ANALYSIS OF THE CONTRIBUTION OF SCHOOL HEALTH EDUCATION TO THE PROMOTION OF COMMUNITY HEALTH

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Abstract

This study was aimed at analysing the contribution of school health education to the promotion of community health. Descriptive research method was used for the study. One hundred and twelve teachers from public secondary schools in Egor Local Government Area of Edo State who were selected using the stratified random sampling technique formed the respondents to a questionnaire. Data were analysed using chi-square test. The result of the study reveals that school health education significantly improves the health and well being of pupils/students through adequate health instruction coupled with family, community involvement and primary health care services ($P < 0.05$). The health knowledge, attitude and behaviour are also improved in the process, enabling them to practice disease preventive measures that could have a direct influence on their respective families that make up the community. Sequel to the findings of this study, it was recommended that health education should be

introduced in schools lacking the subject and sustained in those already offering the subject by way of adequate funding by the government and private organisations at all levels.

Since time immemorial, the school has been an indispensible setting for imparting of valuable information. Such information which is known to be multidisciplinary could range from the arts, social and management sciences to the pure health (and biological sciences). There is a marked gradation in the curriculum contents from primary to secondary which is often a function of the child's cognitive skills, as the curriculum is presented in simple unequivocal terms at the basic/primary level and a little complex at secondary level and so on. Such a well designed curriculum as described by Owie (2005), has the central objective of developing desirable behaviours in pupils and students directly and contributing indirectly, to the nation at large, since pupils and students are the assets of a nation.

According to the United Nations, Social and Cultural Organisation (UNESCO, 2002), more children are going to school than ever before in history worldwide. It further stated that, 83% of primary school age children now attend school, and of these, 84% complete primary school. This figure has been maximally explored for the promotion of norms, values and awareness creation. Baba, Shehu and Oniyangi (2010) stated that, in every civilised and progressive nation, primary education has been made compulsory for all school age children (6 – 12years). Pupils and students however spend considerable parts of their daily times and activities in schools, and this makes the school an important agent of transformation both academically and health wise.

Taking these above factors into consideration, Naidoo and Wills (2000) described education as the most important instrument of change, adding that the school is an important context for health promotion, principally because it reaches a large proportion of population for many years. In the light of this, school health programme has been designed and adopted within the school system to cater for numerous health and health-related problems affecting school children and the surrounding community at large. The emphasis on schools is also a recognition that the learning of health-related knowledge, attitude and behaviour begins at early age. The National School Health Policy (2006) issued by the Federal Ministry of Education, Nigeria added that the promotion of the health of learners in schools is a critical step towards quality achievement in education, and therefore key to the goals and realisation of the goals of the National Policy.

Baba, Shehu and Oniyangi (2010) described school health education as one of the components of school health programme that deals with the sensitization and creation of awareness in school children and staff to improve and promote their health and wellbeing. Other components of school health programme as identified by Linda, Philips and Randy (1996) include school health service; safe and healthful service

environment; physical education; nutritional services; counselling, physiological and social services, parent and community involvement. The present health education curriculum for secondary schools in Nigeria as pointed out by Idehen and Oshodin (2008) is made up of ten instructional units which are theoretically and practically planned to address the physical, mental, emotional and social dimensions of the health of school children most especially in the presence of qualified health educators. However, the outcomes of school health education are sometimes limited by certain constraints. Bartlett (1981), Idehen and Oshodin (2008) reported such constraints to include inadequate assessment of students' interests, needs and influences on health behaviours, lecture-oriented teaching methods, poor execution of curriculum content, competing subject areas and lack of administrative support, insufficient standard facilities, competing behavioural influences, inadequate coordination with community and lack of consensus regarding educational goals.

Nevertheless, the contributions of school health education to community health promotion have been greatly researched and documented by the academia. Rosestock (1966), Heit (1977) and Southworth (1977) noted that many persons, both within and outside the health education profession, have seen school health education as a vehicle for improved health knowledge, attitude, decision making skills, behaviours and health status. According to the United States Department of Health and Human Services (2007), not only do schools provide critical outlets to reach millions of children and adolescents to promote lifelong healthy behaviours, they also provide a place for students to engage in these behaviours, such as eating healthy and participating in physical activity. In Nigeria, Baba, Shehu and Oniyangi (2010) reported the positive impact of school health education programme on pupils to include improving their health and wellbeing. This was further buttressed by Patience, Diwunma and Love (2015) who stated that effective teaching of health education in primary schools in Awka urban area improved the healthy lifestyle of pupils.

