



Contents lists available at ScienceDirect

Gynecologic Oncology

journal homepage: www.elsevier.com/locate/ygyno

Editorial

Gynecologic oncology on the global health agenda: A wake-up call



For the first time in the history of the World Health Organisation (WHO), a comprehensive global strategy to eliminate cervical cancer [1] was adopted by the 73rd World Health Assembly (WHA). The unanimously agreed resolution WHA 73.2 [2] urges all WHO Member States – all countries in the world – to implement nationally the WHO blueprint of the global cervical cancer strategy and to achieve nationally the three related targets. Governments have to deliver and to report back to WHA that by 2030, 90% of girls are fully vaccinated by the age of 15 (target 1), that 70% of women are screened twice by the age 45 (target 2) and that 90% of women diagnosed with cervical disease have access to high quality treatment and symptom management (target 3). Although the strategy applies to all countries in the world, women living in low- and middle-income countries (LMIC) will benefit most. In LMICs 90% of the burden of cervical cancer occurs and there are currently the biggest gaps in access to care.

The resolution WHA 73.2 [2] also calls “all international organisations” “to work cooperatively” to strengthen the supply of cervical cancer prevention and management interventions. Therefore, all professional societies relevant to cervical cancer control are mandated to coordinate their activities. A joint platform is desirable where gynecologic oncologists and representatives of all other dedicated disciplines will work together to implement the WHO strategy globally. The recently published WHO framework for strengthening and scaling-up services for the management of invasive cervical cancer [3] gives the overall directions to achieve in particular target three of the strategy. Gynecologic oncology is included as the core competency for the clinical management of cervical cancer such as “to perform complex pelvic surgery” and to “integrate treatment with palliative care” [3 page 58].

With the portfolio of gynecologic oncology now on the global health agenda, this editorial looks at the challenges for developing adequate gynecologic oncology capacity to achieve the targets of the WHO cervical cancer strategy, gives an overview of the current global health activities of the international gynecologic oncology societies and proposes coordinated actions to strengthen their support to governments and their health care systems to make sure that access to treatment and care for women with cervical disease is improving where there is the greatest need.

Currently, in many LMIC, the lack of specialists represents a major barrier to develop gynecologic oncological capacity together with other disciplines needed for cervical cancer management. Some sub-saharan countries for example do not have any pathology services and in the remainder countries there is an overall ratio of about one pathologist per million population [4]. No detailed data are available for population ratios of gynecologic oncologists. However, there are estimates about the capacity in LMIC for a set of key surgical interventions which include hysterectomy. The Lancet Commission on Global Surgery

concluded that 5 billion out of the 7.8 billion world population currently lacks access to those services [5]. According to WHO, population ratio of surgeons is around 56 per 100,000 in High Income Countries (HIC) compared to 0.7 in LMIC [6]. Major gaps exist in LMICs also for radiotherapy services due to the low availability of radiotherapy facilities, radiotherapists and physicist. About half of the African countries have no radiotherapy facility at all [7]. Migration of surgeons, anesthesiologists and obstetricians from LMICs to HICs contribute to worsen the existing gaps in health workforce.

Low number of specialists together with structural factors of the care systems are barriers that women with invasive cervical cancer receive timely and adequate diagnosis treatment and palliative care. Predominantly advanced disease at time of diagnosis in LMICs require complex surgical and/or radiotherapeutic procedures with potentially curative or palliative intention. High quality treatment decisions and interventions much depend on the availability of interdisciplinary teams, appropriate equipment and facilities as well as opportunities to attend mentoring programmes. Because these components are often lacking, treatment outcomes are mostly poor. In addition, there are substantial gaps in funding and availability of services for palliative care in LMICs.

WHO recommends to overcome these bottlenecks in specialists' services in LMIC by optimizing the existing medical workforce as a first step. The WHO framework gives the example of Zambia where the development of national gynecologic oncology workforce and infrastructure is part of the national cervical cancer program [3].

