

PROMOTING DISEASE OUTBREAK MANAGEMENT THROUGH HEALTH EDUCATION IN OYO TOWNSHIP FOR NATIONAL SECURITY

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Abstract

Health literacy is an essential tool in combating disease outbreaks especially at this time of the pandemic. This study examined the promotion of disease outbreak management through health education for national security in Oyo Township. Two research hypotheses were generated to guide the study. The study employed a descriptive survey research design. The population for the study comprised the educated in Oyo. The sample comprised 400 respondents. A self-developed questionnaire was used to collect data. A test re-test form of data, using Spearman-Brown rank-order correlation was used to ascertain its reliability with the value ($r = 0.78$). Findings from the study showed that health education significantly promoted effective disease outbreak management among people in Oyo town as well as effective disease outbreak management had the potential of securing people from infectious disease in Oyo township. It was thus recommended that health education on disease outbreak management should be made public through different possible available channels of communication to acquaint the individual with the appropriate steps to be taken for safety during the disease outbreak period.

Keywords: Health education, Disease outbreak, Management and National security

Introduction

Health literacy that improves knowledge and develops life skills that are conducive to individual and community health is highly essential in managing an outbreak of diseases. Disease outbreak management has been described as the process of anticipating, preventing, preparing for, detecting, responding and controlling it so that the health and economic impacts are minimised. Tanbo, Adetunde, and Olalubi (2018) and Fatiregun and Isere (2017) described Disease Outbreak Management as an embracing term that explained all that needs to be done before, during, and after the outbreak. It involves anticipating or predicting the occurrence of an outbreak such that it could be prevented. If it could not be prevented, it involves preparedness so that there is a readiness to respond.

Health Education according to Wikipedia, (2020) is described as the combination of planned learning experiences based on sound theories that provide individuals, groups, and communities the opportunity to acquire information and skills needed to make quality health decisions. World Health Organisation (2020) defined Health education as consciously constructed opportunities for learning some forms of communication designed to improve health literacy, including improving

knowledge and developing life skills that are conducive to individual and community health. Health Education Specialist Practice Analysis 11 (2020) opined that Health Education is a principle by which individuals and groups of people learn to behave in a manner conducive to the promotion, maintenance, or restoration of health. United Nations Education Scientific and Cultural Organisation (2018) and Wright (2015) described health education as a planned activity, stimulating learning through communication to promote healthy behaviour.

Health education aims at health promotion and disease prevention by engaging and empowering individuals and communities to choose healthy behaviour and make changes that reduce the risk of developing chronic diseases. Rural Health Information Hub (2020) explained disease as a disorder of function in a human, especially one that produces specific symptoms or that affects a specific location and is not simply a direct result of physical injury. Infectious Disease News (2012) discussed disease as an abnormal condition affecting a living organism. Diseases are seen as a medical condition when involved in a pathological process associated with a specific part of the body and systemic when it affects the entire body. Learning about diseases is important for protecting people and saving money. It identifies the origin, causes of the outbreak and leads to interventions to prevent further cases of the disease.

Disease Prevention and Healthy Lifestyle (2020) identified three broad categories of determining human behaviours at the level of disease prevention:

- a. Primary prevention concerns prevention at the onset of illness or injury before the disease process begins. Examples include immunization and taking regular exercise.
- b. Secondary prevention leads to early diagnosis and prompt treatment of disease; illness or injury to prevent more severe problems from developing. Examples include screening for high blood pressure and breast self-examination.
- c. Tertiary prevention that aimed at rehabilitation following a significant illness.

Rural Health Promotion and Disease Prevention (2020) saw health education as one strategy for implementing health promotion and disease prevention programmes by being able to provide learning experiences on health topics. Also, Health Education Specialist Practice Analysis II (2020) revealed that at the heart of the new approach was the role of a Health Educator who is a professionally prepared individual that serves in a variety of roles and is specifically trained to use appropriate educational strategies and methods to facilitate the development of policies, procedures, interventions, and systems conducive to the health of individuals, groups, and communities.

World Health Organisation, Regional Office for the Eastern Mediterranean (2020) indicated that health education through its information promotes health and prevents diseases. Wang, Han, Fang, Xu, Lin, Xia, Wenhan, Jinlu, Jiang and Tao (2018) claimed that health literacy provided by the health education is often indicated to accommodate individual approach by substituting the three domains of health that is, health care, disease control, and health promotion with “being ill, being at risk and staying healthy”. Health literacy to them bears significance in improving the prevention and control of infectious diseases, whereas health knowledge and behaviour are important components of health literacy.

