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VIEWPOINT | COVID-19

COVID-19 Pandemic and Medical Education in Nigeria

Fatima Usman, MBBS, FWACP, MSc;¹✉ Zubairu Iliyasu, MBBS, MPH, PhD, FMCPH, FWACP;²
Hamisu M. Salihu, MD, PhD;³ Muktar H. Aliyu, MD, DrPH, MPH⁴

¹Department of Pediatrics, College of Health Sciences Bayero University, Kano and Aminu Kano Teaching Hospital, PMB 3452, Kano, Nigeria; ²Department of Community Medicine, College of Health Sciences Bayero University, Kano and Aminu Kano Teaching Hospital, PMB 3452, Kano, Nigeria; ³Center of Excellence in Health Equity, Training and Research, Baylor College of Medicine, 3701 Kirby Drive, 700 Houston, Texas 77098, USA; ⁴Department of Health Policy and Vanderbilt Institute for Global Health, Vanderbilt University Medical Center, 2525 West End Avenue, Suite 725 | Nashville, Tennessee 37203, USA

✉Corresponding author email: fusman.pae@buk.edu.ng

ABSTRACT

The emergence of the COVID-19 pandemic has affected the learning process and outcome of medical education. In this commentary, we discuss the effect of COVID-19 on medical education in Nigeria. The disruption of educational services due to government-imposed lockdown and subsequent transition to e-learning with reduction in direct tutor-trainee contact hours to limit virus spread have had a profound effect on the quality of medical education. These measures have impacted adversely on the proficiency, and the intellectual, psychological, financial and social wellbeing of trainees, worsened by a compromised educational system from pre-existing challenges militating against quality education. Prompt re-evaluation of all aspects of medical training with emphasis on developing digital learning platforms that will enable trainees to acquire the needed knowledge and improve learning outcomes is paramount, as it is likely the effects of COVID-19 will linger for a while.

Keywords: • Medical Education • COVID-19 Pandemic • Learning and COVID-19 • Medical Students • Nigeria • SARS-CoV-2

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Introduction

The emergence of the severe acute respiratory syndrome type 2 virus (SARS-CoV-2) in December 2019 and the ensuing coronavirus-2019 (COVID-19) pandemic has had a profound multifaceted effect on daily life, including on medical education, with deleterious albeit unrecognized consequences and limited plans for action. The disruption of educational services due to stringent lockdowns imposed by countries to curb the spread of COVID-19

is unquantifiable, more so in resource-limited settings where the quality of education is already compromised due to overcrowding, inadequate financial resources, lack of basic teaching tools, and poor planning for quality education¹ among others.

Nigeria has over 30 medical and dental colleges.² The cancellation of all academic activities in March 2020 in compliance with directives from the federal government of Nigeria limited educational opportunities for students and made long-term

learning outcomes uncertain. The resumption of schools in January 2021 was also gradual - reduced contact hours made the approach to learning different. The global response to the pandemic is enabling our understanding of the health impact, prevention and management of COVID-19. However, the effects of the COVID-19 pandemic on the current state of medical training and accompanying consequences on the intellectual, psychological, financial and social wellbeing of trainees cannot be ignored. In this commentary, we discuss the impact of COVID-19 on medical education in Nigeria and offer recommendations on the way forward.

Adverse Learning Consequences of the Pandemic

The economic impact of the COVID-19 pandemic, with accompanying cuts in budgetary allocations, has adversely affected public and private capacity to fund education. The increasing cost of living, currency devaluation, rising unemployment and changes in household dynamics resulting from loss of heads of households make financing medical education increasingly difficult and unsustainable for trainees. Disruption in the academic calendar during the lockdown period has also compromised the learning process. As a result, most trainees studied independently, without supervision or guidance due to non-existent platforms to support online education and a priority shift to patient care. With the resumption of educational activities almost a year into the pandemic, students were withdrawn from most clinical activities to minimize overcrowding and risk of virus spread on the wards, focusing on didactic lectures and limited quick clinical demonstrations. Learning opportunities were lost at various levels, including clerkship, short case demonstrations, direct patient communication and counselling. This forfeiture resulted in inexperienced students with limited confidence and proficiency in practical clinical applications.

Online teaching platforms and educational resources such as video conferencing with instructional services and electronic applications^{3,4} are now available to reinforce medical training. The transition to e-learning and teaching services to

bridge the learning gaps is, however, not seamless.⁵ Factors such as inadequate funding to install and maintain as well as train staff to use the electronic interface, lack of internet access, frequent interruptions in power supply, and unavailability of individual computers for remote learning has slowed this transition. With these challenges militating against optimal education, coupled with restricted face-to-face learning prospects, the quality of medical education is on a downward trajectory with detrimental future implications.

Similarly, examination performance and practice competency are compromised due to changes in the pattern of training, notably, the long break from formal classes during the lockdown and reduced practical exposure to clinical cases upon resumption with emphasis on simulations, didactic lectures and delayed assessments. Shortening of the semesters with crash revision courses prior to assessments is unfavorable for meaningful information retention and skill acquisition. These situations have impacted negatively on the proficiency of trainees.

The duration of medical training in Nigeria is six years and coupled with the incessant industrial actions by the academic staff union, this timeline may extend to eight years. Frequent interruptions in learning activities since the advent of the pandemic have affected the duration of training. Rather than the early graduation for final year trainees seen in certain developed countries,⁴ trainees in Nigeria are faced with delays so as to make up for missed content. This situation has a snowball effect, stalling admission for new entrants into the system. Most medical schools are yet to graduate trainees since the start of the pandemic. The postgraduate medical colleges in the country have already postponed candidate examinations in 2020, affecting professional development and career advancement for students. With the global restriction on travel, the progress of prospective and enrolled international trainees is equally affected.

The psychological impact of COVID-19 is real, especially for students who are recovering from the disease, who have lost family members to the disease or are impacted by future career uncertainty. Mental

health conditions like depression, anxiety, and panic attacks are becoming increasingly common,⁶ with some trainees resorting to substance abuse and on the extreme, dropping out of school. This situation is further exacerbated by the worsening financial vulnerabilities for many families.

Unacknowledged Benefits of the Pandemic

The COVID-19 crisis has underscored the need for emotional support and ethical responsibility.⁷ Despite the loss of direct contact between trainees and their instructors, interpersonal connections and demonstration of community cohesion have greatly increased, evident by new friendships, concern for each other's well-being, support and consciousness toward mundane activities which were previously taken for granted, bringing out humanity in the medical profession among students and their trainers. To bolster training, mentoring of students has intensified, with shared responsibility among close-knit groups having positive impact on learning and interpersonal relations. The realization that medical education is not hinged on clinical rotations alone⁷ has made trainees seek unconventional ways, such as community service and volunteer work to add value to their educational experience.

Conclusion

The COVID-19 pandemic has transformed medical education. Serious concerns as to the future of learning exist, more so in developing countries where holistic support to facilitate education is lacking. This turn of events requires a prompt re-evaluation of all aspects of medical training to adapt to a changing system and improve learning outcomes, as it is likely the effects of COVID-19 will linger for a while. Medical schools may need to invest resources in digital learning platforms that permit trainees to acquire knowledge while staying socially distant, as such platforms are also likely here to stay.

Compliance with Ethical Standards

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