Several international gynecologic oncology societies are active in teaching and knowledge exchange with some focus on LMICs. The European Society of Gynaecological Oncology (ESGO) is active in developing and continuously up-dating and disseminating interdisciplinary treatment guidelines and quality indicators for surgical procedures in cervical cancer management [13]. ESGO has a global outreach through its over 1500 members with increasing LMIC representation. The Pan-Arabian Research Society of Gynaecological Oncology (PARSGO) [8] is a platform for knowledge exchange by e. g. virtual tumour boards of gynaecological oncologists in the Middle East and North Africa. It works closely with ESGO and the International Gynaecologic Cancer Society (IGCS) in translating the ESGO guidelines into regional and national context [9]. IGCS has developed a global curriculum and mentorship program by using the Project ECHO methodology in many LMICs such as Central America Asia and sub-Saharan Africa [9]. In summary, gynecologic oncology societies are at the forefront in developing regional and global platforms for knowledge exchange and training for cervical cancer and other gynaecological cancers management. These efforts are complemented by institutional HIC – LMIC hospital partnerships such as the program of the German Ministry of Cooperation (BMZ) [10]. As part of this program, the Charité University Hospital of Berlin/

Germany is setting up a gynecologic oncology educational program (iSTARC) with the University Hospital Gabriel Touré of Bamako/Mali and with the Hassan II University Hospital of Casablanca /Morocco.

A successful example for a multi-stakeholder partnership is Mali where the Ministry of Health with support of the “Fondation Orange Mali” has set up an ambitious cervical cancer screening program [14] which is complemented by capacity building activities in cervical cancer management in cooperation with the humanitarian organisation Médecins Sans Frontières France and soon also with the University Hospital Charité Berlin/Germany.

However, all these activities to increase capacity for cervical cancer management on LMICs are often fragmented and might not be sufficient to systematically support national efforts to achieve that 90% of women with cervical cancer get access to treatment and care. The WHA resolution on cervical cancer [2] is a call for a coordinated action of international organisation such as all related professional organisations. Governments which are urged by the resolution to implement the WHO strategy are in need for support across disciplines with gynecologic oncology competence as one key success factor for achieving the targets.

It is now the time to ring the alarm clock because national and international gynecologic oncology societies and those of related specialties such as pathology, surgery, radiotherapy, nursing and palliative care will need to respond in a coordinated way to the expected governmental and civil societies' demands. Much needs to be done. The delivery of high-quality surgical procedures requires specialized skill training and years of experience and mentorship. A substantial increase in numbers of qualified physicians in LMICs is urgently needed by adapting curricula for gynecologists and gynecologic oncologists to the national health care needs. Guidelines and standard clinical pathways for cervical cancer management developed by the gynecologic oncology societies can only be useful for LMICs if adapted to health care systems with limited resources.

Taking lessons learnt from successful global initiatives for capacity building in surgery [11] and in radiotherapy [12] the gynecologic oncology societies would be best advised to create jointly a platform managed by a global taskforce and open to all stakeholders across disciplines. The key functions would be (1) to assess the demand for gynecologic oncologic competence and work force, (2) to globally observe ongoing activities by the gynecologic oncology community and other societies in capacity building for cervical cancer management, (3) to get into a strategic dialogue with national health authorities about what is needed in terms of mentoring programs, technical advice on infrastructure development and maintenance and finally (4) to monitor progress achieved. A coordinated platform of the gynecologic oncology societies would join and coordinate with the existing global initiatives on surgery and radiotherapy and would complement their missing links to women's health with the gynecologic competence. The development of a fruitful partnership with WHO and other UN agencies will be of pivotal importance to be successful. Civil society and private sector partnership are other success factors to be included on the way towards the implementation of the WHA resolutions' 73.2 [2] call for cooperative work of all stakeholders.

The tremendous gaps in LMICs to deliver gynecologic oncological services is a major barrier to achieve target three of the WHO strategy that 90% of women with cervical cancer get access to adequate treatment by 2030. It is time to act and to be aware about the scale of the task and the resources needed. There are many promising examples of pilot projects for capacity building in LMICs organized by professional societies where gynecologic oncologists world-wide can join.

Scaling up gynaecological oncology services in LMIC not only will be beneficial for achieving the target three of the WHO cervical cancer

strategy but also for developing capacity for currently underserved malignant and non-malignant diseases among women. The overarching goal is to improve women's health in a holistic way through equal access to quality care systems.

Contributors

All authors have contributed to this commentary. AU has written the first and revised draft, IT, ET, MG and JS have revised the draft and have provided substantial input.

