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SURVEY OF ENVIRONMENTAL HEALTH CONDITIONS IN RELATION TO SAFETY IN PUBLIC PRIMARY SCHOOLS IN EGBEDA LOCAL GOVERNMENT AREA OF OYO STATE NIGERIA

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Abstract

The importance of the school environment to the primary school teacher should not be underestimated as the best of health teaching is done by example. Teachers register complaints about noisy environment, lack of water, poor playground and insufficient toilet facilities among other problems. The need to be constantly alert to observe school buildings, fencing, play ground and other possible hazardous condition that may affect the safety of pupils has become very important, not only to the school but also to the community. Seven research questions were drawn. Purposive sampling was adapted to survey 74 public primary schools. Data collected were analyzed using percentages. The study revealed that the conditions of more than 60% of public primary schools in Egbeda Local Government Area of Oyo State may affect safety of the school community members. The study also shows that most of the schools did not have adequate water supply, sanitation and waste disposal facilities. In recommendation, the ministries of education, health and environment should ensure regular routine inspection of public primary schools with the aim of creating a friendly, safe and sustainable healthful school environment that will improve the process of teaching and learning that will result in favourable learning outcomes.

Introduction

The environment for learning depends substantially on a variety of physical characteristics and human influences. Yet schools differ measurable from those that work very well to improve learning outcomes to those that actually hinder the development of many young students. Primary schools accommodate a concentration of very active pupils who are dynamic, fast moving and vigorous, which in itself may predispose them to accidents or injury. Yet in the interest of safety no one would advocate that children just sit and do nothing. Moronkola, (2012) called for school settings where children are protected and stimulated to maximize the benefit from the school educational programme.

These educational benefits can only be maximized if pupils and teachers comfort and safety are indicated as the most important aspect of any school environment (Roland, 2011). When pupils are comfortable, then learning becomes much easier. Bowers, Howard, Charles, and Burkett (2003) explained that being comfortable in a school is a combination of several and different factors such as adequate usable space, noise free zone, good topography of the school, good playground, well constructed school buildings with well ventilated classrooms and adequate rest rooms.

It must be noted however, that no matter the level of comfort a school provides, accidents and injuries do happen, for there is no such thing as a completely accident free school environment. Accident looms as a greater threat to health and life of the school age population than infectious diseases (Sanitation Connection, 2002). The prevention of accidents has become as important as the prevention of communicable diseases. It is also interesting to note that just as the most effective way of preventing communicable diseases is the positive approach to immunization, the most effective prevention of accidents is also the positive approach to safety promotion for effective living (Aina, 1992; Salami, 1997; Purkey, 1999; Mitchell, 2008)

Safety extends the scope of human experience by anticipating and preventing conditions that would otherwise be injurious and even fatal. The promotion of safety and a healthful school environment is both a challenge and an opportunity as the school safety programme has the future value of turning out safety conscious citizens who are better adapted to modern life (Federal Environmental Protection Agency (FEPA), 2004).

A safe and healthful school environment is one which provides for healthful conditions throughout the school day. It is an organized setup where the school administration, physician and custodian work together to provide safe and sanitary facilities where pupil-teacher relationships are favourable to the optimum welfare of all.

Through the years Nigerian schools have been faced with numerous challenges such as locating schools in potential hazardous area (such as noise, heat and dampness), overcrowded classrooms and poor school building construction, lack of chairs and desk for staff and students, inadequate and non gender and disability sensitive rest rooms, inadequate water supply and sanitation facilities, lack of safe recreation facilities, lack of or bad fencing of school compound (Egim, 2003; Egwunyenga, Nwadiani, Onyeabo, 2004; Obong, Okey, Aniah and Okaba, 2010; Moronkola 2012). Most of these challenges have resulted in several tragic accidents with pointers to the need for attention, modification and improvement of environmental conditions in Nigerian schools.

Next to the home, the school environment is the most influential factor when a child is developing (Teachers' Institute, 2008). Researchers have

shown that children are most vulnerable to environmental pollution and hazards because exposures which may be relatively harmless to adults can be potentially devastating to them causing childhood morbidity such as malaria, measles, malnutrition, diarrhoea diseases and respiratory infections (Federal Environmental Protection Agency (FEPA), (2004). The World Health Organisation (WHO) (2006) also stated that about 40% of the total disease burden due to environmental risks fall on children under the age of 10 years.