Statement of the Problem

In this modern time, when the world is being plagued by different disease conditions (both communicable and non communicable diseases) and the concomitant greater scientific understanding of the prognosis of these diseases, it is quite disheartening that there seem to be a sharp decline in the number of schools (including public and private) offering health education as a subject. The importance of the subject most especially with regard to the promotion of community health is gradually being neglected. Owie (2005) pointed out that the unfortunate scenario in Nigeria whereby schools look for opportunities to drop health education from the syllabus of primary schools, curiously parcelled into integrated science in junior secondary schools (JSS) for no apparent reason than it is a science subject. The consequence is that health education is lost within the integrated science content. This calls for a state of emergency.

Therefore, what are the contributions of school health education with regard to the promotion of community health.

The purpose of this study therefore, was to carry out an analysis of the contribution of school health education to the promotion of community health with regard to improving the knowledge, attitude and behaviour of pupils/students within a community and the nation at large.

Research Questions

The study seeks to address the following questions:

1. Does health education in primary/secondary schools have any significant contribution to the overall health and well-being of pupils/students?.
2. Does school health education contribute to the improvement and promotion of community health?.
3. Does school health education create awareness about disease control/preventive measures and other health-related conditions?.
4. Do school health activities actually improve on the knowledge, attitudes and behaviours of pupils/students as regards health matters?.

Research Hypotheses

1) There is no significant contribution of health education to the overall health and well-being of pupils/students.
2) There is no significant contribution of health education to the improvement and promotion of community health.
3) There is no significant contribution of school health education in disease prevention and control.
4) There is no significant impact of health education on the health knowledge, attitude and behaviour of students.

Literature Review

The starting point for any discussion of health promotion is the Ottawa Charter, which in 1986 set out the concept of health promotion. Health promotion as defined by the World Health Organisation (WHO) Ottawa charter of 1986 and Bangkok Charter of 2005, as the process of enabling people to increase control over their health and thereby improve health. It represents a comprehensive approach to bringing about social change in order to improve health and wellbeing. The five elements of health promotion as stated in the Ottawa charter include; building health public policy, reorienting the health services, creating supportive environments, strengthening community action, and developing personal skills.

John and June (2013) stated that a practical approach to health promotion is to regroup the five components in the Ottawa Charter into three areas of action:

a) Health education (to include strengthening community action and developing personal skills).
b) Service improvement (i.e re-orienting health service).
c) Advocacy (to include building healthy public policy and creating supportive environment).

The full implementation of the health promotion charter has been called for by many because of its long run significance. Mackean and Jones (1985) argued that the health of a community cannot be left to chance, adding that with the increase in the scientific understanding of the causes of illness and disease, it is necessary to bring new knowledge of health care to communities, be it villages or large towns. The WHO stated in its constitution that Governments have a responsibility for the health of their peoples which can be fulfilled only by the provision of adequate health and social measures.

Several reports have stressed the key roles schools can play as agents of change in their communities and the importance of school health program (SHP) in community health promotion has been more recently underscored. School health education which is a component of the school health programme is also one of the vital components of primary health care (PHC). The United Nations Children's Fund (UNICEF) defined primary health care as essential health care made universally acceptable to individuals and families in the community by means acceptable to them, through their full participation and at a cost the community can afford. Healthy children who have been educated to look after their health are likely to become healthy adults. Most countries therefore are spending time, effort and resources on improving child health.

