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Enhancing academic development through school health education and promotion

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Abstract

Considering that children and youths of today are the leaders of tomorrow, their academic development is therefore very important in the future growth and development of the economy. They should therefore the trained in an environment devoid of ill health. Health education and promotion should therefore be part of the curriculum of all schools so that the children can learn to cope with the environment and also develop a healthy lifestyle that will enhance future family health. Impacting a healthy behavioral lifestyle on the student at school not only enhances learning in the school environment, it is also transferred home to parents and future offspring. When teachers and parents work together as partners, they create important opportunities for children to develop social, emotional, and academic competencies. Thus, there is a need for health education and promotion programs in the school. Health Education and Health Promotion should be introduced to students at an early age, since students must be provided with an enabling environment and equipped with knowledge, attitudes, skills, and values.

Keywords

Enhancing, Academic Development, School Health Education, Promotion

1. Introduction

Academic performance is dependent on regular attendance at school, attention to teacher's instructions, healthy mind and a healthy body and the absence of distracting events. School attendance is a function of the student's health, zeal and motivation to learn. The health of the student depends on the attitude of the teachers and parents to environmental sanitation in the school environment and home environment respectively. It also depends on the value, both teachers and parents attach to health and how they are able to inculcate a healthy behavioral lifestyle on the student. Impacting a healthy behavioral lifestyle on the student at school not only enhances learning in the school environment; it is also transferred home to parents and future off springs. When teachers and parents work together as partners, they create important opportunities for children to develop social, emotional, and academic competencies (U.S. Dept. of Education, 2014).

Thus, there is a need for health education and promotion programs in the school. Health Education and Health Promotion should be introduced to students at an early age, since students must be provided with an enabling environment and equipped with knowledge, attitudes, skills, and values. These could assist students in facing challenges and help them in making healthy lifestyle choices in the face of peer and other social pressure (GSHS, 2007).

2. Health Education Programs

Several health education programs are particularly important in the school environment. These include nutrition program, environmental health program, sexuality education, malaria control program, Immunization programs.

Helminthiasis prevention program and other programs that may arise based on circumstances. In addition, a curative program for locally endemic diseases, accidents and injuries should be available for early diagnosis and treatment in the early pathogenic phases of diseases (Park, 2007).

3. Environmental Sanitation

School sanitation and hygiene education refers to the combination of hardware and software components that are necessary to produce a healthy school environment and to develop or support safe hygiene behaviors. The hardware components include drinking water, hand washing and excreta disposal and solid waste disposal facilities in and around the school compound. The software components are the activities that promote conditions at school and practices of school staff and children that help to prevent water and sanitation-related diseases and parasites (UNICEF and IRC, 1998).

Children perform better when they function in a hygienic and clean environment. Parents are more likely to send their daughters to schools with private sanitary facilities. Proper environmental sanitation reduces health hazards to school children and the communities in which the schools are situated. Above all, children have the right to be as healthy and happy as possible. Being clean, healthy and having clean water and proper sanitation facilities contribute to a happy childhood (Snell, 2003).

Environmental sanitation involves cleaning of surroundings, cutting overgrown grass, and proper refuse and sewage disposal. A school that allows grass to grow in its surroundings should await all manners of reptiles, insects and rodents in the school environment. Snakes are particularly dangerous as their bites can cause morbidity, consequent prolonged absence from school or death from venomous poisoning and/or tetanus. A school that has a dirty environment promotes mosquito breeding and therefore malaria, dengue/yellow fever and sometimes filariasis from Anopheles, Aedes, culex mosquito bites respectively. (Lucas and Gilles, 2006) Most of these diseases can cause student morbidity and prolonged absenteeism or even presenteeism. Presenteeism is a situation where the student comes to school but is unable to perform his or her scholastic duties due to sub-acute illnesses. (Hemp, 2004) There is therefore a need for an environmental health program, which will not only prevent illness and promote health but also inculcate the habit of cleanliness and hygiene in the students. The habit of hand washing with soap and running water should be inculcated in students in order to prevent transmission of communicable diseases through the oro-fecal route.

