



PAN AMERICAN HEALTH ORGANIZATION
WORLD HEALTH ORGANIZATION



142nd SESSION OF THE EXECUTIVE COMMITTEE

Washington, D.C., USA, 23-27 June 2008

Provisional Agenda Item 4.3

CE142/10 (Eng.)

13 June 2008

ORIGINAL: ENGLISH

REGIONAL STRATEGY AND PLAN OF ACTION FOR CERVICAL CANCER PREVENTION AND CONTROL

1. This Regional Strategy and Plan of Action for Cervical Cancer Prevention and Control aims to address the high burden of disease and the limited impact of current screening programs in low resource settings. This paper illustrates the cost-effective approaches available for comprehensive cervical cancer prevention and control, including a complete package of services: health education, screening, diagnosis and treatment; and depending on affordability, sustainability and country preparedness, HPV vaccination. An integrated approach for cervical cancer prevention is required across existing programs on adolescent health, sexual and reproductive health, immunization and cervical cancer control. The priority is to fortify programs and evaluate whether and how new technologies and methods, such as new screening techniques, behavioral, educational and preventive programs and HPV vaccines can be used to improve the effectiveness of current programs.

2. There are an estimated 27,500 deaths in the Americas from cervical cancer, representing an economic loss of approximately US\$ 3.3 billion per year. It is a disease of inequities which disproportionately affects poor women. Cervical cancer mortality rates are seven times greater in Latin America and the Caribbean (LAC) than in North America. As illustrated in Annex 1, Bolivia, Haiti, and Paraguay are among the countries with the highest cervical cancer rates.

3. Previous mandates on this topic include: the World Health Assembly Resolution on *Cancer Prevention and Control* (WHA58.22), which urges Member States to give priority to cervical cancer and emphasizes that the control of cervical cancer will contribute to the attainment of international development goals and targets related to sexual and reproductive health; the PAHO 47th Directing Council Resolution on the *Regional Strategy and Plan of Action on an Integrated Approach to the Prevention and Control of Chronic Diseases, including Diet, Physical Activity, and Health* (CD47.R9)

which provides a framework for cancer control; the World Health Assembly Resolutions on a Global Strategy for Reproductive Health (WHA 57.12) and on the Prevention and Control of Sexually Transmitted Infections (WHA 59.19) which recognize the burden of human papillomaviruses (HPV) and provide frameworks to address HPV, cervical cancer and other gynecological morbidities.

4. Cervical cancer is caused by persistent infection with high risk types of human papillomaviruses (HPV), a sexually transmitted infection. HPV types 16 and 18 are the most common types of HPV found in cervical cancer and together account for about 70% of the cervical cancer cases in the Americas. Co-factors contributing to the development of cervical cancer include: young age at sexual initiation, increasing number of sexual partners, coinfection with sexually transmitted infections (Chlamydia or Herpes simplex virus), low socioeconomic status, immune suppression, tobacco use, high parity, and long term use of oral contraceptives. Women from vulnerable and disadvantaged groups are at higher risk of cervical cancer, including indigenous women, women residing in rural areas, and sex workers.

5. HPV is a common infection and most people acquire the infection at some time in their lives. Peak incidence of HPV infection is usually in the adolescent period, soon after the onset of sexual activity, and the majority of HPV infections clear spontaneously within two years. In the Americas, the estimated prevalence of HPV is 15.6% among women in the general population. Only a small portion of women infected with high risk HPV types develop precancerous cervical lesions that can progress to cancer. The natural history of the disease yields opportunities for prevention throughout the lifecycle. In adolescents, health information and education about healthy sexual behaviours including delayed sexual initiation, reduced number of sexual partners and condom use, as well as cervical cancer prevention is critical. In adult women, screening for precancerous cervical lesions, followed by treatment of the lesions has been the most effective way to halt the progression to invasive cancer.

6. PAHO has been working in partnership with the Alliance for Cervical Cancer Prevention (ACCP) since 1999, and with a global coalition Cervical Cancer Action since 2007 to advocate for and strengthen cervical cancer prevention in low resource settings. Demonstration projects were established using alternative screening approaches in El Salvador, Peru, and Suriname, which provided evidence on the effectiveness of these alternative approaches. Technical assistance was also provided to over 10 countries in the Region to strengthen their existing cytology screening programs, and a sub-regional program was established through CAREC which helped to improve the quality and access to screening programs. With respect to cancer treatment, PAHO has a longstanding history of working in the Americas to improve radiotherapy services and strengthen cancer treatment capacity.

