

**ENVIRONMENTAL HEALTH AND SANITATION:
A MODEL FOR HEALTHFUL LIVING AND SOCIAL TRANSFORMATION**

BY

OWODUNNI N. OLUGBENGA¹ AND AGBOOLA HABEEB²

Abstract

Environmental Health and Sanitation is seen as a way of keeping the surroundings of an individual clean, safe and the prevention of contamination and pollution. These sanitary activities include waste, water treatment and disposal, vector control and other diseases prevention activities. Good Environment Health and Sanitation habits are a prerequisite for healthy living. Good health is totally incompatible with improper disposal of sewage, refuse and excreta disposal. Provision of adequate drinkable water, prevention of environmental pollution and adequate low costing housing is the primary responsibility of government and individual member of the community for healthful living and desirable health habit.

This paper shows that good environmental health and sanitation knowledge promotes healthful living and recognises the fact that social transformation are inextricably linked and the quality of present and future life rest on meeting basic human needs without destroying the environment on which all life depends.

Keywords: Healthful Living, Social Transformation Environmental Health and Sanitation.

^{1,2} Department of Health Promotion and Education, Ogun State College of Health Technology, Ilese Ijebu

Introduction

Human being has been created to live, work and enjoy all comfort within their immediate environment, Man Environment consists of physical, biological and social components. These components interact and operate together to ensure meaningful cohabitation. Health is described as the quality of life that enables individuals to live longest and serve best. The World Health Organizations describes health as "a state of complete physical mental and social well-being and not merely the absence of disease or infirmity. Summarily therefore, health is the totality of man's daily living which entails more than one's physical appearance. It is the state of optimum capacity of an individual for the effective performance of his roles in the society.

Environmental Health and Environmental Sanitation are related terms while environmental sanitation is the process of eliminating health hazards from the environment so that they are not harmful to man. Environmental health sanitation remains the scheme of taming the

environment so as to reduce environmental hazard on man. It places importance on the basic sanitation services namely provision of safe and adequate water supply, proper disposal of waste, air hygiene and prevention of atmospheric pollution and control of other hazards that have harmful effect on human beings and other organisms.

Environmental health has been described by World Health Organization as the science of taming the environment to reduce environmental impact on man has described environmental health. It actually encompasses all the interactions of human beings with their environment as well as the health consequences of these interactions. Environmental Health and Sanitation call for improvement in healthy living for all living organism and recommends specific actions necessary to successfully incorporate good health habits and practices. It is very necessary to maintain a healthy environment in order to prevent or control a variety of disease conditions that may result from poor

environmental status. The inculcation of healthful living habit would help to improve people's attributes and knowledge towards a clean and healthy environment. Obionu (2007) asserted that man through his activities and actions effect changes in the environment. Environmental health and sanitation is a process of effecting healthful living. Hygienic conditions and social transformation in the environment promote and improve quality of life, ensure a sustainable environment and total elimination societal health hazard.

Environmental Health And Sanitation

The state of our health is basically determined by the influence of hazards from our environment. These hazards include air pollution, exposure to toxic chemical, plants, animal, weather or climatic conditions Achalu (2004). Environmental health and sanitation places importance on the basic sanitation services namely provision of safe and adequate water supply, proper disposal of waste, air hygiene and prevention of atmospheric pollution Okafor (2002). These

factors also support healthful living in the environment. Hygiene improvements at the individual and community level such as sanitary living conditions and practice potable water and sewage facilities have had a major role in reducing morbidity and mortality from infections Wilson (2009). Even in developed countries where there is access to improved water supply and sanitation, such infections continue to be a problem, especially in high-risk settings in which susceptible and vulnerable individuals like children and the aged gather. In developing countries, infections carry even greater burden of morbidity and mortality, especially in areas where public health infrastructure and modern care are inadequate or unavailable (WHO 2002).

It is well established that general improvement in personal and environmental hygiene practices and community health infrastructure promote healthful living. This is evidence in occurrence of the deadly virus that is creating health fear in Nigeria that attracts global

intervention, the EBOLA virus that can be prevented by washing hands always, avoidance of contact with wild animals and dead body of infected animal.

