
Health Education as a Tool for Preventing the Burden of Chronic Diseases in Primary Schools

By

RICHARD O. OKAKA

*Department of Physical and Health Education,
Ambrose Alli University,
Ekpoma, Edo State.*

And

DR. P. O. OBASANMI

*Department of Physical and Health Education,
Ambrose Alli University,
Ekpoma, Edo State.*

Abstract

The purpose of this paper was to discuss the role of Health Education in preventing the burden of chronic diseases. Efforts were made to define chronic diseases, list factors affecting cardiovascular diseases, list some chronic diseases and their risk factors. It recommended that the government, teachers, parents, private school owners should ensure that the subject is given due attention to achieve the objectives of Health Education in primary schools.

Introduction

The National Policy on Education (2004) stated that Primary Education refers to the education given in an educational institution to children aged six years to eleven years plus. It stated that children should learn Health habits, especially good health habits. This shows that Health Education is an integral part of the primary school curriculum. The importance of Health Education in primary school curriculum cannot be over-emphasized because children constitute a major group in the society. They are exposed to a wide variety of dangers and they need to be taught simple ways of health as well as prevention of diseases.

Health is one of the cardinal objectives of education. The National Policy on Education (2004) acknowledges this when it stated that “the quality of instruction at all levels of education has to be oriented towards including the promotion of the

emotional, physical and psychological health in all children”. Oshodin (2000) defined Health Education as a process of giving health information to people so that they informed judgment. Nwana (2000) defined Health Education as a process of persuading people to accept those measures which will improve their health and reject those which will have adverse effect on their health. Health Education is concerned with ways in which health problems can be prevented and health of the individual improved (Igbudu, 2007).

Health Education is a process by which health information is successfully imparted in such a way that the recipient is motivated to make use of the information for promotion, protection, maintenance or restoration of their own, their family or his community health (Akinsola, 1993). The achievements of the educational objectives of any state or nation depend to a large extent, on the health status of pupils and staff. The health status can be improved through sound school health programmes. This is because the schools in which the pupils live and learn have great influence on the health and productive capabilities (Sheshi, 2006).

The World Health Organization (WHO) (Omirin, 2005) defined health as “a state of complete physical, mental and social well-being of an individual and not merely the absence of disease or infirmity. For one to be sick means that there is a departure from the normal health of an individual. In Nigeria, communicable diseases and accident are the leading causes of early death.

Education has been described as the most important instrument of change, any fundamental change in the intellectual and social outlook of any society has to be proceeded by educational initiative. The federal government is committed to promoting health through schools by participating in and endorsing international conversations such as Dakar and Jomtien Declarations (National School Health Programme, 2006)

The World Education Forum in April 2000 in Dakar, Senegal (jointly initiated by UNICEF, UNESCO, WHO, World Bank, Educational, the Education Development Centre and Partnership for Child Development) launched the Focusing Resources on Effective School Health (FRESH) as a strategy for achieving the Education For All (EFA). Four main components of FRESH were identified to include school Health Policies, Water, sanitation and the environmental skills – based health education; and school – based nutrition and Health Services (National School Health, 2006).

Nwajei (2001) stated four main methods of teaching health education to be (a) individual health education (b) group health education (c) mass–media health education and (d) special health education campaigns. He further stated that all known teaching methods, can be applied to health instructions by skillful teachers and stated four approaches to be: (i) Direct planned, formal and informal instruction (ii) Integrated living as health instruction (iii) Incidental instruction (iv) Correlated instruction and cultural/traditional factors. In all these, the social, political or economic environment

are the best determinants of the best method of choice in Health Education (Ogbe, 2009).

