g catering and cleaning), parents and other community members.
- ii. Analyse existing policies and regulations related to health and disease prevention: address obstacles to compliance, emphasizing joint and individual responsibilities taking into account the needs of students and staff.
- iii. Skilled-based health education: develop health related curricular (e.g hygiene education) that emphasize life skilled development and values, so that positive behaviours are more likely to be adopted and sustained.
- iv. Strengthen links with other relevant school health and social services as well as with other relevant community organisations and services.
- v. Understanding the physical and psychological school environment: address issues such as environmental factors that may render difficulty in the implementation of specific measures as well as existing knowledge, attitudes and practices towards disease prevention.

The Importance of School Hygiene and Sanitation

In recent years, school hygiene and sanitation have become a public concern. School children spend about one third of their time either in schools or doing school assignments during which time they may be exposed to a variety of physical, social and psychological harm. The school is a place where students spend much of their time outside their home. The satisfaction of their physiological and psychological needs and protection against infectious and accidents depend on the way hygiene is promoted in these local institutions. It is possible for these institutions to be the focal point for epidemic diseases such as diarrhoea and measles due to poor hygiene (Akani, Nkamginime and Orumaba, 2001).

Chabo (2018) opined that the provision of school hygiene and sanitation ensures the rights the rights of students to acceptable hygiene practices, safe water supply, latrines and a healthy school environment in general. All schools should be aware of the importance of school hygiene and sanitation for their students. Promotion of hygiene, organizing hygiene or health clubs, having a clean school compound and supervising classrooms for their cleanliness are some of the items that require the attention of the school authorities. The cleanliness of

the classroom is vital for a good learning process. Students should be involved in the maintenance of classroom cleanliness on daily basis. The floor of the classroom should be smooth to reduce dust and control infection.

Conclusion

A healthy school is a place where students have many opportunities in the classroom and in every aspect of their school experience to foster their healthy physical, mental social and intellectual development. The school and broader community should also supply students to develop healthy habits that will last a lifetime, this can be achieved by adopting a comprehensive school health approach. Good hygiene at school and at home keeps infectious diseases away. Practice good hand hygiene, ensure food safety, clean and disinfect properly and stay away from infected items help promotes healthful living.

Based on the reviewed literature it was therefore recommended that:

1. Copies of the school health programme (SHP) policy and implementation guidelines be made compulsory document for all schools to guide programme implementation.
2. Government and health educators should ensure healthful living in schools by supporting schools in providing the needed facilities.
3. There is need for government and health educators to inspect and monitor the activities of the schools in the States.
4. Staff and students should practice good hygiene in order to prevent diseases.

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