

Reducing the Barriers to the Prevention and Control of Covid-19 Spread in Nigeria: The Role of Health Education

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Abstract

Corona Virus (COVID-19) is a deadly infectious disease, caused by Severe Acute Respiratory Syndrome (SARS-Cov2) discovered in December 2019 in WUHAN, China. World Health Organization (WHO) described it as an infectious disease characterized by mild to moderate fever, sore throat, fatigue, dry cough, dyspnoea, dehydration, pale skin, and irritability especially in children. The degree of its severity depends on age and underlying health condition. Nigerian government made frantic efforts to stop the spread of the virus on its confirmation in the country by strengthening surveillance at five international airports, establishment of corona virus group and activation of its incident system. Other preventive steps were lockdown and curfew measures across the nation as well as the establishment of the WHO Information Network for Epidemics. However, these measures were not effective in containing the viral spread due to some barriers such as stigmatization of infected people, under-testing, fear, non-compliance to WHO COVID-19 control and preventive rules. This paper reviews these barriers and the role of health education in reducing them. It concludes that public health education at all levels remains the panacea for controlling the deadly viral spread where every other measure fails. The paper recommends that there should be health education towards positive behavioural change and health educators should be recruited and posted to all the isolation centres in the federation to educate infected persons on the need to stay in the centres until they test negative to the virus.

Key words: Reducing barriers, Prevention and control, COVID- 19, Health Education.

Introduction

Towards the end of December 2019, some strains of corona virus were discovered to infect humans causing pneumonia of unknown origin in China (Wuhan Municipal Health Commission-WMHC, 2020). The World Health Organization (WHO, 2020) described the disease and co-named it COVID- 19 as an infectious disease caused by Severe Acute Respiratory Syndrome (SARS-Cov2) characterized by mild to moderate fever, sore throat, fatigue, dry cough, dyspnoea, dehydration, pale skin, and irritability especially in children (WHO, 2020). In January 2020, China reported to WHO that the pneumonia outbreak has been associated with a seafood market in Wuhan city. The cause of the outbreak was later identified and confirmed to be a novel corona virus (Lu, Zhao, Li, Niu, and Yang, 2020). From China, the viral spread has been like wild fire across the globe causing serious socio-economic and health problems, including thousands of deaths. Most infected individuals do experience moderate respiratory illness and recover without special treatment especially if they are young, but older people, those with underlying medical conditions such as cardiovascular diseases, diabetes, hypertension asthma and cancer are more vulnerable to serious disease. The corona virus spreads primarily through droplets of saliva or discharge from the nose or mouth when the infected person sneezes, speaks or coughs. People can get the infection by touching contaminated surfaces and touching their eyes, nose or mouth (Cennimo, Bergman and Oslen, 2020). It has been reported that persons without symptoms (carriers) can also infect others when in close contact. Most estimates of the incubation period of COVID-19 range from 1 to 14 days, with a median of 5–6 days. This implies that if a person remains well 14 days after having contact with an infected person, he/ she may not have been infected. Some people become infected but do not develop any symptom and do not feel unwell and mortality varies according to location, age and existence of underlying health conditions (WHO, 2020).

Nigeria, like most other African countries took quick and serious steps in containing the deadly virus since its outbreak. On 28 January 2020, the Nigerian government assured citizens of the country of its commitment



to prevent the entry of persons infected with the deadly virus into the country by strengthening surveillance at five international airports in the country (Ifijeh, 2020). The Nigeria Centre for Disease Control (NCDC) also announced on the same day that it had already set up corona virus group and was ready to activate its incident system if any case emerged in Nigeria (Odunsi, 2020). Most state governments established and equipped isolation centres in readiness for the pandemic. President Muhammadu Buhahari in bid to stem the spread of the virus, announced total lockdown in Lagos, Ogun and the Federal Capital Territory (FCT). The initial two weeks lockdown as announced by the President commenced on Monday March 30, 2020. Most states adopted the lock down measures all in attempt to wage the viral spread. At the expiration of the two weeks, there was an extension of another two weeks lock down with an overnight curfew from 8pm to 6am across the nation. This was followed by phased and gradual easing of the lock down measures in the FCT, Lagos and Ogun states starting from 2nd May 2020 (Oyekanmi, 2020). In addition, the WHO Information Network for Epidemics (EPI-WIN) was established at the onset of the COVID-19 outbreak, in view to meet the information demands of the moment and those of future pandemics and emergencies (WHO, 2020).