Communicable diseases are illnesses caused by micro-organisms and transferred from one infected person or animal to another person or animal (Soboye, 2007). A Non-Communicable Disease (NCD) or chronic disease is a disease which is not contagious. Risk factors such as a person's lifestyle, genetic or environment are known to increase the likelihood of certain Non-Communicable Diseases (NCDs). Some examples of NCDs include heart disease, cancer, asthma, diabetes, allergies, stroke and more (Kuh, 1998; Pearson & Pyorola, 1989). They added that NCDs are important causes of morbidity and mortality is not only due to reductions in infectious disease mortality and population ageing; it is also due to real increase in the age-specific incidence and mortality of several non-communicable conditions.

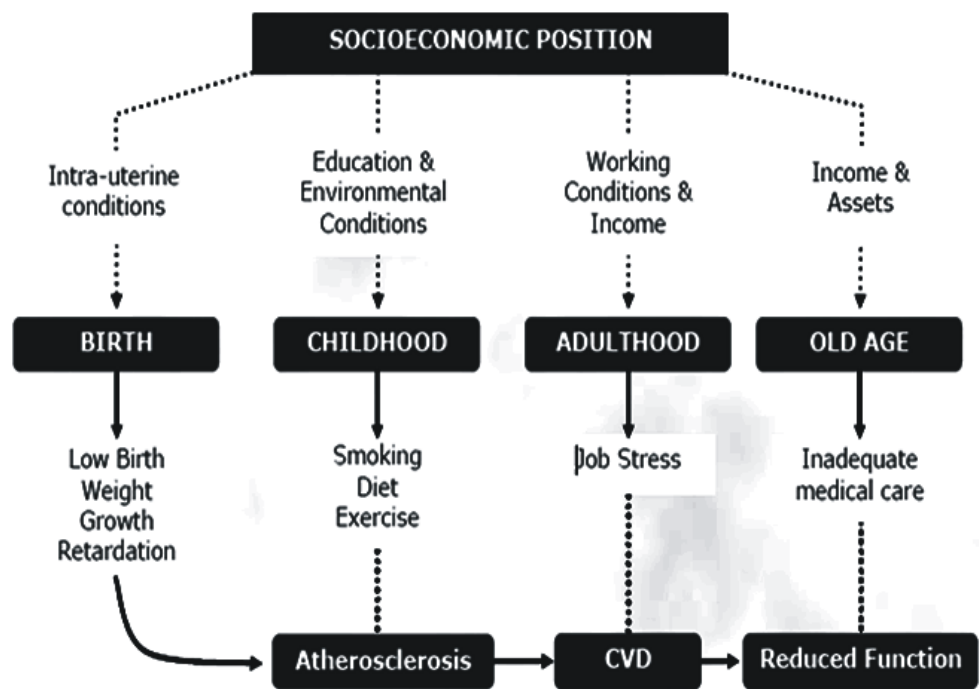
Among NCDs, special attention is devoted to Cardiovascular Diseases (CVDs), diabetes, cancer and chronic pulmonary diseases. Their burden is affecting countries worldwide but with a growing trend in developing countries (World Health Report, 2003 & World Health Organization, 2003). NCDs started causing major problems in industrial countries. Heart diseases, cancer, diabetes, chronic pulmonary and mental diseases became a real burden for health systems in developed countries (Boutayeb, Twizel, Achouyeb, & Chetouani, 2004). CVDs is the name for the group of disorders of the heart and blood vessels and include hypertension (high blood pressure), coronary heart disease (heart attack), cerebrovascular disease (stroke), peripheral vascular disease, heart failure, rheumatic heart disease, congenital heart disease and cardiomyopathies. These diseases constitute the major contributor among NCDs.

Different methods can be considered to quantify the burden of NCDs. In order to overcome the specific problems of each country, the most used method is the approach that measures the global burden of NCDs in terms of Disability (DALYs) which is a combination of Years of Life Lost (YLL) through premature death, and years lived with Disability (YLD). Thus DALY is thought of as one lost year of healthy life (Matters, Benard, Iburgs, Inoure, Fat, Shibuya, Stein, Tomijima, & Xu, 2002; Hutubessy, Chisholm & Edejer, 2003). For example, deaths from overweight every year rob the world's poorest children of an estimated total of 130 million years of healthy life (World Bank Report, 2002). According to this approach, the burden of adult NCDs account for 80% in developed countries and for 70% in middle income countries. Even in the high-mortality regions of the world, almost 50% of the adult disease burden is attributed to NCDs.