7. In the Americas, cytology screening (Pap test) has been in place for over 30 years, either through opportunistic screening or through organized screening programs. Yet countries in LAC have not experienced the same declines in mortality rates as those observed in North America. Few countries in the Region, such as Chile, Costa Rica, and Mexico have observed reductions in cervical cancer rates, which have been attributed to improvements in the coverage, organization and quality of their screening programs. It has proven to be difficult to mount and sustain high quality screening programs in low resource settings.

8. The failures of screening programs in LAC can be characterized not only by factors related to the screening technology, but also health service access, and community perspectives. Gender considerations are particularly important, as women's socio-cultural, economic, religious, educational status and ethnicity influence their access to information, demand, and utilization of cervical cancer prevention services. Other key factors include:

- low awareness among women and men of the importance of screening;
- limited access to diagnostic services and treatment for pre-cancer;
- inadequate capacity for surgical and radiotherapy treatment for women detected with invasive cancer.

9. *Alternative Screening Technologies:* Several cervical cancer screening technologies have been developed, partly as a response to the challenges of cytology screening. These screening technologies include visual inspection with acetic acid (VIA) and HPV DNA test which have demonstrated test performance equal to or better than the Pap test¹. The immediate results of VIA testing enables a single visit approach linking screening with pre-cancer treatment and this approach has shown to significantly reduce mortality rates. Several countries in the Region, such as Bolivia, Colombia, Costa Rica, Guatemala, Mexico, and Peru are currently using alternative screening approaches. It is, therefore possible that an expansion of different screening approaches can be adopted in countries, depending on health system access, availability of laboratory services, and human and financial resources.

10. *HPV vaccines:* The currently available HPV vaccines include a quadrivalent vaccine containing genotypes 6,11,16 and 18; and a bivalent vaccine containing genotypes 16 and 18. In clinical trials, both vaccines have demonstrated safety, high immunogenicity and over 90% effectiveness in preventing infection and precancerous lesions from HPV types 16 and 18, when given to adolescent females prior to sexual

¹ Technical note: The test sensitivity of HPVDNA test (Hybrid Capture II) is 66%-99%; VIA test sensitivity is 67%-79%; and the Pap test sensitivity is 47%-62%. The specificity of the Pap test is superior to the other screening tests.

debut. Both vaccines have a private sector price of approximately \$360 for the required three dose regimen. The vaccines have been licensed for use in females aged 9-26 years, based on data from efficacy and immunogenicity trials. The vaccines have shown a duration of protection of at least 6 years (this being the longest published follow up period) and maybe much longer. Further follow up studies of at least 14 years are planned to evaluate the duration of protection. Additionally, clinical data is still being gathered on the HPV vaccine efficacy in boys.

11. HPV vaccines are not a substitute for health education and screening. A comprehensive cervical cancer program will need to include all components of: health education, screening, diagnosis, treatment and palliative care, even after HPV vaccines can be introduced based on affordability, sustainability and all necessary preparations for new vaccine introduction (eg. training providers, reinforce cold chain, strengthen laboratories, etc). It is particularly important that programs continue to include information for adolescents about preventing HPV and other sexually transmitted infections and healthy sexual behavior; and screening women, to detect precancerous lesions caused by HPV types not included in the vaccines; and to protect those who have not been vaccinated.

12. In recognition of the availability of HPV vaccines, the PAHO 47th Directing Council Resolution on a *Regional Strategy for Sustaining National Immunization Programs in the Americas* (CD47.R10) urges Member States to expand the legal and fiscal space and identify new revenue sources to sustainably finance the introduction of new vaccines, including HPV vaccines.