Global water supply and sanitation assistant report by WHO (2006) listed three (3) key hygienic behaviour that are of greatest benefit to healthy living particularly in developing countries (i) hand washing with soap (or ash or other aid) (ii) safe disposal of children's faeces and (iii) safe water handling and storage. Worldwide, the burden of environment related diseases falls disproportionately on children, and every year more than 5 million children under the age of 14 die, mainly in the developing world, from these diseases (UNICEF/WHO, 2002). Based on this finding, the Nigeria Federal Ministry of Education Science and Technology announces immediate postponement of pupils in Primary and Secondary Schools throughout the Federation from September 8, 2014 to 22nd September 2014 to prevent the spread of Ebola Virus disease. Children are more vulnerable than adults to environmental exposure.

A child's world is his/her home, school and local community, but these may also be unhealthy breeding grounds for diseases; key areas in breaking the hand-to-mouth transmission of disease are a safe and reliable water supply, adequate sanitation and proper education in hygienic behaviour.

Provision of Safe And Adequate Portable Water Supply

Good drinking water is a clear, sparkling, colourless, tasteless, liquid without smell, and free from harmful matter such as chemicals, organic substances and micro organisms. According to Millennium Development Goals number 7, which aims at "Ensuring Environmental Sustainability", expansion of water supply and improvement of sanitation was aimed at poverty alleviation and improved healthy living. The goal stressed that with availability of safe drinking water, diseases like cholera, typhoid and paratyphoid fever as well as infective hepatitis among others will definitely be prevented or controlled. When there is inadequacy in the quality of water as a result of introduction to impurities, water is

said to be polluted. Polluted water constitutes serious injury to health, which may come in numerous ways such as enteric outbreak and mortality among others. For healthy living water should be free from chemical and biological impurities and should be acceptable in terms of its taste, colour and softness.

Disposal of Sewage and Excreta

Human excreta are an important source of pathogenic organisms, especially the causative agents of diarrhea diseases. In addition, faeces are attractive to flies and support the development of the larval stages ('Maggots') of filth flies.

Apart from these hazards, the indiscriminate disposal of faeces can constitute a grave nuisance from the offers, sight and smell. Healthful living can be achieved only where there are adequate provisions in the community for the disposal of faeces and where the people have learnt to appreciate and use them Okafor (1992). Ideally, there should be at least one latrine for each family, and the device should be kept clean and

maintained in good working orders. Public latrines are also required in market and other places where people gather in large numbers.

Proper Disposal of Refuse

This refers to the storage, collection and disposal of solid waste in a community. Refuse include various organic materials such as leaves and food remnants and inorganic objects such as bottles, tins, and a variety of discarded objects. Human activities generate waste and improper disposal of refuse has been linked with diseases as well as give rises to air pollution as postulated by (Achalu and Achalu, 2004). Poor refuse disposal attract flies breeding and other insects, and offers food and shelter for rodents, it creates fire hazard and is a source of accident through cuts and puncture wounds from sharp objects. Wilson (2009) noted that proper knowledge of the consequence of improper disposal of refuse can lead to reduction in related sicknesses for healthy living.

Air Hygiene and Prevention of Environmental Pollution

Pollution of air and water constitute important environmental sources of risk to our health status. Their release to the environment and the exposure of susceptible persons to such pollution has strong impacts behavioural components on our environment we may which or ingest them as food or drinks directly or indirectly. In order to ensure that the external atmosphere is free from deleterious elements and internal conditions of both work and residential places are suitable for the occupants, air pollution needs to be controlled. Research shows that air pollution poses risks to the heart and surrounding tissues Wilson (2009). Air pollution could also come from domestic burning of fossil fuels, dusts from floor late rite roads, improper disposal of storage and refuse. In effecting healthful and hygiene environments for the people, the aforementioned are factors that support healthy living and support hygiene environment.

Provision of Adequate Housing

The provision of good housing is an important aspect of environmental health. It represents:

- (i) A significant part of man's environment
- (ii) Shelter from the elements
- (iii) Workshop: The kitchen for the housewife, the playroom for the children, the tool shed for the adult males.
- (iv) Home: the residence of the family, where this social institution carries out some of its major functions Park (2009).

Good housing should minimize physical and biological hazards in the environment and should promote the health of the community. The risk of the transmission of communicable diseases should be minimized. Poor ventilation and overcrowding, for example, predispose to the spread of respiratory infections. Good drinking water supply, adequate facilities for washing outside and other sanitary devices, good storage for food and well-designed kitchens, will help to minimize the spread of gastrointestinal infections (Ebony, 2009). In his own view, Ekong (2011) opined that

improved standard of hygiene, controls infections, enhances self confidence and relationships and promotes social health of the persons within the environment. The basic aspect of housing relate to the proper location and construction of a residence, which provides fundamental physiological, psychological and sanitary requirement for healthful living. Type of housing in the tropics depend on the climatic environment and hence are quite different in arid zones, in savannahs, in marshlands, in high mountain steppes and in tropical forest.