Figure 1 and Table 1 below shows socio-economic position which can lead to major chronic diseases and their risk factors respectively.

Figure 1

Factors Affecting CVD (Cardiovascular Disease)



Acting on NCDs: An Advocacy Guide for the Western Pacific. Vivian Lin, Prue Bagley and Vivian LinVaughn Koops, School of Public Health, La Trobe University, Australia

Table 1: Major NCD Conditions and Risk Factors

Major NCD conditions	Risk factors
Cardiovascular disease (CVD) (primarily coronary heart disease, stroke, rheumatic heart disease, hypertension)	Smoking, physical inactivity, obesity, high blood pressure, elevated blood cholesterol, environmental tobacco smoke, alcohol consumption, age, family history, diabetes (for stroke).
Diabetes (Type 2/non-insulin dependent)	Physical inactivity, obesity, ethnicity, age.
Lung cancer	Smoking, occupational exposure, dietary factors, environmental tobacco smoke.
Other cancers	Smoking, unhealthy diets, excess alcohol consumption, family history, genetic make-up, environmental and occupational hazards, lack of screening and early detection.
Chronic Lung disease	Smoking, environmental hazards, occupational exposures.
Mental health problems	Biological factors, psychosocial issues, genetic factors, illicit drugs, excess alcohol consumption.

Acting on NCDs: An Advocacy Guide for the Western Pacific. Vivian Lin, Prue Bagley and Vivian LinVaughn Koops, School of Public Health, La Trobe University, Australia

Bucher (1979); Oberteuffer (2001) stated that health programmes in the school is a phase of educational process that attempts to build in the students a sound foundation of scientific health attitudes and health habits. This means that school health programme as important phase of total programme of the school, because teaching and learning will be in jeopardy in an environment that breeds diseases and other health problems.

The thrust of this paper is to examine the role of Health Education towards preventing chronic diseases in primary schools.

Characteristics of School Health Environment

The National School Health Programme (NSHP) (2006), listed the characteristics of Health school environment as follows:

- ✓ Location/site offer schools away from potential environmental hazards
- ✓ Protection of the school community from excessive rise, heat, cold and dampness.
- ✓ Provision of adequate building, constructed in line with approved standards, with particular emphasis on facilities for physically challenged learners and staff.
- ✓ Provision of an appropriate and adequate amount of furniture for learners and staff.
- ✓ Provision of adequate number of gender – sensitive toilet facilities
- ✓ Provision of adequate portable water supply and sanitation facilities for the school community
- ✓ Provision of proper drainage and waste disposal facilities
- ✓ Provision of safe recreational and sport facilities
- ✓ Perimeter fencing of the school
- ✓ Observation of Annual School Health Days
- ✓ Promotion of healthy human relationships in the school community
- ✓ Promotion of a maintenance culture.

The school health services are preventive and curative services provided for the promotion of the health status of learners and staff. The purpose of the school health services is to help children in the schools to achieve the maximum health possible for them to obtain full benefit for their education. The personnel for school health services shall include medical doctor, school nurses, health educators, environmental health officers, school guidance counselors, community health officers/workers, dieticians, nutritionists, school teachers and social workers. Clark, Chasen, Stoifi and Jaballa (2002); Vaselak (2001); Udoh (1977) observed that personnel should not be a problem for better implementation of school health programme. They suggested that each standard school should have a physician, nurse, dentist, health educator and physical educator.