The physical outlook of the school environment is very important in contributing to a healthy academic exercise (Schunk, 2000). No one however should be misled into believing that most of the schools are "up to date" just because new buildings are being erected. Indeed teachers and parents still register complaints about inadequate water supply, overcrowded classrooms and playground, noisy environment and lack of basic safety measures.

A safe environment, devoid of accidents and sanitation related diseases is required to promote teaching and learning in schools. The challenge of developing and managing the environment of a school is a great one (Egwunyenga, Nwadiani, Onyeabo. 2004; Idowu, Abiola, 2007).

Where is the building to be located? Of what is it to be constructed? Is there a play space within the structure? Are there adequate furniture for staff and students? Is there a fence in the school? Are the classrooms adequate in size? Are there adequate gender sensitive toilets? These and a dozen more pertinent questions must be considered when addressing issues concerning environmental health condition of primary schools National

The importance of a safe school environment to the pupils and teachers should not be underestimated. The finest health teaching is done by example. Where there are no proper toilet facilities for instance, it will be difficult to discuss proper toilet habits.

A picture of a typical public school in Egbeda LGA shows the challenges of developing and managing a typical public school environment in Nigeria. It also shows that pupils and even staff may not be safe as most schools are located along road-traffic route, are without a fence, in neighbourhood of industrial activities and markets which constitute a nuisance and predispose them to accidents. Pupils may be exposed to snake and insects bit due to irregular grass clearing. Proper drainage and refuse disposal are important factors for a safe school environment.

The study therefore assessed the environmental health conditions in relation to safety in public primary schools in Egbeda Local Government Area of Oyo State.

Methodology

The descriptive survey research design was used for this study. The sample for the study was made up of 74 public primary schools, the total

sampling technique was adopted to select all the public primary schools in Egbeda Local Government Area of Oyo. Observational method was used with the aid of a Sony camcorder to collect data from all the seventy four public primary schools. The instrument used for data collection was an inventory created from the 2006 National School Health Policy document to serve as a check list. The Inventory was made up of seven items showing environmental characteristics recommended for every school in Nigeria and these were matched against YES and NO options. The YES options showed availability and adequacy while the NO options indicated non availability, not adequate and bad condition.

Results and Discussion

Frequency Distribution of Environmental Health Conditions of Public Primary Schools in Egbeda LGA of Oyo State.

	External Inspection	Yes	No	Total
1	Schools cited away from potential environmental hazards.	43(58.1%)	31(41.9%)	74(100%)
2	Schools with adequate water supply	18(24.3%)	56(75.7%)	74(100%)
3	Schools with perimeter fencing	31(41.9%)	43(58.2%)	74(100%)
4	Schools with adequate and gender sensitive toilet facilities	14(18.9%)	60(81.0%)	74(100%)
5	Schools with safe recreational and sport facilities	10(13.5%)	64(86.4%)	74(100%)
6	Schools with proper drainage and waste disposal facilities	4(5.5%)	70(94.5%)	74(100%)
7	Schools with adequate structures and facilities for physically challenged learners	3(4.1%)	71(95.9%)	74(100%)

Research question 1 is answered in row one of the frequency table above. Showing that 43 (58.1%) of the schools inspected were cited away from potential environmental hazards (such as major roads, industries, markets, and public parks) while 31 (41.9%) schools were cited either close to a market, major road or motor parks.

Row 2 of the table above shows the percentage of public primary schools with adequate water supply in Egbeda LGA of Oyo State in line with research question 2. Only 18 [24.3%] schools have adequate water supply. While 56 (75.7%) schools do not have adequate water supply,

Research question 3 was to know percentage of public primary schools with perimeter fencing in Egbeda LGA of Oyo State. Row 3 of the frequency table above indicates that 43 (58.2%) of the inspected schools do not have perimeter fencing (schools with dilapidated fence with no gates were included in this category), while 31 (41.9%) schools were found to have adequate fencing.

The percentage of public primary schools with gender sensitive toilet facilities in Egbeda LGA of Oyo State is shown in row 4 which indicates that only 14 (18.9%) schools were found with adequate and gender sensitive toilet facilities. The remaining 60 (81.0%) schools either had inadequate or no toilet facilities.

To answer research question 5, row 5 of the frequency table showed the percentage of public primary schools with safe recreational and sport

facilities in Egbeda LGA of Oyo State. It showed that, only 10 (13%) of the schools have safe recreational or sport facilities. 64 (86%) of the schools in Egbeda LGA however do not have adequate recreational and sports facilities.