However, like most of other highly infectious diseases the preventive and control measures adopted in the country could not stop the virus from spreading fast, and finally, the first case of covid-19 in Lagos Nigeria was confirmed on Feb 27, 2020. Since then, there has been tremendous and steady rise in the spread of the pandemic in the nation. On May 21 2020, about 6677 cases were confirmed, with 1860 discharged and 202 deaths. As at 15th June 2020, there were 16658 cases, 5349 discharged and 424 deaths. On June 28 2020, 490 new confirmed cases and 7 deaths were recorded, bringing the total confirmed cases in the country to 24,567, number discharged 9,007, 565 deaths and total tests carried out 130,164 (NCDC, covid-19, 2020). As at 13th Oct 2020, there were 60,655 cases of COVID-19 in the country, 2,006 discharged, and 1, 116 deaths (NCDC, 2020).

The above trend of the disease implies that the steps already taken by Nigerian government in curbing the menace of the pandemic in the country such as setting up Corona Virus Group and lock down are good but, not enough. The situation paints an ugly picture of more skyrocketing confirmed cases, more deaths, vulnerability and economic loss in future if a more focused, proactive and practical steps are not taken to stop the spread of the virus. This paper therefore reviews the role of health education in reducing the barriers to the prevention and control of the disease in Nigeria.

Despite the efforts of the federal and state governments, together with World Health Organization (WHO) and Nigerian Centre for Disease Control (NCDC) in containing the covid-19 spread, there are still enormous challenges mitigating such efforts with attendant continuous increase in the number of confirmed cases and recorded deaths. Adepoju (2020) noted that although Nigeria has a seasoned public health institute for responding to covid-19, there are still specific challenges that should be tackled. In this regard, the authors perceived the under-listed factors as the major barriers to the prevention and control of the spread of COVID-19 in Nigeria that needs to be addressed such as:

- Stigmatization of infected people
- Under- testing
- Misconceptions and ignorance
- Fear
- Non- compliance to covid-19 preventive control and rules

Stigmatization of infected people

Stigmatization entails branding of a person or group in a disgraceful, unworthy and shameful manner concerning a situation including diseases. Stigmatization can result to withdrawal from the society, friends, co-workers and even families with its attendant emotional and mental trauma including increased suicidal tendencies (United Nations Children Education Fund, UNICEF and WHO, 2020). In the context of COVID- 19, infected people are labelled, treated separately, and may experience status loss due to a perceived link with the disease. Stigmatization can push infected people to hide the disease, discourage them from adopting healthy behaviours, including the unwillingness to be tested and treated thereby increasing morbidity and mortality arising from the disease. Stigmatization can cause more serious health issues and difficulties in controlling and preventing future disease outbreaks (Johns Hopkins Centre for Communication Programs, 2020; Fayoyin, 2016). Some people attribute it to a particular race, groups like refugees and migrant workers. This situation is heightened by rumours and misinformation on media platforms about the prevalence, prejudice and fears of COVID-19.