13. Twenty eight countries in the Americas have licensed the HPV vaccine and Canada and the USA are currently implementing the vaccine in immunization programs; and Costa Rica, Mexico, and Peru are testing the HPV vaccine in demonstration projects or research trials. The affordability of the HPV vaccines for public health programs remains a challenge, in addition to the preparatory requirements to introduce the vaccine as part of a comprehensive cervical cancer program. The current HPV vaccines are in the process of WHO prequalification for new vaccines, which would enable purchases in developing countries via United Nations agencies. In the meantime, PAHO has developed a framework for country based policy decisions on new vaccine introduction, through its ProVac Initiative.

14. The purpose of this Regional Strategy is to improve country capacity for the sustained implementation of comprehensive cervical cancer prevention and control programs, with the goal of reducing incidence and mortality. The components of this Regional Strategy are as follows: health information and education; screening of asymptomatic women and pre-cancer treatment; invasive cervical cancer treatment and

palliative care; and evidence-based decision making on whether and how to introduce the HPV vaccines.

15. This proposal calls upon the Pan American Sanitary Bureau (PASB) and its Member States to collaborate, and in partnership with other organizations including women's groups, develop and/or strengthen cervical cancer prevention and control programs according to the needs and situation of the country. The strategy calls for integrating cervical cancer into existing primary health care programs, including sexual and reproductive health and adolescent health programs. The following seven point plan of action is proposed, with the immediate priority to strengthen current programs and consider the introduction of new technologies and approaches to improve their effectiveness.

- (a) *Conduct a situation assessment:* in the absence of current strategic information, collect information on sexual health; assess the current investments and coverage, follow up and quality of the screening program; assess the HPV, cervical pre-cancer and cancer burden in the country; and examine the adolescent and community perspectives, beliefs and needs related to cervical cancer prevention and control. This information would help inform decisions on whether and how to modify cervical cancer policies and practices; and also serve as a baseline for monitoring program impact.
- (b) *Intensify information, education and counseling:* increase awareness about cervical cancer and HPV infection prevention and promote healthy sexual behavior among adolescent populations, women and men and health professionals; and engage communities in prevention services, focusing on women from disadvantaged and vulnerable groups including women residing in rural areas, indigenous women, and sex workers. This involves empowering women and informing people of cervical cancer, its causes and prevention methods; promoting screening, increasing awareness of signs and symptoms, reducing fear, embarrassment and stigma. Health education is most effective if provided in community settings, with the support and involvement of families, community leaders, youth groups, women's advocacy and support groups, the non-governmental sector, and media.
- (c) *Fortify screening and pre-cancer treatment programs:* in settings with sufficient resources to sustain quality Pap test screening and guarantee timely and appropriate follow up for women screened positive, strengthen screening programs by: (1) improving the quality of screening tests, and consider introducing HPV DNA testing; (2) increase the screening coverage of women in the at risk age group (>30 years); and (3) increase the proportion of timely and appropriate follow up care for women with abnormal screening test results.

In settings where resources are not sufficient to sustain quality Pap test screening, and where there are high rates of women who do not have access to timely and appropriate follow up care, consider incorporating a single visit screen and treatment approach. This involves screening women, for example with visual inspection with acetic acid (VIA) followed by immediate treatment of precancerous lesions using cryotherapy. This can be easily administered in primary health care services or through outreach campaigns.

- (d) *Establish or strengthen information systems and cancer registries:* establishment of an information and surveillance system is essential for on-going monitoring of cervical cancer program performance, including coverage, screening test results and follow up diagnosis and treatment; as well as to assess pre-vaccine burden of HPV, pre-cancer and cervical cancer and to monitor the impact, safety and effectiveness of HPV vaccines.
- (e) *Improve access and quality of cancer treatment and of palliative care:* surgery and radiation therapy are the recommended treatment modalities for invasive cervical cancer, resulting in cure rates of 85% to 90% in early stages (12-15). Investments are needed to ensure that radiation therapy and surgery are available and accessible, and linked to screening programs so that women detected with cancer can be treated appropriately and cured.

Palliative care services are an integral component of cancer control programs. This involves providing symptom control and pain relief, access to opioids, palliative radiation therapy, spiritual and psychosocial support to patients and families.