Fang, Luo and Li (2015) confirmed their study that health education can improve the cognitive level and prevention awareness of infectious diseases such as mumps and measles. Centers for Disease Control (2020) revealed the characteristics of an effective health education curriculum as having an emphasis on the teaching of essential knowledge for shaping personal values and beliefs that support healthy behaviours; group norms that value a healthy behaviour and development of the essential health skills necessary to adopt, practice and maintain health-enhancing behaviours.

Health education helps with the management of diseases at the three categories of prevention levels. Health education can be applied at all levels of disease prevention and can be of great help in maximizing the gains from preventive behaviour. Disease Prevention and Healthy Lifestyles (2020) indicated that, at the Primary level of prevention, people could be educated on how to practice some of the preventive behaviours, such as having a balanced diet, so that they can protect themselves from developing diseases in the future. People can also be educated to visit their local health centre when they experience symptoms of illness, such as fever, for early treatment of their health problems as secondary prevention. There can be retraining, re-education, and rehabilitating of people who have already developed an impairment or disability as tertiary efforts.

Wisconsin Department of Health Services (2020) identified standard precautions for infection control and prevention as a set of infection control practices used to prevent transmission of the disease that can be acquired by contact with blood, body fluids, and mucous membranes. The measures are to be used when providing care to all individuals, whether or not they appear infectious or symptomatic. Other measures identified are hand hygiene including its rules; personal protective equipment; needle-stick and sharps injury prevention; cleaning and disinfection; respiratory hygiene (cough etiquette); waste disposal and safe injection practices.

In line with the standard precautions for infection control and prevention identified by Wisconsin Development of Health Service (2020), United State Centers for Disease Control and Prevention (2020); Rural Health Information Hub (2020); Tuohetamu, Pang, and Nuer (2017); Yue (2015) and Yang (2015) affirmed that health education strategies are tailored for their target population by presenting information on particular health topic including the health benefits and threats they face and provide tools to build capacity and support behaviour change in an appropriate setting. They added that health education makes the activities of health promotion and disease prevention achievable through: communication by raising awareness about health behaviours for the general public. The strategies used include public service announcements, health flair, mass media campaigns, and news-letters; education by empowering behaviour change and actions through increased knowledge. Examples of health education strategies include courses, training, and support groups and policy, system, and environment by making systematic changes through improved laws, rules and regulations (policy); functional organisational components (system) and economics, social or physical environment, to encourage, make available, and enable healthy choices.

Statement of the Problem

Ignorance of what to do, how and when to do it is observed as the major problem during the outbreak and spread of infectious diseases. Despite the level of health education in the Oyo community, poor actions towards disease outbreak management are still evident. The effects of which can cause insecurity to social and economic statuses as well as the loss of lives. The need for adequate health knowledge and appropriate action(s) is unavoidable. Hence, the need for continuous health education as the situation demands. Among past researches are Rural Health Promotion and Disease Prevention (2020) which revealed that health education provides learning experiences tailored for presenting information to the target population on particular health topics including the health benefits, threats they may face, and tools to build capacity and support behaviour change in an appropriate setting. Based on the above, these researchers, therefore, investigated the degree to which health education promotes effective disease outbreak management towards national security. This would enable the researchers to make a suggestion(s) for future improvement.

Purpose of the Study

The main purpose of this study was to examine the degree to which disease outbreak management through health education in Oyo Township can promote national security. Specifically, the study sought to determine whether:

1. Knowledge of the cause and mode of spread of disease acquired through health education would promote effective disease outbreak management among people in Oyo town.
2. effective disease outbreak management would serve as a tool for national security among people in Oyo town

Research Questions

The following questions were raised:

1. Would knowledge of the cause and mode of spread of disease acquired through health education promote effective disease outbreak management among people in Oyo town?
2. Would effective disease outbreak management serve as a tool for national security among people in Oyo town?

Research Hypotheses

The following hypotheses were formulated and tested:

1. Knowledge of the cause and mode of spread of disease acquired through health education would not significantly promote effective disease outbreak management among people in Oyo town.
2. Effective disease outbreak management would not significantly serve as a tool for national security among people in Oyo town.