Schools in the forefront of health education program are referred to as health promoting school. According to the WHO, a health promoting school is "one that is constantly strengthening its capacity as a healthy setting for living, learning and working". The roles of the such school include:

1) Fostering friendly healthy and learning environment.
2) Integrating health and education officials, parents and the community in the effort to make the school a healthy place
3) Providing healthy environment, skill – based health education and school health services.
4) Striving to improve the health of learners, personnel and the community.
5) Building capacity for security, peace, shelter, education, food, gender equity, stable eco-system, social justice and sustainable development.
6) Preventing leading causes of death, disease and disabilities in the school community e.g. malaria, water borne diseases, infections, drug and alcohol abuse, HIV and AIDS, injuries, and malnutrition.
7) Influencing health related knowledge, attitude, values, beliefs, skills, and behaviours.

Deal and Hodge (2009) summarized that maintaining and improving health is frequently addressed through three levels of public health intervention (i.e primary, secondary and tertiary prevention). Primary prevention refers to keeping health problems from occurring. Kolbe (2002, 2005) argued that it is achieved through health literacy instruction and practice that takes place in classroom-based health education. Secondary prevention refers to actions that will address health problems and limit further progression, including health-compromising behaviours. Schools can play a role in both primary and secondary prevention in a coordinated fashion with communities. Tertiary prevention refers to rehabilitation following a significant health problem.

Methodology

Research Design

The descriptive design was used for this study. The design allows for a systematic gathering of information from respondents for the purpose of understanding and predicting interest. Omoruyi, Omogiade and Osahon (2011) stated that survey design provides broad based information and allows researchers a lot of avenues to study a phenomenon and thereafter draw conclusion.

Population of the Study

The population of this study consisted of teachers in public secondary schools in Egor local Government area of Edo State. Statistics from the Post Primary Education Board and the Ministry of Basic Education reveal that the Local Government has a total of 24 Public Secondary Schools: 12 Junior Secondary (Primary 7 – 9) and 12 Senior Secondary. There are a total of 454 teachers in both groups during the 2014/2015 academic year, made up of male and female of different age groups, grade levels, qualification and areas of specialization and years of experience.

Sample and Sampling Technique

Out of the 24 public secondary schools in the local government area, 8 secondary schools were selected to provide proportional representation. The stratified random sampling technique was used to draw 112 teachers (i.e 30% of the population of teachers in each school that constituted the sample) for this study.

Research Instrument

The research instrument used for this study was a questionnaire designed by the researchers. The instrument was labelled ‘Questionnaire on an analysis of the Contribution of School Health Education to the Promotion of community Health’. The questions were developed based on information and experiences derived from the review of literature on school health education and community health promotion.

Validity and Reliability of Instrument

The validity was reviewed in its content and face value by experts in the field of health education to ascertain whether the items in the instrument were relevant and clear.

The test-retest measure of reliability was applied. The scores obtained were correlated, using the Pearson's correlation formula. A reliability coefficient of 0.85 was obtained.

Administration of Instrument

The instrument was administered in person to the respondents and some of completed forms were collected instantly and others at later date agreed upon between the respondents and the researchers.

Data Analysis

Data were analysed using Chi-square test.

Results

Table 1: Teachers' Responses on the Significant Contribution of School Health Education to the Overall Health and Wellbeing of Pupils/Students

Item	Response	Freq.	%	Df	Table value	Cal. Value	Decision
Health and well being of students greatly improved since the introduction of health education.	SA	84	75	3	7.82	159.5	P < 0.05
	A	23	20.53				
	D	4	3.57				
	SD	1	0.89				
Pupils /students in schools where health education is taught are more healthy.	SA	11	9.82	3	7.82	190.1	P < 0.05
	A	91	81.25				
	D	7	6.25				
	SD	3	2.65				
Regular school sanitation generally improves leaarning conditions	SA	78	69.64	3	7.82	134	P < 0.05
	A	28	25				
	D	4	3.57				
	SD	2	1.78				

Table 1 above shows the calculated Chi-square (X^2) value for items 1, 2 and 3 are 159.5, 190.1 and 134 respectively. These calculated values are greater than the critical table value of 7.82 at 0.05 level of significance with degree of freedom of 3. Thus hypothesis 1 is rejected meaning school health education contributes significantly to the overall health and wellbeing of students ($P < 0.05$).