Under- testing

Most African countries including Nigeria, do not have sufficient testing materials which results in under-testing. This situation is dangerous because untested individuals may be positive going about their businesses infecting others, thereby increasing the rate of spread. Some people are asymptomatic all through their infection period, but are positive on the virus test and therefore can infect others (Hu, Song, Xu, Jin, Chen, Xu, Ma, 2020). In some parts of the world including Nigeria, there is selective testing for only persons in government and some who are considered most vulnerable in getting the virus. If everyone can be tested, the viral spread would be reduced. Muhajarine, Eboime, Korem and Badejo (2020), suggested that in responding to COVID-19, African health systems need to pay particular attention to equity. Testing results in many parts of the world including Nigeria indicate that the number of infected cases outnumber those who are infected. Again, a country's actual recorded figures depend on its testing strengths and the number of people that are being tested (Lau, Khosrawipour, Kocbach, Ichii, Bania Khosrawipour, Haverst, Reed, Lim, et al, 2020).

Misconceptions and ignorance

Most people believe that the virus affects only the affluent and politicians who travel across the globe. On February 27 2020, the index case in Nigeria was an Italian who came to Nigeria from Overseas. The former chief of staff of the President Mallam Abba Kyari who earlier died of the disease was infected after an overseas travel. The son to the former vice President of Nigeria, Abubakar Atiku, who had the disease was also infected during his overseas trip. These incidents heightened the misconceptions about COVID-19 in the country. This is why poor people think that COVID-19 cannot affect them thereby refusing to abide by the guidelines from the federal ministry of health and the NCDC. Non-compliance to these measures put in place against the disease is one of the main reasons for its spread. As a result, the poor still perceive COVID-19 as a rich man's disease (Muhajarine, Eboime, Korem & Badejo, 2020). Ignorance of facts about virus make some Nigerians believe that alcoholic drinks, herbs and sunlight can prevent COVID-19 infection. Misconception and ignorance make it more difficult for people to comply with the social distancing rule, use of face masks, regular hand washing/sanitising and other precautionary measures stipulated by the NCDC.

Fear

Fear is one of the greatest barrier in the prevention of COVID-19 in Nigeria. Fear steamed from myths and misconceptions surrounding the epidemic, mainly from social media sources and fake news. People feared getting tested, going to the hospital to get treated for any illness as they became jittery at the mere mention of the virus, all due to unfounded information about the virus. Health care workers were rejecting patients in the hospitals especially on showing any sign/symptoms associated with covid-19 (Adejoke, 2020). Fear results to negativity which in turn brings about emotional health issues such as depression, anxiety and stress (Bakioğlu, Korkmaz and Ercan, 2020). Preventive and control strategies such as physical distancing and lock down measures could give room for anxiety, stress and depression in people, even though they are important in stopping the spread. These psychological issues can predispose to sleep and eating disorders, lack of concentration, worsening of other mental health disorders and worry about health and job (CDC, 2020).

Non- compliance to covid-19 preventive and control rules

Non- compliance to COVID-19 preventive measures remains a major concern in the prevention and control of the spread of COVID-19 in Nigeria (Ojoma 2020). It is a common sight in Nigeria of people going about their businesses, shaking hands, hugging one another, not wearing masks, and in crowds and even in social and religious centres. Some of these non- compliant centres were closed in Lagos State (Olisa, 2020). The chairman of the Presidential Task Force (PTF) on COVID-19 expressed concern over high level of non- compliance with the measures put in place against the spread of the virus such as physical distancing, wearing of face masks in public places, sanitizing and general maintenance of personal hygiene throughout the country. He expressed disappointment that the areas where these mitigating attitudes abound are the market places, religious centres, and motor parks (News Agency of Nigeria- NAN, 2020). The effect of non-compliance has impacted greatly on Nigerian oil sector which is a hallmark of the Nation's economy, leading to a drastic fall in the revenue by N425.52 billion to N940.91 billion during the first quarter of 2020. There has been a decline in the sale of crude oil during the lock down with an envisaged drop of oil production due to viral spread in the oil fields due to non-compliance with the COVID-19 rules (Adekoya, 2020).