Poor refuse disposal promotes rodent visitation to school premises. Rodents may visit the school kitchen and pit latrines and play the role of mechanical carriers of infectious agents, which can cause gastroenteritis, cholera and typhoid when students eat foods from such kitchens. Some specialized rodents such as *mastomys natalensis* are capable of transmitting Lassa fever virus in a Lassa fever endemic area. (Lecompte et al., 2006) The morbidity that follows such infestations places a financial and health burden on the families of such students. Such students may suffer complications including sensoneurial deafness, which impairs learning and cognitive function (Cummins et al., 1990; Inegbenebor, 2012).

4. Nutrition Program

Malnutrition disorders affect more than 42% of school children in Nigeria and are responsible for 49% absenteeism of primary school age children (Yunusa, 2014). It is not uncommon for students from low income group families to come to school without breakfast and with no hope of lunch even when they get back home from school. Hungry students may be inattentive in class. Besides, they may have stunted growth. It has also been found that lack of proper nutrition contributes to worse class performance, lower test scores, and eventually less successful students and a less productive and competitive economy (WHO, 2013). Protein-energy malnutrition produces notable morphological changes in the brains of children in the developing world. These changes damage the intellectual potential of those who survive and limit their capacity to become part of the competitive world (Cornelio-Nieto, 2007). Protein energy malnutrition is particularly harmful with regard to growth stunting and cognitive dysfunction (Kar et al., 2008). It is therefore imperative that all tiers of government should provide some form of food supplementation to growing school children in order to enhance learning and adequate growth and development. Practical demonstrations in food cropping and animal husbandry should be part of the curriculum so that the children can learn to cultivate some food and rear domestic animals at home to enhance nutrition at home and in their future families. Nutrition education is also necessary. Students are then knowledgeable about the use of balanced diet to enhance growth and development of younger siblings and their future families. The use of excessive quantities of high glycemic index diets (Ihediohanma, 2011) should be discouraged as this leads to hyperinsulinemia, obesity, insulin resistance and type 2 diabetes (Shanik, 2008). The use of dietary fiber, nuts and fruits should be encouraged as these tend to limit the quantity of glucose absorbed and provide anti-oxidants and vitamins respectively (Slavin, 2008).

5. Immunization

Vaccines have been frequently cited as one of the most equitable low-cost, high-impact public health measures, saving millions of lives annually when programs are implemented on the national level. Over the last 40 years, the use of smallpox, measles, diphtheria, tetanus, pertussis, and poliomyelitis vaccines have eradicated smallpox and eliminated diseases in those populations that have achieved and sustained programs with high implementation rates (Miller and Sentz, 2006) All schools should obtain immunization history from parents of students in order to

have information on their immunization status against locally endemic diseases. Those who have not been immunized should be immunized if they are found to be susceptible to locally endemic diseases. Booster doses for tetanus should be given to students to prevent tetanus in the event of accidents and injuries to which they are prone. Certain diseases like German measles, human papiloma viral diseases and hepatitis are commonly acquired in this age group (Information letter from the Norwegian Institute of Public Health, 2010). Students should therefore be immunized against these diseases.

6. Prevention of Accidents and Injuries

Broken bottles, sharp instruments and metallic scraps should be removed from the school environment. Students should be educated on avoidance of alcohol and other drugs of addiction, which can promote violence and consequently accidents and injuries (GSHS, 2007). Road signs indicating proximity to a school environment and zebra crossings by the school gate should be put in place to prevent road traffic accidents. In addition, all schools compounds should be enclosed by a circumferential school wall to prevent children from running into busy roads indiscriminately. The play-grounds should also be far from roads in order to prevent children from running into roads to pick balls.

7. Infirmary

A curative health unit staffed by a school nurse or community health extension worker and equipped with anti-malarial drugs, analgesics, dressings and disinfectants should always be available in schools to provide first aid and treatment for minor ailments and injuries. It tends to prevent locally endemic diseases from progressing from their early pathogenic phase to late pathogenic phase, which is capable of causing disability and impairment of the learning process and absenteeism. Furthermore, the infirmary can serve as a center for the detection of illnesses that need referral to the physician.