Table 2: Teachers' Views on the Contribution of School Health Education to the Improvement and Promotion of Community Health

Item	Response	Freq.	%	Df	Table value	Cal. Value	Decision
School health instruction indirectly promotes community health	SA	94	83.92	3	7.82	211.7	P < 0.05
	A	15	13.39				
	D	2	1.78				
	SD	1	0.89				
Family and community involvement necessarey for successful health education programme	SA	101	90.17	3	7.82	254.2	P < 0.05
	A	6	5.35				
	D	1	0.89				
	SD	4	3.57				
Health education furnishes students with information essential for determining their community health needs.	SA	88	78.57	3	7.82	175.9	P < 0.05
	A	17	15.17				
	D	5	4.46				
	SD	2	1.78				

Table 2 shows the calculated Chi-square (X^2) value for items 1, 2 and 3 are 211.7, 254.2 and 175.9 respectively. These calculated are values greater than the critical table value of 7.82 at 0.05 level of significance with degree of freedom of 3. Thus hypothesis 2 is rejected. This means that school health education contributes significantly to the improvement and promotion of community health. ($P < 0.05$).

Table 3: Teachers' Response on School Health Education in Relation to the Creation of Awareness on Disease Preventive Measures

Item	Response	Freq.	%	Df	Table value	Cal. Value	Decision
Adequate health education in schools helps prevent and control the spread of diseases	SA	90	80.35	3	7.82	183.9	P < 0.05
	A	11	9.82				
	D	4	3.57				
	SD	7	6.25				
The presence and number of qualified health educators in a school determine the level of health consciousness	SA	83	74.1	3	7.82	144.3	P < 0.05
	A	12	10.71				
	D	8	7.14				
	SD	9	8.03				
Regular health inspection on pupils/students can help check unhealthy lifestyle.	SA	97	86.6	3	7.82	227.8	P < 0.05
	A	9	8.03				
	D	1	0.89				
	SD	5	4.46				

Table 3 shows the calculated Chi-square (X^2) value for items 1, 2 and 3 are 211.7, 254.2 and 175.9 respectively. Since the calculated values are greater than the critical table value of 7.82 at 0.05 level of significance with degree of freedom of 3, hypothesis 3 is thus rejected. This means that school health education contributes significantly in the creation of awareness about disease prevention and control. ($P < 0.05$).

Table 4: Teachers' Responses on the Impact of School Health Activities on Improving the Health Knowledge, Attitude and Behaviour of Pupils/ Students

Item	Response	Freq.	%	Df	Table value	Cal. Value	Decision
Health instruction improves health knowledge of pupils/students	SA	99	88.39	3	7.82	241.7	$P < 0.05$
	A	10	8.92				
	D	2	1.78				
	SD	1	0.89				
Health education promotes and amplifies positive health attitude in students and host communities.	SA	94	83.92	3	7.82	210.2	$P < 0.05$
	A	13	11.6				
	D	4	3.57				
	SD	1	0.89				
Health education helps tailor students' behaviour towards more of disease prevention than curative measures.	SA	96	85.71	3	7.82	220.2	$P < 0.05$
	A	3	2.67				
	D	5	4.46				
	SD	8	7.14				

The calculated Chi-square (X^2) value in table 4 for items 1, 2 and 3 are 241.7, 210.2 and 220.2 respectively. Since the calculated values are greater than the critical table value of 7.82 at 0.05 level of significance with degree of freedom of 3, hypothesis 4 is thus rejected. This means that health education impacts significantly on the health knowledge, attitude and behaviour of students.

Discussion

The outcome of this study analyzes the invaluable contributions of school health education with regard to the promotion of community health. The teaching of health education in schools may have been long since canvassed for but in reality, it has been treated with levity. The reason for this is not farfetched, in that most school administrators are unaware of the positive impact of the subject. This could be quite disheartening most especially in the face of resurging health challenges (communicable and non-communicable diseases inclusive).

It is worthy of note that the outbreak of the Ebola haemorrhagic fever disease between 2013 and 2015 which ravaged some West African countries including Nigeria may be seen as a litmus test for the level of seriousness of not only the health care delivery sector but also that of the health literacy drive subsector. This gap tends to be bridged by an adequate and well sustained school health education, since it targets the population's majority (that is, school-aged children whom are often seen as agents of information dispersal). In short, school health education has been adjudged by many as one of the proactive measures for disease prevention.