The National School Health Policy (2006) stated the objectives of the school health programme should be to:

- i. Promote growth and development of every child taking into consideration his or her health needs.
- ii. Create awareness of the collaborative efforts of the school; home and the community in health promotion.
- iii. Develop health consciousness among the learners.
- iv. Create awareness on the availability and utilization of various health related resourced in the community.
- v. Promote collaboration in a world of interdependence, social interaction and technological exposure in addressing emergent health issues.
- vi. Build the skills of learning in the learners and staff for health promotion in the school community.

One of the characteristics of school health services is “prevention and control of communicable and non-communicable diseases through inspections, exclusions, re-admissions, educational measures, immunization, sanitation and epidemic control. For a balanced development of the child, life at home should complement a health lifestyle provided in the school. Therefore, regular contacts between school and home are essential (NSHP, 2006).

According to the World Health Organization (WHO) (1990), a health promotion in school is one that is constantly setting, for living, learning and working.

Factors Militating Against Health Education In Primary Schools

1. It is observed that health education is not an examinable subject in primary school leaving certificate examination and as a result of that, the time meant for it on the time table is used for manual labour.
2. Quality textbooks on the subject in primary schools are few compared to other subjects like English language, Mathematics, etc.
3. There are no enough qualified teachers in some of the schools to teach the subject.

Benefits of Health Education In Primary Schools

The earlier health education introduced into our school system, the better the chances of helping school children to make intelligent decisions regarding their health behaviour. Childhood and school years have been identified as being important for habit formation. It is therefore logical to develop a positive attitude toward high quality well being of an individual. The benefits of Health Education in Schools are:

1. Through health education, pupils can be helped to make intelligent and informed decisions regarding their health behaviour.
2. The subject, if will taught in primary schools, it will equip the pupils to face social and health problem later in life.
3. It will also help to clear some health misconceptions that are common to their age six years to eleven years plus.
4. Children of primary school age (6 – 11) years are likely to suffer from communicable diseases and if the subject is given due attention in primary schools, this can be detected and referral is made to make the situation not to be worse.
5. It can also assist to correct some bad health habits in the society which are capable of spreading communicable diseases like spitting in public places, sneezing without covering their mouth with clean handkerchief, e.t.c.
6. Children of primary school age are likely to suffer from minor sickness, but if health education is given full attention, these diseases can be checked.
7. Health workers and hospitals are few in our country compared to the number of school pupils that face health problems. If the subject is taught in schools, children would know what to do about their health in case of emergency.

Conclusion

From the above discourse, it can be inferred that Health Education is a tool for preventing the burden of non-communicable diseases in primary schools. It is hoped that when the measures suggested and recommended are implemented, non-communicable diseases among school children will be eradicated or reduced to the barest minimum.

Suggestions and Recommendations

Health Education is one of the cardinal objectives of education. As an academic discipline or subject, It draws it body of knowledge from human anatomy, physiology, medical sciences, biological sciences, pure sciences, psychological sciences and social sciences. The way the teacher in primary schools teaches the subject poses a problem which the government, teachers, parents, counsellors, private school owners, religious organizations should handle.

The following are some of the suggestions and recommendations based on the findings of the study.

1. The government should ensure that the subject is made an examinable subject in primary school leaving certificate examination.
2. Qualified and dedicated health educators should be encouraged to write quality textbooks on the subject.
3. Only qualified and committed health teachers should be employed in all the primary schools to teach the subject.
4. Ministry of education should ensure that the subject is properly taught and that the period is not used for manual labour.
5. Scholarship should be made available for pupils who may wish to read subject in higher institution.
6. Seminars should occasionally be organized for pupils in their mother tongue to compliment the efforts of the health teachers.
7. Instructional materials should be used to teach the subject to make it interesting to the pupils.
8. Alcohol education should be included in primary school curriculum to control alcohol abuses.
9. Pupils should be encouraged to take part in physical activity.
10. The danger of smoking should be part of the scheme of work.
11. The importance of healthy diet should be encouraged. It can be demonstrated with mid-meal during school hours.
12. Improved Primary Health Care (PHC) for screening and early detection of NCDs should be within the reach of the pupils.

