Pathology Training for Cancer Diagnosis in Africa: Perspectives from Two Virtual Courses

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Purpose
The burden of cancer continues to grow in Africa, yet there are too few trained pathologists to manage the rising number of cancer cases. The shortage of resources in African countries, as well as the travel restrictions resulting from the COVID-19 pandemic, necessitate innovative means of training and supporting pathologists across the continent. In response to requests for training in cancer pathology among African pathologists, two virtual training courses were organized: one conducted in English for participants in Nigeria and another conducted in French for participants across several countries in Francophone Africa. Each course had weekly 90-minute sessions led by experts in the United States, Canada, and France. The Nigeria course spanned nine weeks, and the Francophone Africa course lasted eleven weeks.

Methods
Two research questions were investigated for both courses: 1) did the course participants appreciate the virtual training format? and 2) did the participants improve their knowledge of the topics covered during the course? Participants’ appreciation of the virtual course format was assessed through an anonymous survey that included Likert-scale questions and qualitative feedback. The improvement of knowledge among participants was assessed through a pre-course and post-course technical assessment with multiple-choice questions.

Results
Nigeria course: 85 participants from 26 Nigerian states registered for the course, with 46 (54.1%) completing both the pre-test and post-test. 95.8% of respondents reported being satisfied or very satisfied with the course’s virtual format. 54.3% of participants achieved a better score on the post-test versus the pre-test, with the average score increasing by 3.4%. This change was not statistically significant (paired two-sample t-test; p=0.05).

Francophone Africa course: 425 participants from 18 African countries registered for the course, with 161 (37.9%) completing both the pre-test and the post-test. 96.1% of respondents reported being satisfied or very satisfied with the course’s virtual format. 55.3% of participants achieved a better score on the post-test versus the pre-test, with the average score increasing by 13.1%, a statistically significant change (paired two-sample t-test; p<0.001).

Conclusion
Virtual training is a promising tool to improve cancer diagnosis in Africa, as the experience of the two courses illustrates participants appreciate the virtual format. However, continued training and mentorship are required to reinforce new skills and enable the participants to appropriately apply their new knowledge to their daily practice.