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Letter to the Editor "COVID-19 and Neurosurgical Education in Africa: Making Lemonade from Lemons"



Never in history has the fabric of African neurosurgery been challenged as it is today with the advent of the novel coronavirus identified in 2019 (COVID-19). Even the most robust and resilient neurosurgical educational systems in the continent have been brought to their knees with neurosurgical trainees and young neurosurgeons bearing the brunt. In the face of this new reality, and in order to limit the impact of the current COVID-19 pandemic, multiple programs have implemented physical distancing to reduce in-person interactions. In some cases, residents have been asked to stay home at least until they are instructed otherwise. This unfortunate event presents an innovative opportunity for neurosurgical education in Africa. Herein, we detail the framework of an online neurosurgical education initiative to advance the education of African residents and young neurosurgeons during and after the COVID-19 pandemic.

LETTER:

Seventeen of the 54 African countries do not have the recommended specialist neurosurgeon workforce density principally due to a lack of training programs.¹ Also, few African training programs offer a wide range of neurosurgical subspecialty experience to their trainees. Yet some of the most respected neurosurgeons in the world are African neurosurgeons who have either trained on the continent or are training the future generation of neurosurgeons in their countries. These neurosurgeons are an estimable resource that we have underused. To reach greater heights, we must choose to stand on the shoulders of these giants. However, educational exchanges between our training centers are limited and pale in the face of the partnerships our training centers have with high-income country institutions, perhaps owing to the fact that it is generally cheaper and easier to travel outside of our continent than it is inside.² We hope therefore that the African Continental Free Trade Area will facilitate the transfer of knowledge. In the meantime, however, we must find alternative ways to share the skills and experiences of our senior neurosurgeons with the younger generation.

African residents and young neurosurgeons are already learning from and about world-renowned neurosurgeons via online medical education platforms.³ It is clear from this that we can do a better job of integrating online medical education and our experts into our training programs. In order to limit the impact of the current COVID-19 pandemic, multiple programs have implemented physical distancing, which reduces in-person interactions. In some cases, residents have been asked to stay home at least until they are instructed otherwise.⁴ This unfortunate event presents an

opportunity for neurosurgical postgraduate medical education in Africa. Herein, we detail the framework of an online neurosurgical education initiative to advance the education of African residents during and after the COVID-19 pandemic.

Led by professional societies, senior faculty from all neurosurgical subspecialties and from all the regions will be invited to host continental neurosurgery grand rounds. With permission from program directors, residents will be recruited and asked to register online (Google Forms, Google, Mountain View, California, USA). The lectures will be scheduled weekly and hosted on a video-telephony platform such as Skype (Skype Technologies, Luxembourg, Belgium), Zoom (Zoom Video Communications, San Jose, California, USA), or GoToMeeting (LogMeIn, Boston, Massachusetts, USA). The aim of this initiative would be to improve the knowledge, skills, and attitudes of residents and young neurosurgeons in Africa. These online sessions will focus on clinical and nonclinical topics. Nonclinical topics will include networking, mentorship, and advice for early career neurosurgeons. In addition, the sessions will focus on research, promoting the organization of virtual scientific conferences with abstract presentations, and award ceremonies.

An initiative like this one can increase interregional and intraregional neurosurgical collaborations. This could, in turn, lead to the development of an African neurosurgical fellowship registry and research collaboration groups.

CONCLUSION

Some people speak of the return to pre-COVID "normalcy" after the pandemic, but it is more likely that the post-COVID period will define a new "normalcy"—one in which some things that were considered impossible before will no longer be impossible. Successful organizations adapt promptly in the face of adversity. While the post-COVID period surprised and tested our health systems, post-COVID African neurosurgical education must reinvent itself and transform its potential into achievements. Resilience in this situation lies in recognizing the value of learning from those who walked the path we wish to walk and using technology to our advantage. We cannot let the current crisis stifle our progression, and we should not aim to return to the pre-COVID "normalcy." When life gives you lemons, make lemonade!

CRediT AUTHORSHIP CONTRIBUTION STATEMENT

Ulrick Sidney Kanmounye: Conceptualization, Writing - review & editing. **Ignatius N. Esene:** Conceptualization, Writing - review & editing.

Ulrick Sidney Kanmounye¹ and Ignatius N. Esene²

From the ¹Global Neurosurgery Initiative, Program in Global Surgery and Social Change, Harvard Medical School, Boston, Massachusetts, USA; and ²Neurosurgery Division, Faculty of Health Sciences, University of Bamenda, Bamenda, Cameroon

To whom correspondence should be addressed: Ignatius N. Esene, M.D., Ph.D.

[E-mail: ignatiusesene@yahoo.co.uk]

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