Declaration of Competing Interest

AU MG TD none declared. JS reports grants, personal fees and non-financial support from Aisei, MSD, Astra and GSK outside the submitted work.

References

- [1] World Health Organisation (WHO), Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem. Geneva, <https://www.who.int/publications/i/item/9789240014107> 2020 (accessed February 22, 2021).
- [2] 73rd World Health Assembly, Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem and Its Associated Goals and Targets for the Period 2020–2030, WHA 73.2 Agenda item 11.4 https://apps.who.int/gb/ebwha/pdf_files/WHA73/A73_R2-en.pdf 2020 (accessed February 22 2021).
- [3] WHO, Framework for Strengthening and Scaling-Up Services for the Management of Invasive Cervical Cancer, WHO, Geneva, 2020 <https://www.who.int/publications/i/item/9789240003231> (accessed February 22 2021).
- [4] K.A. Fleming, M. Naidoo, M. Wilson, et al., An essential pathology package for low- and middle-income countries, *Am. J. Clin. Pathol.* January 147 (2017) 14715–14732.
- [5] G. Meara, A.J.M. Leather, L. Hagand, et al., Global surgery 2030: evidence and solutions for achieving health, welfare, and economic development, *Lancet* 386 (2015) 569–624.
- [6] H. Holmer, A. Lantz, T. Kunjumen, et al., Global distribution of surgeons, anaesthesiologists, and obstetricians, *Lancet* 3 (S2) (2015) S10–S11.
- [7] O. Balogun, D. Rodin, W. Ngwa, Challenges and prospects for providing radiation oncology services in Africa, *Semin. Radiat. Oncol.* 27 (2) (2017) 184–188.
- [8] Pan-Arabian Research Society of Gynecological Oncology (PARSGO), <http://www.parsgo.org/> 2020 (accessed February 22, 2021).
- [9] International Gynecologic Cancer Society (IGCS), Global Curriculum & Mentorship Program, <https://igcs.org/mentorship-and-training/global-curriculum/>, and Project Echo Mentorship program <https://igcs.org/mentorship-and-training/project-echo/> (accessed February 22, 2021).
- [10] Bundesministerium für wirtschaftliche Zusammenarbeit (BMZ), Hospital Partnerships – Partners Strengthen Health, https://health.bmz.de/where_we_work/global_regional/hospital_partnerships/index.html 2020 (accessed February 22, 2021).
- [11] The Global Surgery Foundation, Leaving no one behind, <https://www.global-surgeryfoundation.org/home> (accessed February 22, 2022).
- [12] International Atomic Energy Agency, Programme of Action for Cancer Therapy (PACT), <https://www.iaea.org/services/key-programmes/programme-of-action-for-cancer-therapy-pact> (Accessed February 18, 2021).
- [13] M. Gültekin, P. Morice, N. Concin, ESGO contribution to the WHO initiative on elimination of cervical cancer. *Int. J. Gynecol. Cancer* 30 (2020) 434–435.
- [14] I. Teguede, F. Korika Toukara, B. Diawara, A population-based combination strategy to improve the cervical cancer screening coverage rate in Bamako, Mali. *Acta Obstetrica et Gynecologica Scandinavica* (2021) <https://doi.org/10.1111/AOGS.14119>.

Andreas Ullrich

^aDepartment of Gynecology and Center for Gynecologic Oncologic Surgery, Charité Universitätsmedizin Berlin, Germany

**Corresponding author at: Department of Gynecology and Center for Gynecologic Oncologic Surgery, Charité Universitätsmedizin Augustenburger Platz 1, DE 13353 Berlin, Germany. E-mail address: andreas.ullrich@charite.de*

Murat Gültekin

^bDepartment of Obstetrics and Gynecology, Division of Gynaecological Oncology, Hecettepe University Ankara, Turkey

Ibrahima Teguete

^cCentre Hospitalo-Universitaire Gabriel Touré, Département de Obstétrique
et Gynécologie Bamako, Mali

Jalid Sehouli

^aDepartment of Gynecology and Center for Gynecologic Oncologic Surgery,
Charité Universitätsmedizin Berlin, Germany

Edward L. Trimble

^dNational Cancer Institute National Institutes of Health, US Department of
Health and Human Services, Rockville, MD, USA

Available online 6 March 2021