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RAPID REPORTS AND PERSPECTIVES FROM THE FIELD

Mobilizing medical students for improved COVID-19 response in Nigeria: a stop gap in human resources for health

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Abstract

The Human Resources for Health (HRH) are one of the major building blocks of any health system. Shortage of HRH has however been observed in Nigeria during the COVID-19 pandemic. In the COVID-19 context, medical students could serve as a pool of person-power for contact tracing and to develop capacity in epidemiology and disease surveillance. Their understanding of their community makes them effective in advocacy, activism, social mobilization and risk communication. Lessons should be learnt through the identification of contextual methodology to develop the untapped capacity of HRH in outbreak preparedness and response by involving more students and other stakeholders. This will ultimately help in reducing the disparity between developed and developing countries' health system and health event outcomes.

Keywords: Medical students, COVID-19, Human resource for health, COVID-19 outbreak response, COVID-19 outbreak preparedness.

Introduction

According to the World Health Organization (WHO), Human Resources for Health (HRH) are one of the major building blocks of any health system. Shortage of human resources in the health sector has however been a problem globally, particularly in Sub-Saharan Africa (SSA) [1]. It was estimated that compared to Europe, SSA had about a tenth of nurses and doctors for their population and shortage of HRH has been identified as a major challenge of the health systems in many developing countries [1-3]. Some of the factors implicated in the shortage of HRH in SSA include mal-distribution, migration, weak knowledge and skills imbalance [1]. Chen et al. found that in most developing countries, skills in population based public health field are often deficient [1]. In many developing countries, task shifting, mHealth, exchange programs, international academic partnership and field epidemiology training programs are among many of the interventions that have been deployed to address HRH shortage and also to improve the skills among health workers in many developing countries. While some of these interventions have been found to be effective, their efficiency, cost-effectiveness and sustainability are also of concern [4].

Globally, epidemics and pandemics are public health events known to stress and strain the health care system due to increased demand for health resources (time, money, manpower). On the 31st December 2019, the World Health Organization (WHO) was alerted to several cases of pneumonia in Wuhan City, Hubei Province of China. Following the rapid escalation of the outbreak and spread to countries outside China, WHO declared the outbreak a Public Health Emergency of International Concern (PHEIC) on 30th January 2020 and a pandemic by 11th March 2020[5,6]. Nigeria reported her first case of COVID-19 on the 27th of February and some of the immediate control measures included social distancing, border closure, and bans on religious and social gatherings [7]. Closure of educational institutions commenced on the 19th March, 2020, and has affected more than 1.6 million students globally [8-10]. Medical students have not been spared from the effects of the school closure, the result of which has resulted in an interruption to medical learning. While this control measure seemed to have caused potential delay in production of human resource for health, could this be the only effect of this step? Could this group of students with valuable skills and clinical knowledge have been a potential resource for public health? Could this outbreak have been used as field epidemiology training for the next generation of physicians? Could COVID-19 have been the opportunity for developing countries to build our outbreak preparedness capacity? Did COVID-19 present us the opportunity to build our resilience for disease outbreak?

Have we truly missed the opportunity or can we still learn from this?

Medical students, though not fully trained, are a group of knowledgeable, partially trained and skillful people that may be a resource in an emergency such as a pandemic. There are various ways in which students could be beneficial to the health system without being involved in the frontline management of patients. They could serve as a resource for contact tracing and alongside develop capacity in epidemiology and disease surveillance. Their understanding of their community makes them an asset for advocacy, activism, social mobilization and risk communication. Their knowledge of science, physiology and pathology makes them a good resource for training and re-training of several population groups. During the COVID-19 pandemic, the Harvard Medical School had a medical student led Response Teams of over 500 medical students that volunteered to be involved in various activities of the COVID-19 response in the United States [11]. Some were involved in training, creation and dissemination of COVID-19 infographics for medical and non-medical personnel. Others were involved in providing clinical and social support for healthcare workers, elderly and other vulnerable population. The students reported increased level of knowledge on the science of COVID-19 and readiness to rise to the challenge of COVID-19 pandemic [11]. In reality, the lesson learnt could be beyond just their readiness for the challenges of COVID-19 pandemic but even readiness for the challenges of future pandemic. Developing countries should learn from this and identify contextual methodology to develop the capacity of their untapped HRH in outbreak preparedness and response by involving more stakeholders [12]. This increased surge capacity may reduce the disparity between developed and developing countries' health system and health event outcomes.

Competing interests

The author(s) has/have no competing interests to declare.

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