

1 **Title:** Deprived of the Sea: Being a Kenyan Final-year Medical Student During the COVID-19 Outbreak

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3 **Author names:** Innocent Wafula

4 **Degrees:** Bachelor of Medicine and Bachelor of Surgery, M.B.Ch.B (Student)

5 **Affiliations:** The University of Nairobi

6 **Email:** [innocentwafula1@gmail.com](mailto:innocentwafula1@gmail.com)

7  
8 **Author names:** Eunice Mokeira Ong'era

9 **Degrees:** Bachelor of Medicine and Bachelor of Surgery, M.B.Ch.B (Student)

10 **Affiliations:** The University of Nairobi

11 **Email:** [eunicemokeira01@gmail.com](mailto:eunicemokeira01@gmail.com)

12  
13 **About the author:** Innocent Wafula is currently a 6<sup>th</sup> year medical student of the University of Nairobi of a 6-  
14 year program. He is also a recipient of the Health-Professional Education Partnership Initiative (HEPI)-Kenya  
15 Qualification in Health Research.

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30 **Personal, Professional, and Institutional Social Network accounts.**

- 31 • **Facebook:** Inno Wafula, University of Nairobi Medical School, Eunice Mokeira.
- 32 • **Twitter:** @Innowafula, @UoN\_CHS

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34 **Discussion Points:**

- 35 1. August 2020, COVID-19 cases are still rising in Kenya.
- 36 2. Education has been affected, shifting attention towards online studies, albeit with challenges.
- 37 3. Clinical medical education has since been halted. What next for final-year medical students?

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## 1 THE EXPERIENCE.

2 “If we continue to behave normally, this disease will treat us abnormally.” This statement by the Cabinet  
 3 Secretary for Health in Kenya on March 22, 2020,<sup>1</sup> nine days after the confirmation of the first COVID-19 case  
 4 in Kenya, marked the beginning of months of never-ending uncertainties. The Kenyan Government has since  
 5 worked tooth and nail to stem the tide of the rising number of cases in the country. Social distancing, travel  
 6 restrictions, regional lockdowns, and curfews all have been implemented at some point to curtail the spread.  
 7 However, five months down the line, the war seems far from over; the country is still experiencing an exponential  
 8 increase in the number of cases and fatalities from the disease. As of August 15, 2020, Kenya had a total of  
 9 26,334 confirmed COVID-19 cases and 465 fatalities.<sup>2</sup>

10  
 11 We have witnessed the impact of the disease in Kenya go deep, beyond fever, dry cough, breathlessness, sore  
 12 throat, and anosmia. It has left the country's economy hamstrung; the education sector inclusive. Just two days  
 13 after the first case was reported (March 15, 2020), the government issued directives for the closure of all learning  
 14 institutions. Millions of students have had their education disrupted. Online platforms have since been the  
 15 dominant alternative platform for education, just like in other countries such as Italy<sup>3</sup> and the US,<sup>4</sup> which were  
 16 among the first to report upsurges of the infection. However, in a situation where most students barely have  
 17 stable access to the internet and electricity, online education has been a source of inequalities in education that  
 18 disadvantages the socio-economically underprivileged.

19  
 20 For final-year undergraduate medical students, our journey in medical school has been anything but simple.  
 21 Although the Kenyan medical education system involves six years of undergraduate study, the study period for  
 22 our class has been extended by almost a year due to various external interferences, including industrial actions  
 23 by lecturers and doctors. COVID-19 has yet been another interference. Barely three months shy of achieving  
 24 our much-anticipated lifetime goal; the proclamation of our graduation, the classic head-to-head classes were  
 25 halted. A bitter pill to swallow indeed. The adoption of online classes shone a ray of hope in our disconsolate  
 26 hearts. Initially, it was exciting, being a new experience for most of us. Who wouldn't enjoy classes at the comfort  
 27 of their home where the soft chair is more lenient to the gluteus than the school bench? Although the online  
 28 platforms robbed us of the experience of physical interaction with our teachers, interacting with colleagues,  
 29 working with peers and the sense of group solidarity among us, it did save some of us the embarrassment of  
 30 raising face to face questions. It even provided a platform for some of the very shy of us (or those with the  
 31 “purulent stuff” kind of questions) to type them on our keyboards. It gave us a rare chance of doubling up  
 32 attending class while spending time with our families, which we hardly do with the busy schedules at medical  
 33 school. With the extra time at hand, some of our colleagues even had an opportunity to study more and catch  
 34 up on the areas that they had lagged behind, at least initially.

35  
 36 Nevertheless, the experience came with challenges. To put it into perspective, our school is in Nairobi, the  
 37 epicenter of the pandemic in Kenya. Immediately after the closure of school, I (the first author) travelled 200  
 38 miles by road to home in Kakamega. Here, there is no broadband or fiberoptic connection, and I heavily rely on  
 39 mobile network providers for internet access. Even so, the mobile network coverage is not strong enough, and  
 40 the most stable mobile network that I can use to access online classes is the most expensive. On average, I  
 41 spend KES 100 (approximately \$1USD) on internet bundles to attend classes and access learning material for

1 the day, which is of course a costly out-of-pocket expenditure for a student without a stable income. Besides  
2 episodic interruption of electricity is a norm; there was even a time when I lacked electricity for five consecutive  
3 days. Notably, such challenges are comparable to those experienced by medical students in other low- and  
4 middle-income countries (LMIC) such as Nigeria<sup>5</sup> and India.<sup>6</sup> Despite such set-backs, our class did not tire. We  
5 pulled out all the stops to ensure everyone's progression, including conducting a small fundraiser to support  
6 colleagues who would have trouble affording the internet. More so, just like in Italy,<sup>7</sup> lectures were even recorded  
7 for future reference or access to those who could not attend the live sessions.

8  
9 Classes have never replaced the clinical practice in medicine. To quote Sir William Osler, "He who studies  
10 medicine without books sails an uncharted sea, but he who studies medicine without patients does not go to  
11 sea at all."<sup>8</sup> Unlike medical students in such countries as Thailand where Samuthpongton & Pongpirul reported  
12 having had the experience of seeing patients in the midst of the pandemic<sup>9</sup>, we were deprived of the sea from  
13 the beginning. Justifiably, it would be hazardous to have us in the hospitals in the middle of an outbreak of a  
14 novel, highly infectious virus and a widespread shortage of personal protective equipment. Nevertheless, the  
15 essence of medical education is not to graduate, but to graduate when competent to provide patient care. We  
16 can only do so with adequate exposure to the clinical environment. Qarajeh et al. suggest that exposing medical  
17 students to the clinical environment during this period would improve their insight into their practice of medicine  
18 especially in periods of crisis, and they even endorse returning of US students to training after receiving infection  
19 prevention training.<sup>4</sup> Is this an option for us? Is there room for online examinations and graduation as reported  
20 in the Italian medical students' experience?<sup>7</sup> Is it applicable in our setting? What will happen to those who cannot  
21 access the online examination platforms? What about our clinical experience? No one wants to be referred to  
22 as the 'COVID-19-generation of medical graduates who lack basic clinical skills.' The uncertainties are many.  
23 Yet, it is the general wish of the final-year class to complete our education and join other healthcare workers in  
24 the country in providing care.

25  
26 Indeed, the uncertainties have created fear, anxiety, and despair, more so among medical students. Yet, we  
27 should not lose sight of the future. At the moment, perfect the art of watchful waiting and maintaining safety.  
28 The future is guaranteed if we are safe enough to experience it. Setbacks are just setups for comebacks.

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