The Role of Health Education in reducing the barriers

Health education has been defined by Ememabsi and Ikoro (2016) as a profession of educating people about health. In the context of this paper, definition of health education by Gold (2001) applies. Gold (2001) defined it as any 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 hence, Public Health Education remains a veritable intervention programme which is geared towards the prevention and control of communicable diseases including covid-19 by reducing the occurrence, efficacy, or eliminating the presence. This could be achieved through health intervention programmes such as periodic house to house health education and public enlightenment by means of seminars and workshops. Disease control measures seek to reduce the incidence, duration and risk of transmission, disease impacts including financial/economic burden. The control steps could be primary or secondary or both. Primary prevention means the action taken before the onset of disease which removes the chances of the disease occurrence. This phase aims at preventing the specific disease onset through risk reduction or by increasing resistance (Association of Faculty of Medicine of Canada, 2015). Secondary prevention means an action taken to halt the progression of a disease at its early stage and to prevent complications. This phase aims at halting the disease process, health restoration, early detection and treatment and reverse communicability of infectious diseases (John Hopkins School of Public Health, 2008). Some health education measures have successfully been used over the years in controlling infectious diseases and can be applied specifically in the prevention and control of Covid-19, with some modifications to suit its peculiarity. Such measures are: community mobilization, health awareness creation, health education of different groups especially the vulnerable groups like the elderly and those with underlying health conditions. Other strategies include encouraging positive attitude towards COVID-19 prevention and health communication among others. This paper presents the under listed measures as instances of how health education can help to reduce the barriers of preventing and controlling the spread of the virus thus:

Reducing stigmatization of infected people through effective communication

Effective communication plays a vital role in reducing misconceptions, rumours, and misinformation which are major contributing factors to stigma and discrimination. Misconceptions are to be corrected though with caution, bearing in mind that people's feelings and subsequent behaviour are real, not minding the underlying assumption, and in doing this, the importance of prevention, lifesaving actions, early screening and treatment are to be emphasized (Fayoyin, 2016). When information comes from trusted sources, it can be effective at influencing the public to seek health knowledge and positive attitudes towards and uptake of healthcare services for Covid-19. Raising public awareness on success stories of people who have recovered from COVID-19 is a good approach to curb stigma associated with the disease (WHO, 2020). Though enough is being done through social media, a lot of misinformation abound in different media platforms; moreover, rural/suburb populace may not access the media. Health education provides trust, advice, and empathy to those affected. It gives in-depth understanding of the disease, provides effective and practical steps on how people should keep themselves and families safe. Effective communication regarding COVID-19 is pertinent in preventing and controlling the spread of the disease, and in reducing fear and stigma. A supportive environment is needed to discuss the facts about the disease and its impact in details without bias through health education (Johns Hopkins Centre for Communication Programs, 2020). Positioning health educators in the fore front to enlighten the public that having COVID-19 infection is not a death sentence and that individuals who have recovered fully from the infection are no more infectious is very important. House to house information dissemination about the facts of covid-19 by trained health educators will go a long way towards reducing the stigma associated with the virus. This approach will make people to willingly get tested and be treated early, thereby limiting the spread.

Reducing under-testing

As people are coming to terms with COVID-19, WHO is of the opinion that each country ensures that a set of comprehensive strategies in reducing the transmission of the virus and reduction of its associated deaths is in place. One and first of such measures according to WHO Covid-19 updates is understanding public health capacities. Health education is a veritable tool of public health in the capacity of containment and management of cases after disease outbreaks. Virus testing should be easily available and free of charge for all. However, it is unfortunate that only three testing centres are available for over 200million people in Nigeria. This inadequacy is compounded with the fact that the current technology for the viral testing is difficult to scale hic explains he limited samples that have been tested (Muanya, 2020). As government makes effort to provide test kits, health education continues to create public awareness on the importance of voluntary testing in order to increase the number individuals being tested. Health education ensures rapid and thorough tracing of the contacts of cases which is

capable of increasing the testing demand (WHO, 2020). Health education is highly needed in market places, schools, worship centres and in the rural areas to create awareness on the importance of getting tested. This approach will remove the erroneous belief which people have, that the virus is gotten while being tested.