Table 3 reveals that health education in primary/secondary schools does have significant contribution to the overall health and well-being of pupils/students. It is believed that the general health status of pupils/students has greatly improved since its introduction to school curriculum. The content of the health education curriculum is so robust in that it covers a lot of topics that are vital for maintaining and improving health. This was also noted by the Federal Ministry of Education (2006). In a related development, regular school sanitation was reported to improve learning conditions. This is in line with the findings of Turner (1990), Baba, Shehu and Oniyangi (2010) and Ana *et al*. (2008). They maintained that a healthy school environment provided through the availability of essential amenities, safe water, location, ventilation, sanitation and sanitary facilities helps improve learning conditions.

Another finding from this study was revealed by research question 2. It became evident that school health education contributes to the improvement and promotion of community health. The adequate school health instruction as given by respective health educators and as defined by the curriculum tends to act toward that direction. This is in line with that reported by Idehen and Oshodin (2008) who noted that a well structured pattern of health instruction in schools is an impetus to effective living, health promotion and disease prevention. But the period of teaching health per week seems to threaten its positive outcome. Also, the importance of family and community involvement and primary health services were shown to be necessary for a successful community health promotion. In a nut shell, the positive outcome of school health education programme results when all the components are acting simultaneously since the presence or absence of one can influence the others.

The result of research question three revealed that school health education creates awareness about disease control/preventive measures. Under this condition, pupils/students are exposed to the various disease prevention practices such as hand washing, sanitation and dietary lifestyle. This is rightly supported by Burgers (2000) who stated that hygiene education aims to promote those practices that will help prevent water and sanitation – related diseases as well as promoting healthy behaviour in the future generation of adults. This was also highlighted by Ama *et al* (2008). Also examined in the questionnaire was the effect presence and number of qualified health educators which was found to affect the level of health consciousness in a school. Such personnel often assume the duty of impacting and reminding pupils/students of scientifically proven health information but their absence leads to health misconceptions, slows down the implementation of health education curriculum and limits positive outcome.

Research question four revealed that school health activities improve on the knowledge, attitudes and behaviours of pupil/students as regards health matters. These help them in determining their own health needs and that of their communities. This is in line with evaluative studies by Bartlett (1981) who revealed that these programmes are very successful in increasing knowledge, somewhat successful in improving attitudes,

and facilitating lifestyle changes. On a more serious note, one may be tempted to add that school health education activities are more likely to achieve significant improvement in health behaviours when they are directed towards diseases with high perceived susceptibility and severity (for example cholera, Ebola disease, Lassa fever, high blood pressure, malaria, cancer, acquired immunodeficiency syndrome (AIDS)).

Conclusion

The contribution of school health education with regard to the promotion of community health cannot be overemphasized. The subject has been one of the media by which relevant recommendations of biomedical researches (majorly from the field of medicine, microbiology, anatomy, and physiology e.t.c) are disseminated in a simple, unambiguous format to pupils/students. This has made it possible for such meaningful research works to be accessible and not to be or die in the corridor of the academia alone. And thus, health education programmes in schools can contribute directly to a student's ability to successfully adopt and practice behaviours that protect and promote overall health and wellbeing and indirectly to the community (since the pupils/students and their respective families make up the community). In relation to the aforementioned, there would be a direct influence of students' behaviour on their immediate families as regards health matters that they might have been taught. Suffice to add, health education tailors students' behaviour towards more of disease prevention than curative measures. Therefore, efforts by all stakeholders must be geared towards its improvement and sustenance if a country must achieve her set goals.

Recommendations

Going by the immense contribution and potential of school health education in relation to the promotion of community health as analysed in this study, the following are recommended.

1. Health education should be introduced in schools lacking the subject and sustained in schools already offering the subject.
2. Since 'health is wealth' and 'an everyday affair' the period allotted to teaching health per week should be revisited.
3. There should always be a strong interaction between the school, family and community.
4. Government at all levels and private organisations should dedicate adequate funds towards health and health education of the populace.
5. Adequate health educators should be recruited in all schools across the federation.

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