WHO global strategy to eliminate cervical cancer as a public health problem: An opportunity to make it a disease of the past

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1 | WHY CERVICAL CANCER AND WHY NOW?

Cancer of the uterine cervix is the fourth most common cancer among women globally with half a million cases and more than 300 000 deaths in 2018, the vast majority of which occur in low- and middle-income countries. A successful vaccine is now available to prevent this cancer, which is an additional opportunity to have more impact on the prevention of non-communicable diseases. Cervical cancer can also be effectively prevented through screening and treatment of pre-cancerous lesions. In addition, if cancer is detected in its early stages and promptly treated, cure rates of more than 90% can be achieved. HPV vaccination and cervical cancer screening and treatment were identified as ‘best buys’ and form part of WHO guidance to countries. Despite these proven cost-effective interventions, the global disparities in human resources and infrastructure required to treat cervical cancer are extreme both across and within countries.

WHO member states have taken a historical step to endorse the strategy to eliminate cervical cancer as a public health problem. The landmark resolution endorsed by member states of the WHO calls for acceleration of the proven strategies and interventions through ambitious and bold goals for 2030. We have a decade ahead of us to achieve the SDG agenda, including Universal Health Coverage and to reach (and maintain) the 2030 targets of the WHO Global strategy for the elimination of cervical cancer. This WHO global strategy can spearhead progress in global public health and address a neglected cancer that can be eliminated.

2 | WE KNOW WHAT WORKS

2.1 | Vaccination against human papillomavirus

A vaccine against HPV infection was first licensed in 2006. By 2017, more than 100 million adolescent girls received at least one dose of the vaccine, however 95% of them were in high income countries. The long term impact of HPV vaccination is emerging. A registry-based cohort study from Sweden reported the outcome data of girls and women vaccinated since 2007. In the follow up period up to 2017, the cumulative incidence of cervical cancer was 47 cases per 100 000 persons among women who had been vaccinated and 94 cases per 100 000 persons among those who had not been vaccinated. There are not many interventions with such a dramatic impact. The global strategy aims to have 90% of girls covered with a HPV vaccination by age 15. We need to learn from all successful countries on introduction, financing
mechanisms, communication, and service delivery to ensure that all girls are vaccinated in all countries by the age of 15.

2.2 | Screening and treatment of cervical precancerous lesions

Many European countries that implemented cervical cancer screening in the 1960s had well established population-based programs with demonstrable impacts by 1980. However, this did not occur in most low- and middle-income countries because of poverty, lack of resources and infrastructure. A WHO survey in 2019 revealed that 65% of the 194 countries responding to the survey reported a national screening program and of these, 62% had organized population-based programs. In most of these countries the coverage was between 10% and 50%. There are now simpler interventions and algorithms for screening and treatment that could be rapidly scaled-up in countries around the world by 2030. In particular, screening the target population of women with a high-performance test such as HPV, followed by prompt management of precancerous lesions, could achieve the 70% coverage and 90% treatment targets, respectively.

2.3 | Treatment of invasive cancers and provision of palliative care

Early-stage cervical cancer has cure rates of ≥90% when treated appropriately. In 2019, only 30% of low-income countries reported having the required diagnostic and treatment infrastructure (advanced imaging, pathology, surgery, chemotherapy, radiotherapy) available in the public health system, compared to 90% in high income countries. Of equal importance are the disparities in palliative care, particularly since the vast majority of cases in many low resource settings are advanced stage. Health systems must be enabled to detect cancers in the early stages through investments in workforce and infrastructure development. Clinical care pathways must be identified and women with cervical cancer should receive additional social support and financial protection in order to complete their treatment.

‘Elimination as a public health problem’ means achieving the measurable global targets to prevent and treat cervical cancer: 90–70–90 by 2030 (90% of girls fully vaccinated with HPV vaccine by 15 years of age; 70% of women screened using a high-performance test by age 35, and again by age 45; 90% of women identified with preinvasive and invasive cervical cancer properly managed). Modeling analysis has demonstrated the impact of HPV vaccination and cervical cancer screening and treatment 2030 targets on cervical cancer mortality and morbidity, with 100 000 cervical cancer cases averted and 250 000 cervical cancer-related deaths prevented.

Modeling has shown that acceleration and further expansion of the 2030 coverage targets can get countries to the point where they achieve an elimination threshold of four or fewer cases of cervical cancer per 100 000 women per year by the end of the century, and that it is cost-effective.

3 | HOW DO WE CHANGE THE STATUS QUO? COLLECTIVE ACTION IS THE NEED OF THE HOUR

The role of women and girls is crucial, and they should be represented in the decision-making process to set up national programs and quality services as part of their right to health. All interventions for cervical cancer elimination should be placed within a health systems approach with people at the center of care. HIV and sexual and reproductive health services are natural platforms for synergies with cervical cancer control. Immunization, health of adolescents, cancer control programs, primary health care, access to medicines and technology and other areas can also be strong enablers for implementing the elimination strategy.

There is no lack of programs for cervical cancer. However, to be impactful they must achieve adequate coverage and should be of high quality. Implementation of the key cost-effective interventions, as defined in the three pillars of the strategy, require that programs work within a continuum of care so that women can be reached effectively throughout their lives. Training is a key component to ensure quality programs, and screening for cervical cancer and treatment of precancerous lesions should be a mandatory competency for all medical students, nurses and midwives, especially those who are trained in gynecology. All countries can make progress by implementing available and cost-effective interventions. Each bold step for moving to the next level will bring good returns.

WHO strategy should also catalyze innovation in the field of vaccination (new regimens, new delivery methods, therapeutic vaccines) as well as of screening and treatment (point-of-care screening tests, artificial intelligence-based screening, new treatment modalities). Furthermore, innovation also includes new approaches to scaling-up interventions. Countries need to invest and lead implementation research to address barriers, ensure acceptability, feasibility and equity so that new interventions can be introduced and implemented at scale.

National and international professional associations are a major force in shaping this work in countries and we are pleased to see the lead by the International Federation of Gynecology and Obstetrics (FIGO). This special issue of the International Journal of Gynecology & Obstetrics is a welcome step to take this message to the world.

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