Accelerating the elimination of cervical cancer as a public health problem: Towards achieving 90–70–90 targets by 2030

Cervical cancer is a preventable disease. It is curable if detected early and adequately treated. In 2020, 190,874 new cases of cervical cancer and 116,015 deaths from the disease were estimated in the WHO South-East Asia Region.

The Global Strategy to accelerate the elimination of cervical cancer as a public health problem 2020–2030 has set goals for 2030 with a view to accelerate the progress to the elimination target of an incidence of 4 per 100,000. Depending on the baseline and the acceleration, the elimination date will vary among countries.

The Global Strategy also proposed reaching the interim targets on the three pillars of the elimination strategy by 2030 as follows – Vaccination: 90% of girls fully vaccinated with the HPV vaccine by the age of 15; Screening: 70% of women screened using a high-performance test by the age of 35, and again by the age of 45; and Treatment: 90% of women with pre-cancer treated and 90% of women with invasive cancer managed. Each country should meet these ‘90–70–90’ targets by 2030 to be viably on track to eliminate cervical cancer.

The achievement of the 2030 interim targets will also contribute to achieving Sustainable Development Goal 3, Target 3.4 (reducing by 30% the number of cervical cancer deaths by 2030), and achieving the WHO Regional Flagship Priority Programme of ‘Prevention and control of noncommunicable diseases through multisectoral policies and plans, with a focus on best buys’. Progress on cervical cancer elimination in the Region is on the right track, but the current trends are not enough to achieve the interim targets. Rapid acceleration is needed with proper strategic choices to achieve the 2030 interim targets.

The attached Working Paper was presented to the High-Level Preparatory (HLP) Meeting for its review and recommendations. The HLP reviewed the paper and made the following recommendations for consideration by the Seventy-fifth Session of the Regional Committee:
Actions by Member States

(1) Introduce the HPV vaccine without further delay. If already introduced, attain and sustain high coverage of HPV vaccination.

(2) Adapt screening programmes to the new HPV test and scale up in a phased manner, integrating screening into other programmes such as HIV/AIDS and sexual and reproductive health services and family planning. Explore the possibility of integrating HPV testing into existing laboratory networks.

(3) Strengthen diagnosis and treatment of cervical cancer, including palliative care, to improve access as part of the overall cancer control plan, as well as increase coverage of cancer registration to help in monitoring the programme.

(4) Establish/scale up cancer registries to obtain reliable data for monitoring progress.

Actions by WHO

(1) Support Member States to develop applications for introducing the HPV vaccine and improving its coverage, as required.

(2) Support Member States to facilitate the purchase of HPV-DNA test kits, including through pooled procurement, and provide technical assistance to integrate HPV testing into existing laboratory networks.

(3) Provide financial and technical support on a priority for developing colposcopy and other treatment services for managing precancerous conditions and invasive cancers and for establishing and scaling up cancer registries.

The Working Paper and the High-Level Preparatory (HLP) Meeting recommendations are submitted to the Seventy-fifth Session of the WHO Regional Committee for South-East Asia for its consideration and decision.
Introduction

1. Cervical cancer is a preventable disease. It is curable if detected early and treated adequately. Yet, it remains one of the most common cause of cancer-related deaths globally and continues to be a significant public health problem in the WHO South-East Asia Region. The Global Strategy to accelerate the elimination of cervical cancer as a public health problem was launched on 17 November 2020 following the World Health Assembly resolution WHA73(7) in May that year, which also covered its associated goals and targets for the period 2020–2030.

2. The Global Strategy to accelerate the elimination of cervical cancer as a public health problem and achieve its associated goals and targets for the period 2020–2030 targeted eliminating cervical cancer by reducing to and retaining the incidence of cervical cancer at less than four cases per 100,000 women.

3. The Global Strategy also proposed reaching the interim targets on the three pillars of the elimination strategy by 2030, which are as follows: Vaccination: 90% of girls fully vaccinated with the HPV vaccine by the age of 15; Screening: 70% of women screened using a high-performance test by the age of 35, and again by the age of 45; and Treatment: 90% of women with pre-cancer treated and 90% of women with invasive cancer managed. Each country should meet these “90–70–90” targets by 2030 to be on track to viably eliminate cervical cancer.

4. The achievement of the interim targets for 2030 will also contribute to achieving SDG 3, Target 3.4, by reducing by 30% of the total number of cervical cancer deaths by 2030, and also fulfilling the WHO Regional Flagship Priority Programme of “Prevention and control of noncommunicable diseases through multisectoral policies and plans, with focus on best buys”.