- (f) *Generate evidence to facilitate decision making regarding HPV vaccine introduction:* as countries decide whether and how to introduce the vaccine into public health programs, evidence to inform their decisions will need to be gathered and several issues will need to be taken into account. PAHO, through the ProVac Initiative will work with countries to enhance the national capacity to make evidence-based vaccine introduction decisions through a five-year program of scaled up work. Issues to consider in making these policy decisions include the following:
- the burden of HPV related disease and prevalence of specific HPV genotypes in the country, population groups most affected, and the competing health priorities;
 - affordability, sustainability, cost effectiveness and community acceptability;

- target population and age group for vaccination, for example whether to vaccinate females alone or both girls and boys;
 - strategy for equitable vaccine delivery, for example whether to use a school based approach, a family-community approach, etc;
 - the capacity to sustain vaccine delivery, achieve high vaccination coverage and monitor vaccine impact; and
 - access and quality of cervical cancer screening and treatment services.
- (g) *Advocate for equitable access and affordable comprehensive cervical cancer prevention:* widespread access to the HPV vaccine will depend on having an affordable vaccine price and ensuring the necessary preparations for introducing a vaccine as part of a comprehensive cervical cancer program. Advocacy is needed to educate about HPV and cervical cancer as well as to encourage affordable HPV vaccines. Partnerships and collaboration across multi-disciplinary health professional groups are needed to strengthen the primary care services, sexual and reproductive health and immunization programs, in preparation for HPV vaccine introduction and to ensure a comprehensive approach to cervical cancer.

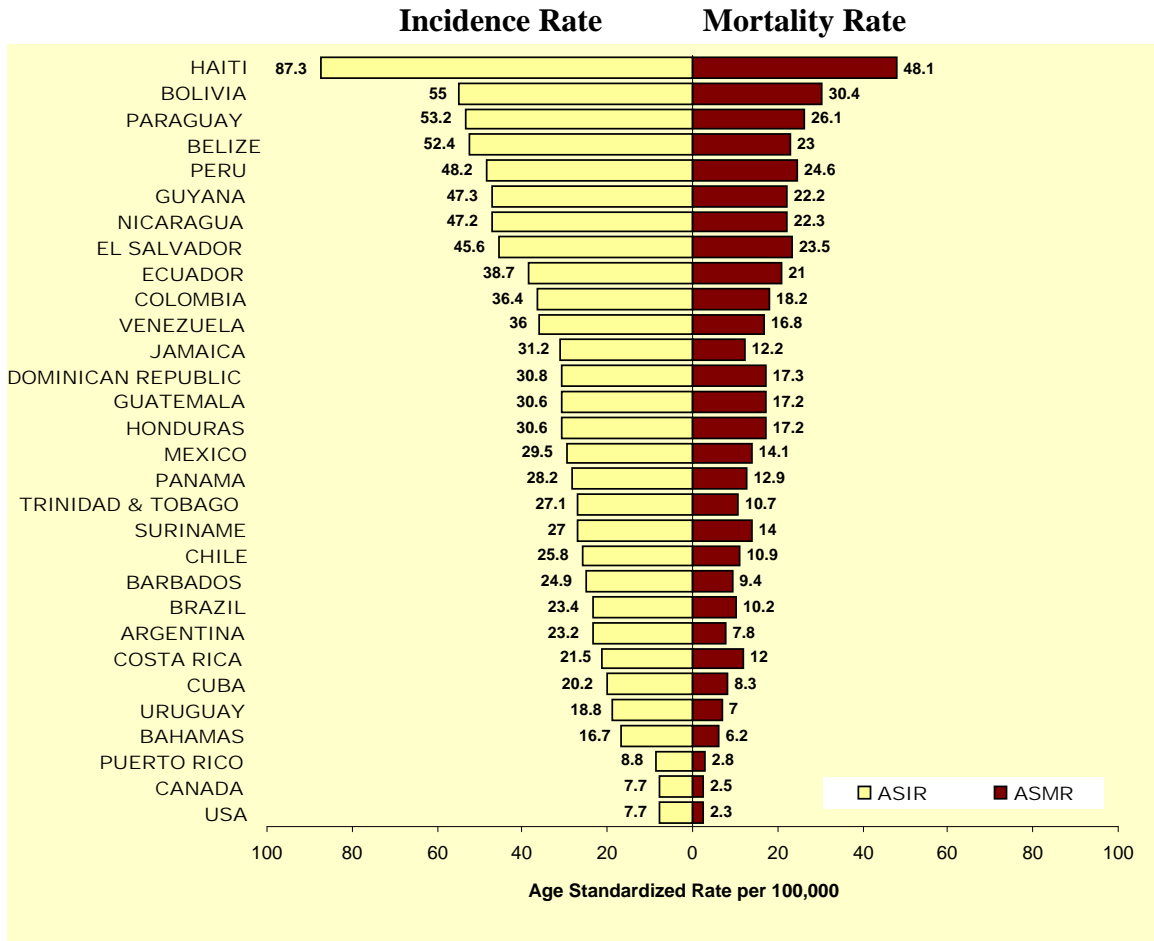
16. To implement this Regional Strategy and Plan of Action, partnerships with community, national, and international organizations will be developed or strengthened, including across the UN system with agencies such as UNFPA and UNAIDS. The initial focus will be on working in those subregions and countries with the highest mortality rates from cervical cancer. Within countries, more intensified efforts will be in those areas/districts with the highest mortality rates and in populations with disadvantaged and vulnerable groups. The Secretariat will mobilize resources and undertake efforts in an inter-programmatic manner to ensure the successful and sustained implementation of this Strategy.