Reducing non-compliance to covid-19 control and preventive rules through community mobilization

Health education mobilizes the community to use simple preventive measures and refer cases to ensure continued prevention in the host community and neighbouring areas, establishes contingency plans, and isolation of cases. Other measures here are monitoring and isolation of positive contacts, use of referral laboratory and safe handling and burial of dead bodies as well as decontamination of contaminated places. Preventive measures here include frequent hand washing with soap and water for at least 20 seconds, or sanitizing with alcohol based (at least 60%) solutions. Coughing and sneezing should be done with a tissue paper or the inside of the flexed elbow and surfaces should be frequently disinfected. Staying at home when feeling unwell, maintaining physical distancing, use of disposable and non-disposable face masks and how to use them are to be demonstrated and encouraged (Sumerset and Society for Public Health Education, 2020). This information should be disseminated and demonstrated through periodic home visits, sharing of posters, drawings on strategic places on trees and walls, fliers and handbills. The preventive measures are to be illustrated in local dialects for easy understanding. Worship centres, market squares, schools and other crowd prone areas are to be closely monitored by health educators to ensure strict compliance to the preventive measures. According to Li, Hu, Liu, (2020), public health laws should be in place, understood, and accepted by the public to reinforce behavioural change that are necessary for community health and well-being.

Reducing misconception and Fear through Community participation

To achieve a more effective communicable disease including COVID-19 control and prevention, it is important to involve the community. Community participation is necessary in both the delivery of and decisions about health service in view of providing appropriate care for their peculiar needs and situation. Involving the community leaders, volunteers, health workers together with supporting agents and agencies in the community can greatly reduce misconception and fear in the community seeing that their members are actively involved in the process. Such strategies include health education towards positive behavioural change which enhances case education, the myths and reality, identification of defaulters, and sustainable interventions. There is need for capacity building in the community for isolating individuals with COVID-19 and quarantining contacts.

This strategy is more effective if it is implemented in details with people's full cooperation, under public health supervision (Li, Hu, Liu, 2020). Health education ensures disease surveillance through ongoing systematic collection, analysis and interpretation of health data, as well as timely data dissemination to the people concerned and its application. Good surveillance results in successful communicable disease control and gives more insight on the changing disease pattern. Facility based health information system should work in synergy with the community based surveillance to source important health data through home visits by health educators (Sumerset and Society for Public Health Education, 2020).

Conclusion

Covid-19 has taken a deadly toll globally including Nigeria, with deficiency in several aspects of control and preventive measures, and the country is losing thousands of its citizens to the pandemic. The control and preventive measures by the federal and state governments are not very effective due to some barriers such as inadequate testing, non-compliance to COVID-19 rules, fear and misconception/ignorance. This paper reviews the various preventive and control measures of the federal and state governments, the barriers to these measures and the role of health education in reducing those barriers. It was concluded that where every other action fails, public health education at all levels remains the panacea for controlling the deadly virus.

Recommendations

1. This paper recommends that, the federal and state ministry of health should as a matter of urgency organise, train and retrain health educators in line with WHO Covid 19 protocol. These trained health educators will assist in organizing seminars, workshops and house to house campaign to sensitize the public on the importance of strict adherence to the COVID-19 rules.
2. The trained and retrained health educators are to work in synergy with other health agencies in reporting any case, both symptomatic and asymptomatic patients to the appropriate health authorities.



3. Health educators should continue to create public awareness on the importance of voluntary testing in order to increase the number of individuals being tested.
4. The federal ministry of health should recruit and post health educators to all the isolation centres in the federation to educate infected persons in those centres on the need to stay until they test negative of the virus.
5. Preventive and control information should be disseminated and demonstrated by health educators through periodic home visits in local dialects.

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