Continuing medical education during COVID-19: virtual training for gynecologic oncology management in Rwanda

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Rwanda, a landlocked country in sub-Saharan Africa with a population of 12.3 million, is investing in cancer control and prioritizing the response to its highestincidence cancers.^{1 2} Over 1500 Rwandan women develop gynecologic cancers each year, with 71% of those women dying from their disease.^{3 4}

The Rwanda Biomedical Centre (RBC)the implementation arm of the Ministry of Health-has prioritized the expansion of quality gynecologic cancer prevention, screening, diagnostic, and treatment services nationwide. As community-based cervical cancer screening programs are scaled, there is a need to build Rwanda's capacity to manage all newly-identified cancer patients. Like many countries in sub-Saharan Africa, there are currently no specialized gynecologic-oncologists or established avnecologic-oncology training programs in Rwanda. Instead, the burden of care falls on general obstetriciangynecologists (OB-GYNs).

Through its African Access Initiative,⁵ BIO Ventures for Global Health (BVGH, a non-profit organization based in Seattle, Washington) partnered with RBC in 2017 to improve cancer patient outcomes in Rwanda. In response to Rwandan OB-GYNs' need for improved in-service oncology management training and continuing education during the COVID-19 pandemic, BVGH, RBC, and Rwandan and international academic partners designed and held an innovative, multi-week gynecologic cancer management training program targeting Rwanda's OB-GYNs.

The training program covered the most prevalent gynecologic malignancies in Rwanda (Figure 1) and consisted of seven, 90 min live video lectures. Responses to a pre-course survey, as well as feedback received throughout the course, were used to refine the weekly content to the Rwandan



Figure 1 Virtual training program weekly webinar topics and implementation team. The topics were identified and prioritized by Rwandan partners. The trainer(s) covered the role of Rwandan OB-GYNs in the screening, diagnosis, treatment, and referral of each cancer type and provided up-to-date information on current gynecology-oncology practices.

OB-GYN's needs. Each webinar featured case-based discussion groups delivered by one or two expert gynecologist-oncologists or oncologists from Botswana, Canada, Rwanda, or the USA. Faculty from the Rwandan Society of OB-GYN and the



Figure 2 Geographic distribution of course participants.

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University of Rwanda OB-GYN department guided course development and recruited 44 OB-GYNs from 18 Rwandan healthcare facilities to attend the course (Figure 2). Participants who completed all course materials received 21 continuing professional development credits from the Rwandan Medical and Dental Council.

Participants' learning was measured via weekly homework assignments consisting of three to six multiple-choice and shortanswer questions and identical pre- and post-course assessments. Following the webinar series, approximately half (51%) of the participants had improved their assessment scores by an average of 3%: however. this change was not statistically significant (Figure 3). The trainees were overwhelmingly satisfied with the course, with 98.3% of survey respondents indicating their plan to apply what they learned from the course to their daily work. Participants noted the minimal one-on-one mentorship and lack of hands-on opportunities as limitations of the course.

The results of this course demonstrate that virtual training-customized to the local setting-is feasible and highly acceptable to healthcare providers, yet does not replace the need for formal training of avnecologist-oncologists. As demonstrated by the statistically-insignificant increase in assessment scores, further training activities that build on the virtual program's key learning points are needed to have a more substantial impact on OB-GYNs' knowledge and their resulting management of gynecologic cancer patients. With these caveats in mind, the virtual training model can be employed to train healthcare providers in other aspects of oncology and beyond.

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Figure 3 Participants' assessment and survey results. The pre-course survey and assessment were administered 2 weeks before the first webinar via Google Forms. Participants completed identical assessments at the beginning and end of the course. The post-course survey and assessment were administered immediately after the final webinar.

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