

Analysis of the situation of cervical cancer in the Region of the Americas

Executive Summary









Introduction

Cervical cancer is a preventable disease through vaccination against the human papillomavirus (HPV) and the detection and treatment of precancerous lesions. Despite its preventable nature, it remains a significant cause of cancer death in women, especially in low- and middle-income countries. To prevent and control this disease, in September 2018, the 56th Directing Council of the Pan American Health Organization (PAHO) approved the Plan of Action for the Prevention and Control of Cervical Cancer 2018-2030. The main objective of this Plan is to help Member States develop comprehensive cervical cancer control programs. In 2020, the World Health Organization (WHO) launched a strategy to accelerate the elimination of cervical cancer as a public health problem, with specific targets for vaccination, screening, and treatment. To achieve this goal, the Strategy proposes three objectives for countries by 2030: 90% coverage of HPV vaccination in girls (by age 15); 70% screening coverage (70% of women undergo high-performance tests at ages 35 and 45); 90% treatment of precancerous lesions and management of 90% of invasive cancer cases.

Epidemiological Profile

The age-adjusted incidence rate of cervical cancer for the Americas Region is 11.5 per 100,000 women, a value three times higher than the elimination target (4 cases per 100 000 women), with a significant difference between North America versus Latin America and the Caribbean, with an adjusted rate of 6.4 and 15.1 per 100,000 women, respectively (2022). Latin America and the Caribbean is the second region in the world with the highest incidence and mortality rates after Africa, where HIV co-infection translates into a higher population risk, compounded by deficiencies in access to health services (incidence of 15.1 and 26.4 per 100,000 inhabitants, and mortality of 7.7 and 17.6 per 100,000, respectively). Factors such as high fertility and limited access to health services contribute to the incidence and mortality of the disease.

There is great variation in the estimated incidence between countries in the Region, with rates ranging from 6.3 to 38.7 per 100,000 women in the United States of America and the Plurinational State of Bolivia, respectively. Similarly, mortality rates vary between 2.2 and 18.3 deaths per 100,000 women in the United States of America and the Plurinational State of Bolivia, respectively.

Cervical Cancer Control

In general, for the Americas Region, the most frequent HPV types in invasive cancer are HPV-16 (53.8%), HPV-18 (14.4%), and HPV-45 (5.4%). HPV vaccination is crucial to prevent HPV infection, the main cause of cervical cancer. Thirty-two countries in the Americas (out of 35) have introduced the HPV vaccine into their national immunization programs. Coverage of the first dose of the HPV vaccine varies from 1% in Grenada to 88% of the eligible population in Chile (2023). Twenty-four countries have expanded the target population to boys and girls. As of 2024, 21 countries have introduced single-dose schemes, which would help improve vaccination coverage and/or expand the target population.

Early detection programs have been implemented since the 1960s; however, cytology remains the basis of screening in most countries. Screening coverage varies from 7% in Haiti to 87% in Canada. More than 60% of included countries report screening coverage exceeding the 70% target; however, most are not using high-performance screening tests like the HPV test. Six countries report using the HPV test as the primary screening test, but the degree of implementation and coverage of the general population is variable. Transitioning to HPV tests is recommended by PAHO/WHO and is essential to improve the effectiveness of detecting precancerous lesions.

Following up with women with positive screening results is a major challenge, with variable compliance rates, which is another challenge to ensure the effectiveness of screening programs. The availability of resources for the treatment of cervical cancer is uneven, with greater difficulties in English-speaking Caribbean countries where radiotherapy services are not available in all countries. The available information on screening, follow-up, and treatment of premalignant lesions, as well as confirmed cases and cancer treatment at the population level, is quite limited and of variable quality, so monitoring the 90% treatment target represents another challenge for the region.

Conclusions and Recommendations

Socioeconomic inequality is a key determinant of cervical cancer in the Americas Region. Improving the coverage and effectiveness of HPV vaccination, as well as transitioning to HPV tests for screening, and strengthening treatment capacities for precancerous lesions and cancer are priorities. It is essential to strengthen information and monitoring systems to evaluate and improve prevention, early detection, and management programs for premalignant disease and cancer. The availability of therapeutic resources must be improved, especially in countries with greater access difficulties. The Pan American Health Organization is actively supporting countries in the region to strengthen the effectiveness of their cervical cancer prevention and control programs by creating national plans for the elimination of cervical cancer, based on the needs to improve HPV vaccination coverage, support the implementation of the HPV test, and improve the availability of treatment for premalignant lesions and cancer. Similarly, PAHO is offering technical support to improve information systems to monitor and evaluate actions and progress towards the elimination of cervical cancer as a public health problem.