Environmental Health and Sanitation Strategies for Social Transformation

An adequate environmental health and sanitation policy improves healthful living of the individual and community, which promote social transformation. Hornby (2012) defines transformation, as a complete change in something. Social transformation is also the process by which an individual alter the socially ascribed social status of their parents into a social achieved status for themselves. The community

every where are closely and intricately linked to the natural environment in which they are embedded. The healthy status and human social activities have influenced the human environment causing a degradation of the environment in form of air, water and soil pollution causing: a significant source of stress both to the individual and to the community. The environment as earlier seen exerts a lot of influences on the healthful living attitude of the community which also degrade the environment making it unhealthy. This calls for improving the community social and physical healthy environment according to WHO (2006) Healthy school's physical environment can directly improve children's effective learning and thereby contribute to the development of healthy adults as skilled and productive members of the society.

The individual role in promoting healthful living in the environment should begin with his or her surroundings, thus individual or group of individual in his or her immediate community, should control those activities that will degrade the

environment this will ultimately lead to a safe and healthy environment free from those hazards that would threaten the health of the community. The modern improvement in medical technology, decreasing the mortality and morbidity rates in the society. With a resultant increase of a healthy population and improve workers healthy status, there is bound to be an increase in productivity. This will influence the socio economic status of the community thereby bringing about desirable social transformation which when they sustain over time where attitudes and values are held in a completely new context (paradigm) base upon healthful environment, different assumption and beliefs that affect individual health practices and behaviour.

Conclusion

Environmental health and sanitation is essential for healthful living and is a powerful means of enabling children and adult to attain and maintain desirable health and well being. The total burden of disease can be prevented yearly by making our environments healthier World Health

Organization (2006). The major risk factor of diseases in Africa and Nigeria in particular are unsafe water and air pollution leading to respiratory infection, lack of food, hygiene, inadequate waste disposal poor diseases vector control, exposure to chemical and injuries. Therefore there is needs to increase community awareness and it is through regular national sanitation and environmental health education that this can be achieved. Awareness and education are powerful ways to derive behavioural change related to health. In a bid to maintain a healthful living and desirable health habit an individual or group must be able to identify and to realize aspirations to satisfy needs and to change or cope with the environment.

Recommendations

Awareness can be provided through enlightenment campaign programme by the government and non-governmental organization through electronic and print media aimed at promoting and maintaining healthful living in the environment.

For healthful living in the community provision of adequate low-cost housing is a primary responsibility of government and local authorities; standard of the low cost housing should be such that can be made habitable in a low income community and relate to local climate and cultural conditions.

Government, organization and individuals in the community should provide social amenities or facilities for community members for relaxation in order to ease tension and stress.

There is need for medical and paramedical personnel in the community to create and organize programme that will help the people to be aware of those environmental factor that can help maintain healthful living in the society.

Regulation of nutrition behaviour by consuming the right type and quantities of food prepared in ways that are healthful and eaten in context that promotes health.

References

- Achalu, El & Achalu D.E (2004) *Environmental health and pollution control* Lagos: splendid publishers
- Ebony R.D (2009) *Community Health and issues* Abak: Riduma printers and publishers.
- Ekong I.E (2011) *Groom the girl child* Uyo: GT technologies.
- Hornby A. S (2012) *Oxford advanced learners dictionary* (8th Ed.) London, Oxford Press.
- Obionu LI (2007) *Synopsis of occupational and environmental health*, Enugu, Cectatop, (Nig) press Ltd.
- Okafor, J.O (1992) *Preamble of healthful living* Onitsha: Erudite publishers.
- Park, K (2009) *Preventive and Social Medicine*. Indain:Mys Banarsidas Bhanot.

UNICEF/W.H.O (2002)- *Children in the new millennium Environmental impact on Health* Geneva

World Health Organization (1947) *W.H.O Technical Report Series: Alma Alta declaration* Geneva

WHO (2006) World Health report, *neonatal and prenatal mortality country, regional and global estimates* Geneva.

W.H.O (2012) Promoting health and well being *W.H.O information series* Geneva.

Wilson D. (2009) *Health Environmental Rescue and Disease Prevention.* Nigeria: Intercap Educational Foundation line.