References

Akinsola, H.A. (1993). *A to Z of community health and social medicine in medical and nursing practical*, Ibadan: ZAM Communication Press, 103 – 123.

- Boutayeb, A., Twizell, E.H., Achovoni, A., (2004). A mathematical model for the burden of diabetes and Its complication. *Journal of biomedical engineering*.
- Bucher, C.A. (1979). *Administration of health and physical education programme*, St. Louis C.V. Mosby.
- Clark, D; Clasen, C; Stoifi, A; & Jaballas, E.R. (2002). Parents knowledge and opinion of School health services in an urban Public School Health Services in an Urban Public School System, *Journal of school health*, 72 (1) 18 – 22.
- Federal Republic of Nigeria (2004). *National policy on education*, Lagos, Federal government Press.
- Federal Ministry of Education (2006). *National school health* Abuja: Federal Government Press.
- Hutubessey, R, Chishoim, D., & Edejer, T.T. (2003). Generalized cost-effectiveness analysis for national-Level priority Setting in health sector. *Cost Effectiveness Resource Allocation*. 1:8.
- Igbudu, U. (2007). Strategies for preventing HIV/AIDs among the Youths in Nigeria: The Role of health educators.
- Matters, C.D., Bemard, C., Iburg, K.M., Inove, M., Fat, D.M., Shibuya, K. Stein, C., Tomijima, N, & XuH (2002). Global Burden of Disease in 2002 Data Sources, Methods and Results, Paper 54, WHO.
- Nwajei S D (2001). Pedagogical issues in health education: The case of Sex education: *Nigeria School Health Journal*. 8(2): 236 – 242.
- Nwajei, S.D. (2001). Pedagogical issues in health education: The Case of Sex Education: *Nigeria school health journal*. 8(2): 236 – 242.
- Nwana, O.C. (2000). Health education and promotion in Nigeria by the Year 2010: *Nigeria Journal of health education*. 9(1): 44 – 58.
- Oberteuffer, D. (2001). Philosophy and principles of school health programme. *The journal of school health*. 71 (8): 373 – 375.
- Ogbe, O.J. (2007). Health education as a therapy: The precede mode application: *Journal of human Kinetics, health and environmental education (JOHNHE)*. 2(1): 150 – 152.

- Ogbe, O.J. (2007). Health education as a therapy: The precede mode application: *Journal of human kinetics, health and environmental education (JOHNHE)*. 2(1) 150 – 152.
- Omorin, T.C. (2005). *Sociology of health*: Macmillan Publishers, Ibadan.
- Oshodin, O.G. (2000). The roles and functions of health educators career prospects in physical and health education, Benin City: UNIBEN Press.
- Sheshi, B. (2006). Status and problems of school health Programme in primary schools in Bida local government area of Niger State. *The Ilorin journal of health, physical education and recreation (IJOPHER)*. Vol. 5 (124).
- Soboyejo, A.N.A. (2007). Academic discipline and gender differences in secondary school students knowledge and practices on communicable diseases.
- Udoh, C.O. (1977). An Investigation into the provision of healthy school living environment in primary schools in Ibadan City. *Nigeria school health journal*, 1 (1), p.6.
- Veselak, K.E. (2001). Historical steps in the development of modern school health Programme. *The journal of school health* 71 (8): 367 – 372.
- World Health Organization (1990). Education for health: A manual on health education in primary health care WHO, Geneva, 9 – 10.
- World Health Report (2002). Reducing Risk: Promoting health life. Retrieved from <http://www.who.int/whr/2002/en> on the 14/9/2010.
- World Health Report (2003). Diet, Nutrition and the prevention of chronic diseases. In technical report series 916: Geneva, world health organization.