



## Invited Commentary

**Invited commentary on: Mentoring approaches in a safe surgery program in Tanzania: Lessons learned during Covid-19 and recommendations for the future**


## ARTICLE INFO

## Keywords

Mentoring

The global cancer burden continues to rise with over 27 million cancer cases and 16 million cancer deaths projected worldwide by 2040 [1]. Unfortunately, low and middle income countries (LMIC) are expected to be most affected and will experience 70 % of all global cancer deaths [1]. Even in the best of circumstances, cancer care is incredibly complex and requires transdisciplinary approaches that rely on reliable diagnostics, access to medicines and radiotherapy, and clinical expertise and judgment by well-trained oncology professionals. Already strained health systems in LMICs often struggle to provide the comprehensive care required of oncology patients which can lead to poor outcomes. Numerous challenges may exist along the entire cancer care continuum including inadequate screening and prevention infrastructures, delayed recognition and diagnosis of cancer, complex public perceptions and awareness of cancer, inadequate attention to the various social determinants of health and lack of contextually relevant research. To many, these issues may seem insurmountable, but there are numerous examples of the successful creation and/or improvement of oncology infrastructures in LMICs, some of which have come from sustainable partnerships with various African Institutions and academic institutions from North America and Europe. Many of these partnerships recognize that education is a critical platform to address inequitable cancer outcomes in LMICs. Facilitating educational opportunities is imperative to increasing the number of qualified health care professionals who are well trained in the core competencies of multi-disciplinary care, medical judgment, and leadership in the context of their geographic, social and economic surroundings.

Here Fitzgerald and her colleagues describe an educational partnership in which they share a unique approach to expanding quality of surgical services in Tanzania through in-person and virtual mentorship [2]. These authors highlight a program developed at 40 healthcare facilities in Tanzania called Safe Surgery 2020 which was developed in collaboration with the Tanzanian Ministry of Health, local public, and private health agencies in partnership with faculty and staff from Bugando Medical Centre in Mwanza City, Tanzania. Mentorship was provided by a team from Bugando Medical Center to mentees from the 40 healthcare facilities and was initially conducted as bi-monthly on-site meetings but were replaced with virtual platforms using the Project

ECHO tele-mentoring sessions and WhatsApp groups due to the COVID-19 pandemic.

This program has many strengths which should be highlighted. A focus on building local mentor-mentee relationships amongst surgical team members who understand the relevant social, geographical, and political context likely created a foundational and interlinked network of communication for surgical professionals. One false perception in educational global health partnerships is that learning is unidirectional with the vast knowledge of the higher-resource countries being imparted on those from LMICs. Fitzgerald and colleagues share a local mentoring program in which Tanzanian surgical team members are both the mentors and mentees with some degree of facilitation by North American colleagues. All involved team members, North American and Tanzanian, could then learn from the mentoring program and feedback generated during this period. When one examines the various social determinants of health for any patient, it remains clear that the issues of fiscal toxicity, nutrition, cultural disparities and misinformation, transportation and adequate access to care are global health issues that transcend geographic boundaries [4]. Lessons on how to optimize delivery of health care (including prevention, screening and early detection, treatment, and palliative care) and the pragmatic conduct of clinical trials are critical to decreasing disparities in health outcomes everywhere. For example, the use of Community Health Volunteers to reach out to patients in rural and other under-resourced settings can improve access to care and has been implemented in Kenya as well as in the U.S. [5]

Secondly, this program utilized a continuous learning and adaptation process to tailor the mentoring program to the current educational needs of mentors/mentees and landscape, which in this case which greatly affected by the COVID-19 pandemic and required moving mentoring sessions to the Project ECHO Platform. Project ECHO was originally created by Dr. Sanjeev Arora in New Mexico to create a community of practice for dissemination of treatment for hepatitis C but expanded worldwide with its learning network based on peer-to-peer mentoring [3]. While face to face meetings provide the gold standard of building sustainable relationships, the virtual format has advantages in LMICs where the care and the caregivers are decentralized, often with

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participants scattered across great distances. To be effective, these virtual meetings must be purposeful and each session must be well prepared. Importantly, this program obtained continuous feedback from both mentees and mentors, a key tenet of Project ECHO, to ascertain impact, identify areas for improvement and guide future sessions. Having an open line of communication between mentors and mentees is important and allows for a safe space to conduct peer-peer mentoring and learn from one another.

Lastly, successful global partnerships are based on mutual respect. A foundational pillar of these activities is that both the mentees and the mentors benefit from the collaboration at all phases including scholarly output. Slightly tangential from the scope of this topic is that of authorship of publications. In a review of 186 randomized control trials led by high-income countries (HIC) which enrolled patients from LMIC and upper middle-income countries (UMIC), the median number of total authors was 19 (range 15 to 23), whereas the median number of authors from LMIC/UMIC was only 1 (range 0 to 3). Further, one-third (33 %, 62 of 186) of RCTs had no authors from LMIC/UMIC, and one-quarter (27 %, 51 of 186) had one author from LMIC/UMIC. There was no last author from LMIC and only 4 % of last authors were from UMICs [6]. Scholarly respect needs to go both ways with first and/or senior authorship representation from the LMIC/UMIC partners strongly encouraged.

The authors of this paper should be congratulated on their emphasis of novel training approaches that employ local peer to peer mentoring and cultural humility through continuous evaluation. To increase the capacity of a well-trained workforce and to engage these professionals through life-long learning models of multi-disciplinary care are goals that must be prioritized to address the global health issues at home and abroad.

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#### Ethics and consent

This editorial does not require IRB approval.

#### Declaration of competing interest

None to declare.

#### References

- [1] Sung H, Ferlay J, Siegel RL, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin* 2021;71:209–49.
- [2] Fitzgerald L, Tibyehabwa L, Varallo J, et al. Mentoring approaches in a safe surgery program in Tanzania: Lessons learned during COVID-19 and recommendations for the future. 2023.
- [3] Arora S, Geppert CM, Kalishman S, et al. Academic health center management of chronic diseases through knowledge networks: Project ECHO. *Acad Med* 2007;82(2):154–60. Feb.
- [4] Sors TG, Chauhan-O'Brien R, Scanlon ML, et al. Reciprocal innovation: a new approach to equitable and mutually beneficial global health partnerships. *Glob Public Health* 2022. <https://doi.org/10.1080/17441692.2022.2102202>.
- [5] Li HW, Scanlon ML, Kisilu N, et al. The role of community health workers in the surgical cascade: a scoping review. *Hum Resour Health* 2021;19:122.
- [6] Rubagumya F, Fundytus A, Keith-Brown S, et al. Allocation of authorship and patient enrollment among global clinical trials in oncology. *Cancer*. 2023:1–8.

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