8. Sexuality Education

By age 18, 70 percent of U.S. females and 62 percent of U.S. males have initiated vaginal sex. No abstinence-only-until-marriage program has been shown to help teens delay the initiation of sex or to protect themselves when they do initiate sex. (Kirby, 2001) In Nigeria, the time of initiating vaginal sex depends on a multiplicity of factors ranging from the socio-cultural, through socio-economic to ethno-religious background, which is modulated by parental permissiveness. Research has identified highly effective sex education and HIV prevention programs that affect multiple behaviors and/or achieve positive health impacts. Behavioral outcomes have included delaying the initiation of sex as well as reducing the frequency of sex, the number of new partners, and the incidence of unprotected sex, and/or increasing the use of condoms and contraception among sexually active participants. Long-term impacts have included lower sexually transmitted diseases and/or pregnancy rates. (Alford, 2003)

Students should therefore be exposed early to sexuality education. They should be taught on menstrual cycles, abstinence from sex and contraception methods. It might be argued that an early exposure to sexuality education could motivate them to earlier sexual activity. It should be understood that it is better to prepare the student's mind against the dangers of unsafe sex, which may cause unwanted pregnancy, and increased drop-out rates, as sexuality education can motivate the student to resist the temptation to engage in unsafe sexual activity. In the early years, supporting young children to learn about bodies and develop skills to relate with others has many benefits. These include helping children to feel good about themselves, increasing their independence in self-care, understanding emotions, understanding appropriate sexual behaviors, asking questions and seeking help if they need to (Link, 1997). Early childhood education settings and primary schools can provide education to support healthy and safe sexual development. During puberty, young people need support to develop the knowledge, skills, attitudes and values to care for their health and wellbeing, manage the changes they experience with confidence and seek advice and support from trustworthy sources. Sexuality and relationships education has the potential to have a positive flow on effect on the health decisions and behaviors of young people (WHO, 2003). Many adolescents at some point during their secondary school years become sexually active. Sexuality and relationships education have been shown to have a positive effect of behavior, delaying the onset of sexual activity and increasing the adoption of safer sex practices (Senderowitz and Kirby, 2006).

9. Malarial Control Program

Malaria is the most prevalent disease, which affects school children and is a major cause of the absenteeism in Nigerian schools (Okwa and Ibidapo, 2010) Mosquitoes, which transmit malaria parasites tends to breed in pot holes and cans that often litter most premises in Nigeria. Potholes should be covered or drained when possible and cans should be properly disposed of. Plantain and Banana trees, and overgrown flowers sometimes provide shades and hiding places for mosquitoes, which bite students when they go under these shades to play. Such places should be sprayed with insecticides regularly if they cannot be trimmed or disposed of. In addition students should be provided with insecticide treated nets, which can prevent contact with mosquitoes at night. Students who have developed symptoms of malaria should be adequately treated with combined artemisinin derivatives in order to prevent the emergence of drug resistant strains of malaria parasites.

10. Prevention of Helminthiasis

Various worm infestations affect the school child and may also affect learning by causing discomfort, anemia, wasting and disability. School children are particularly vulnerable to hookworm infestation as some may walk barefooted over soils that have been defecated upon by individuals who have no latrines and therefore engage in 'bush attack'. They may also contact ascariasis when ascaris cyst laden dust is blown into fried cassava flour, which is the ingested after soaking in water. Tape worm infestation can occur when school children eat undercooked pork or beef served by food vendors. Hookworm infestation cause anemia when the stoll count is high while tape worm infestation can lead to wasting and emaciation. It is therefore obligatory to carry out regular de-worming to improve the health of school children in order to enhance attendance and learning process.

11. Sports and Recreation

Sports and Recreation are essential aspects of educational development. Exercise improves the utilization of nutrients and prevents obesity and obesity related diseases such as dyslipidemia, gall bladder disease and sudden cardiac death. Energy obtained from food is stored as glycogen after exercise while the same energy is stored as fat in non-exercising individuals (Lustig, 2010). Exercise therefore reduces fat mass while increasing the proportion of non-fat mass. This effect of exercise reduces the propensity to developing glucose intolerance in susceptible persons. In addition, sports development has become a major financial resource for many individuals and therefore a boost to national economies. A major reason for educational development is the need for sustenance of individuals, families and community development. School children should therefore be actively engaged in sporting activities. When appropriately presented, sporting activities can support the development of social skills and social behaviors, self-esteem and pro-school attitudes, and, in certain circumstances, academic and cognitive development. Many of these benefits result not only from participation, but also from nature of the interactions between students and their teachers, parents, and coaches who work with them (Bailey, 2006).

12. Conclusion

School health education and promotion should be a part of the curriculum of all schools as it enhances academic prospects and helps to prepare adolescents and youths for the future.

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