Current situation, response and challenges

5. According to the Global Cancer Statistics 2020 (the latest year for which figures are available), an estimated 604,000 women were diagnosed with cervical cancer worldwide, and about 342,000 women died of the disease that year. It is estimated that 32% of incident cervical cancer cases and 34% of cervical cancer deaths worldwide occurred in the 11 Member States of the WHO South-East Asia Region. In 2020, 190,874 new cases and 116,015 deaths were estimated due to cervical cancer, the Region’s third most common cause of cancer.

6. The SE Asia Region gives high importance to cervical cancer prevention and focuses on the disease in the Regional Director’s Flagship Priority Programme of “Prevention and control of noncommunicable diseases through multisectoral policies and plans, with focus on best buys”.

7. In 2015, resolution SEA/RC68/R5 was passed by the Sixty-eighth session of the WHO Regional Committee held in Dili, Timor-Leste, on cancer prevention and control as the way forward in the context of comprehensive NCD prevention and control. The resolution broadly urges Member States to focus on primary prevention (vaccination), early detection (screening), and treatment and palliative care of cervical cancer.
8. Cervical cancer was also an Agenda item for deliberations at the Seventy-second session of
the Regional Committee in New Delhi. The Committee noted the elimination threshold and
interim targets in the Global Strategy to accelerate the elimination of cervical cancer as a public
health problem and in the achievement of its associated goals and targets for the period 2020–
2030. It observed that it is feasible for the Region to achieve these targets if the availability and
affordability of the HPV vaccine and the consistency of conducting the HPV-DNA tests are
ensured.

9. A series of policy instruments and action plans (including the SEA Regional Strategic
Framework for the comprehensive control of cancer cervix 2015, the Regional Vaccine Action
Plan 2016–2030, the Regional Strategic Framework for accelerating universal access to sexual
and reproductive health in the SEA Region 2020–2024, and the Regional Implementation
Framework for cervical cancer elimination as a public health problem 2021–2030) are providing
the strategic and implementation directions to Member States on this issue. The SE Asia Region
is one of the first regions to develop the Regional Implementation Framework for the elimination
of cervical cancer as a public health problem following the launch of the Global Strategy.

10. The WHO SE Asia Region Technical Advisory Group on Women’s and Children’s Health
(SEAR-TAG) also proposed robust recommendations for cervical cancer elimination in the
Region. These included the areas of HPV vaccination, screening and treatment of precancerous
lesions, management of invasive cancer, palliative care and monitoring and evaluation of
cervical cancer.

**HPV vaccination**

11. Bhutan (in 2010), Sri Lanka (in 2017), Thailand (2017), Maldives (2019) and Myanmar (in
2020) have introduced the HPV vaccine nationwide. The state of Sikkim in India has made the
vaccine part of its routine immunization schedule. In Indonesia, the HPV vaccine has been
introduced in seven provinces (Jakarta, Yogyakarta, Central Java, East Java, North Sulawesi,
South Sulawesi and Bali). Both India and Indonesia are planning the expansion of HPV
introduction to other states and provinces. Nepal (in 2015–2016), the state of Punjab in India
(2016) and Bangladesh (in 2016–2017) have conducted pilot projects. Bangladesh and Timor-
Leste are planning to introduce the HPV vaccine in 2022 or 2023, and Gavi has approved their
applications for the vaccine and operational support. Bhutan has achieved more than 95%
coverage among females reaching the age of 15 years since 2017.

12. Current constraints on vaccine supply, coupled with high prices, preclude many countries
from getting ready access to the vaccines. However, recently a new HPV vaccine with a
relatively lower price tag has been added to the WHO list of prequalified vaccines, thus
potentially increasing accessibility to HPV vaccines. With this new development, more countries
will be encouraged to introduce the HPV vaccine to their immunization schedule. Two other
HPV vaccines have recently received market authorization – a bivalent vaccine in the People’s
Republic of China and a quadrivalent in India. According to the WHO–UNICEF estimates of
national immunization coverage, or WUENIC estimates, apart from Bhutan all countries in the
Region are still making efforts to attain the expected 90% coverage for HPV vaccination.
Screening and treatment of precancerous lesions

13. Population-based cervical cancer screening has been initiated in nine of the Region’s 11 Member States. However, coverage remains low, except in Bhutan, Sri Lanka and Thailand. Screening for cervical cancer has been included in essential service packages or UHC packages in several countries.

14. Based on new evidence, WHO recommends moving into the highly precise HPV-DNA test as a primary screening test, as against PAP smear or visual inspection of the cervix with acetic acid (VIA) that are currently the common screening methods deployed by the Member States. Thailand is the only country that uses HPV-DNA as a primary screening test, Sri Lanka has partially switched to this test and Bhutan and Maldives are planning to shift.