Action by the Executive Committee

17. The Executive Committee is requested to: 1) analyze this document, and consider that comprehensive cervical cancer prevention and control is a priority for public health programs and that it is necessary to expand, strengthen and sustain cervical cancer programs; and 2) discuss and approve the Regional Strategy and Plan of Action for Cervical Cancer Prevention and Control and the accompanying Resolution.

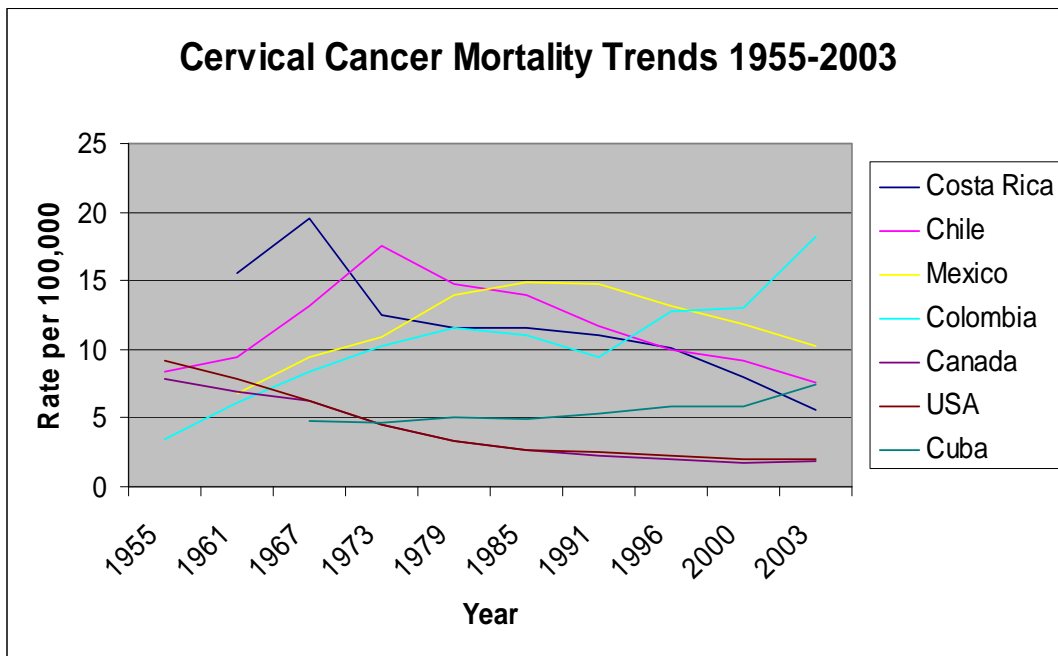
Annexes

**Cervical Cancer Age Standardized Incidence and Mortality Rates:
The Americas**



Source: Ferlay et al, Globocan 2002, International Agency for Research on Cancer.

**Cervical Cancer Mortality Trends Age Standardized Rates:
Selected Countries, 1955-2003**



Source: PAHO Mortality database, 2007.