Methodology

The design for this study was a descriptive method of survey type. The target population was people residing in Oyo township, basically government workers (Civil and Public Servants) as at the time of this study. A multi-stage sampling technique of purposive for making sure that every group in the target population no matter the number was involved stratified to sample respondents from different categories of workers and incidental random for giving every member opportunity

to participate. Four hundred (400) respondents were used. The instrument used for data collection was the researcher's structured and developed questionnaire. It was given to the experts in the field of Physical and Health Education and Test and Measurement for validation. The comments and suggestions made were used to improve the quality of the research instrument. Test re-test form of data with Spearman-Brown rank-order correlation was used to ascertain its reliability. The coefficient of ($r = 0.78$) obtained was used to establish its reliability. Administration, filing, and collection of questionnaire forms were done with the help of research assistants. Inferential Statistics of Pearson product-moment correlation were used to determine the level to which health education promotes disease outbreak management for national security.

Results

The data analyses, interpretation and results were presented below:

Hypothesis 1: Health education would not significantly promote effective disease outbreak management among people in Oyo township.

Table 1: Pearson's (r) showing a significant level of health education and disease outbreak management

Variables	N	Df	Crit value	R	Sig (2 tailed)	Alpha Level	Decision
Health education and disease outbreak management	400	398	0.117	0.654	0.054	0.05	Ho Rejected

Table 1 showed a calculated r -value of 0.654 with a significant probability value (p -value) of 0.054, computed at an alpha level of significance of 0.05 is greater than the critical value of 0.117. Since the calculated r -value of 0.654 is greater than the critical value of 0.117, therefore, the null-hypothesis was rejected. This showed that health education significantly promoted effective disease outbreak management among people in Oyo town.

Hypothesis 2: Effective disease outbreak management would not significantly serve as a tool for national security among people in Oyo township.

Table 2: Pearson's (r) showing a significant level of effective disease outbreak management and national security

Table 2 :	N	df	Crit value	R	Sig (2 tailed)	Alpha Level	Decision
Effective disease outbreak management and national security	400	398	0.117	0.567	0.037	0.05	Ho Rejected

Table 2 revealed the calculated r -value of 0.567 with a significant probability value (p -value) of 0.037, computed at 0.05 alpha level of significance. Since the calculated r -value of 0.648 is greater than the critical value of 0.117, therefore, the null-hypothesis was rejected. By

implication, it meant that effective disease outbreak management had the potential of securing people from infectious disease in Oyo township, hence, promoting national security as long as Oyo township is a community among the communities in the nation.

Discussion of Findings

The finding on hypothesis 1 revealed that health education significantly promoted effective disease outbreak management. This corroborates the World Health Organisation, Regional Office for the Eastern Mediterranean (2020) which indicated that health education through its information promotes health and prevents diseases and Wang, Han, Fangi, Xu, Lin, Xia, Wenhan, Jinlu, Jiang and Tao (2018) who claimed that health literacy provided by health education is often indicated to accommodate individual approach by substituting the three domains of health, that is, health care, disease control, and health promotion with “being ill, being at risk and staying healthy”. Health literacy to them bears a significant role in improving the prevention and control of infectious diseases, whereas health knowledge and behaviour are important components of health literacy.

On hypothesis 2, the finding showed the significant capability of effective disease outbreak management in serving as a tool for national security. This is in corroboration with Wisconsin Department of Health Services (2020) which identified standard precautions for infection control and prevention as a set of infection control practices used to prevent transmission of diseases that can be acquired by contact with blood, body fluids, and mucous membranes. The measures are to be used when providing care to all individuals, whether or not they appear infectious or symptomatic. Other measures identified are hand hygiene including its rules; personal protective equipment; needle stick and sharps injury prevention; cleaning and disinfection; respiratory hygiene (cough etiquette); waste disposal and safe injection practices. In line with the standard precautions for infection control and prevention identified by Wisconsin Development of Health Service (2020), United State Centers for Disease Control and Prevention (2020); Rural Health Information Hub (2020); Tuohetamu, Pang, and Nuer (2017); Yue (2015) and Yang (2015) it is affirmed that health education strategies are tailored for their target population by presenting information on particular health topic including the health benefits and threats they face and provide tools to build capacity and support behaviour change in an appropriate setting.

Conclusion

From the findings above, it was concluded that effective disease outbreak management created through health education had the potential of securing people’s lives in Oyo township, hence, promoting national security since Oyo is a segment of the nation.

Recommendations

Based on the conclusion, it was therefore recommended that,

1. Health education on disease outbreak management should be made public through different possible available channels of communication to acquaint the individual with the appropriate steps to be taken for safety during disease outbreak period.
2. Health education had the potential of securing people’s lives in Oyo township, hence, promoting national security since Oyo is a segment

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