15. In 2017, the South-East Asia Region became the first among WHO regions to publish a training package on a comprehensive approach to cervical cancer screening and management of cervical pre-cancers for health workers. Regional capacity-building workshops were conducted in 2015, 2018 and 2019 to strengthen the national capacity of Member States using the regional training packages on cervical cancer screening and management of cervical pre-cancers.

16. The Region in collaboration with the International Federation for Cervical Pathology and Colposcopy (IFCPC) and the International Agency for Research on Cancer (IARC) organized in 2020 an online training course on colposcopy and the prevention of cervical cancer for 100 participants from the Region as an alternative to face-to-face training during the pandemic.

17. The Regional Office has facilitated several regional meetings and webinars to disseminate WHO recommendations and shared best country examples on all three pillars of cervical cancer elimination.

18. An affordable supply of quality-assured high-performance HPV DNA tests and treatment devices needs to be ensured to achieve high coverage of screening and management of precancers. This is a challenge for several Member States. Colposcopy services are not widely accessible for the early treatment of cervical lesions in most countries in the Region.

Management of invasive cancer and palliative care

19. Even with continuous efforts from Member States, there is still a substantial variation in the availability of diagnostic and imaging services, onco-surgery facilities, radiotherapy infrastructure, radiation oncologists, medical physicists, radiotherapy technologists, and palliative care physicians among the Member States.

20. The WHO Framework for strengthening and scaling up services for the management of invasive cervical cancer provides guidance for countries on establishing and strengthening diagnosis, staging treatment, and providing palliative care and survivor care to achieve high-quality, effective service provision. Palliative care, which goes beyond cervical cancer, is supported in six countries of the Region through capacity-building and support for service delivery.
Health system support for cervical cancer elimination

21. Country capacity surveys on NCD prevention and control collect information on cervical cancer elimination programmes every two years. Various aspects of cancer registry development and data analysis are supported in five countries.

22. The cervical cancer elimination process and the achievement of the 90–70–90 interim targets by 2030 need robust integration of several programmes. The HIV/AIDS and sexual and reproductive health services and family planning services are natural platforms to achieve synergies with cervical cancer prevention programmes. Immunization services, adolescent health services, cancer control programmes, primary health care and access to medicines and technology can also be strong enablers for implementing the elimination strategy. Strong partnerships with UN agencies, development partners and implementing partners are crucial to accelerate the process.

The way forward

23. The recent recommendation by the WHO Strategic Advisory Group of Experts (SAGE) on immunization of a permissive, off-label, one-dose HPV vaccination is a major development that can help countries in the Region to accelerate HPV vaccination.

24. Member States need to accelerate cervical cancer prevention and control programmes and specifically switch over to HPV-DNA tests as the primary screening test and innovative options for purchasing screening tests and treatment devices. They may also explore all opportunities to integrate HPV-DNA testing into other functioning laboratory networks such as for HIV, TB etc.

25. The ongoing COVID-19 pandemic response has pushed back the HPV vaccination and cervical cancer screening programmes that had gained momentum in the previous years. Member States need to refocus on this and devote due attention to addressing service disruptions. Continued strategic and technical support for Member States through country support plans to mitigate the service disruption due to the pandemic and maintain the services for HPV vaccination, screening and management of precancers and invasive cancers. Despite the disruptions caused by the COVID-19 pandemic, WHO continues to respond to requests for support and technical assistance from the Member States that prioritize cervical cancer elimination.

Conclusions

26. There are eight years to go to the 2030 deadline to achieve the 90–70–90 interim targets for cervical cancer elimination. Progress on cervical cancer elimination in the Region is in the right direction, but the current trends are not enough to achieve the interim targets. Rapid acceleration with proper strategic choices is needed to reach the 2030 interim targets.
27. High coverage of HPV vaccination has to be sustained and the remaining countries must introduce them without delay. Screening programmes must adapt to the new HPV testing and scale-up in a phased manner. Diagnosis and treatment of cervical cancer including palliative care also needs to be strengthened as part of the overall cancer control agenda. Cancer registries are essential for obtaining reliable data to monitor progress.

28. Achieving the high coverage of vaccination, screening and improving access to services for screening and management of precancerous lesions and invasive cervical cancers while addressing the demand- and supply-side barriers through the primary care approach will be beneficial.

29. Cervical cancer is a preventable disease and curable if detected early and adequately treated. Therefore, investment in cervical cancer prevention and control will gain a substantial return on investment for the country.