To answer research question 6 the frequency table indicated that Only 4 (5.5%) schools were found to either have proper drainage or waste disposal facilities while, 71 (94.5%) schools in Egbeda LGA do not have proper drainage and waste disposal facilities.

Row 7 of the frequency table Shows that only 3 (4.1%) schools were found to have adequate buildings but these three schools do not have facilities for learners with disabilities. 71 (95.9%) schools were found to have dilapidated buildings with no considerations for learners with disabilities.

This study showed that a good percentage of schools in Egbeda LGA are cited in areas of potential environmental hazards such as major roads and industries. Pupils attending these schools may be exposed to various environmental hazards including vehicular accidents and air pollution. They may become susceptible to the chemicals in the air from the industries around their schools; they may be exposed to both physical and biological hazards which may trigger asthma and acute respiratory diseases. FEPA (2006) warns that poor outdoor and indoor air quality will cause drowsiness, fatigue, headache, eye, nose, and throat and skin irritation. It also stated that damp indoor air in leaking roof or dusty classrooms triggers asthma in susceptible children. In addition to this, Egwunyenga, Nwadiani, Onyeano. (2004) stated that the location of schools has influence on students' dropout rate.

The result shows that most schools do not have adequate water supply and by implication, pupils attending these schools cannot be said to be free from diseases as they may not be able to perform the basic hygiene of regular hand washing which has been reported to reduce the incidence of diseases associated with poor sanitation (WHO, 2006). Idowu and Abiola (2007) reported that adequate water supply in schools has a positive influence on the health status of student.

This study found out that a high number of schools in Egbeda LGA are without fence. By implication the pupils in these schools are not safe as they are exposed to external hazards and it may be difficult to control movements in and out of these schools. The National School Health Policy (2006) insists that every school should have perimeter fencing for safety purposes. Moronkola (2012) also advised that staff and students should be motivated through the provision of appropriate facilities and a conducive learning environment.

The result of this study also showed that only 14 schools out of 74 studied made provision for adequate and gender sensitive toilet facilities. It is important to teach good toilet habits as a part of personal grooming and hygiene. The availability of gender sensitive toilets will provide a sense of safety and

responsibility among the pupils. Schunk, (2000) recommends that lavatories with soap and water should be provided in schools as this will aid learning and contribute to optimal wellbeing of students and teachers.

This study also discovered that only ten schools out of seventy four have safe recreational and sports facilities. Most of the schools are littered with stones, tall trees and dilapidated sporting facilities. These conditions will expose pupils to injury and accidents during play. Moronkola (2012) advised that schools should provide opportunity for physical education, sports and leisure activities as this will aid social and mental health development.

The scores for schools with proper drainage and waste disposal (4) and adequate structure (3) respectively are low. This is an indication that most of the schools do not have these facilities. This finding buttressed the findings of Egim (2003) who stated that educational planners and management have been more interested in issues such as the number of schools, teachers, students' infrastructural facilities like classrooms and school buildings; however, little attention has been given to the quality of the school environment.

Conclusion

The environmental health conditions of more than 50% of public primary schools in Egbeda LGA of Oyo State are not in line with the characteristics of a healthful school environment as indicated by the 2006 National School Health Policy. The structures of most of the schools surveyed have serious security challenges and are worrisome. Most of the school buildings are dilapidated and unkempt, therefore making the learning environment dull and unattractive. It also presents a very hostile study environment that is not child friendly, lack recreational centers and poor toilet and waste disposal facilities.

Based on the findings of this study the following recommendations were made:

- i. The safety of pupils in and around the school should be considered above all things and beautification of schools to create staff/learner friendly environments should be taken seriously by the school authorities. Landscaping and planting of flowers with regular trimming and clearing of grasses should be encouraged.
- ii. Portable water should be provided to all public schools to encourage personal and group sanitation.
- iii. Recreational facilities should be provided and monitored during use to reduce injury.

- iv. An efficient sub-committee that will achieve the objectives of a healthful school environment as indicated by the National School Health Policy should be set up. Members of this team should include the Principal and vice, representatives from the teachers, a student representation, representatives from the parent-teacher association (PTA), and other stakeholders.
- v. The external and internal School environment should be inspected constantly by all the stakeholders including members of the Nigeria School Health Association, Ministry of Health and the Ministry of Environment.

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