

Organization of population-based Cervical Cancer Screening Program ZORA in Slovenia



TYPE
STATUS

Fully Implemented Program

LAST
UPDATE

September 2021

SLOVENIA • NATIONAL
Screening – Cervical Cancer

PROBLEM & OBJECTIVE

PROBLEM Opportunistic screening for cervical cancer was available through personal gynecologist since early 1960 however the incidence and mortality rates in Slovenia still needed to be decreased.

OBJECTIVE Implementation of ZORA program to decrease cervical cancer incidence and mortality in Slovenia, promote Human Papillomavirus (HPV) vaccination so to eliminate cervical cancer as a public health problem in Slovenia.

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KEY COMPONENTS / STEPS

- 1998-2000: Pilot of organized screening in two regions.
- 2003: Roll-out of national organized screening with central screening registry nightly synchronized with Central Population Registry, quality assurance, monitoring and control.
- 2003 (last change in 2019): Legal frame for implementation of national screening programs for the early detection of precancerous changes and cancer).
- Current developmental projects:
 - Renewal of the central information system of the screening programme. Linked to national eHealth, clinical data structured in open Electronic Health Record (EHR) format. A change in the concept of the screening registry: switching from database of copies of all reports, to e-circle among screening providers with real time exchange of original requests, reports and other relevant clinical data.
 - Pilot study for the implementation of liquid-based cytology to allow for reflex testing and leave opportunity for different tests and biomarkers in the future.
 - Standardization of colposcopy on national level and central registration of structured colposcopy reports.
- Renewal of the screening policy, switching toward HPV screening (preparatory phase).

KEY CONTEXTUAL FACTORS

Organization:

- Founded in 2003: Ministry of Health (MoH), Health Insurance Institute of Slovenia (HIIS).
- Central management since 2003: Institute of Oncology Ljubljana (Head of the program, Central coordination unit since 2003 with central Screening registry, Expert Council).
- Screening providers since 2003: gynecological teams (screening and diagnostic, treatment, follow up after treatment), laboratories (cytopathology, histopathology, HPV testing).
- Reimbursement of all costs to screening providers since 2003 by HIS.
- Screening Programs Steering Committee since 2018: MoH, HIIS, Association of Health Institutions of Slovenia, NGOs.

Current screening policy:

- Conventional cytology with 3-year screening interval in the age group of women 20–64 years since 2003.
- Bethesda classification for cytology since 2006.
- HPV triage of low-grade lesions and after HSIL treatment since 2011.
- WHO standards and guidelines for histopathology with Last extension since 2015.

MAIN IMPACTS / ADDED VALUE

Since 2003 there has been a successful switch from opportunistic to organized screening:

- Implementation of organized screening within the existing healthcare system (integration).
- Prolongation of the screening interval from one to three years.
- Systematic central registration and monitoring of screening, diagnostic, treatment and follow-up activities (programmed and opportunistic).
- Systematic education of screening providers, implementation of national guidelines for providers, legal framework for the operation of screening programme and screening registry.

The observed benefits were:

- Higher coverage of women in the target age group by a screening test and less excess smears, lower recall rate due to a pathological screening test result (from 16% in 2003 to 5% in recent years), less unsatisfactory smears (from 7% in 2003 to less than 1% in recent years), higher quality of providers' services, higher detection of precancerous lesions (HSIL/CIN2+) and 50% decrease in cervical cancer incidence.

Results of the screening program:

- Coverage by a screening smear (Source: Screening registry ZORA):
 - 72 % (3-year); below 70 % in women aged 50 years and more and in two out of nine regions;
 - 82 % (5-year).
- Cervical cancer incidence (ASIR, recorded since 1961) and mortality (ASMR, recorded since 1985) rate per 100.000 women, age standardized, world standard (Source: Cancer registry of Republic of Slovenia (incidence) and National Institute of Public Health (mortality)):
 - highest recorded: 27,5 ASIR in 1962, 5,4 ASMR in 1985;
 - the lowest ever recorded in 2017: 4,9 ASIR in 2017, 1,7 ASMR in 2016;
- latest incidence year: 6,6 ASIR in 2018, 1,7 ASMR in 2016.

LESSONS LEARNED

- It is important to have a comprehensive approach, including all levels of screening: identification and invitation of the target population, screening, further diagnostic, treatment, follow-up after treatment.
- Multidisciplinary and multisector approach is also necessary, early collaboration of screening coordinator, decision makers and national experts in the field of public health and cancer epidemiology, gynecology, cytology, histopathology, molecular diagnostic.
- International collaboration, consultations, exchange of best practices.

REFERENCES & DOCUMENTATION

- National programme guidelines and standards (screening, diagnostic, treatment, follow-up, monitoring and quality control, cytology, pathology, molecular diagnostic, gynecology, programme management)
- Legal regulations
- 3-year coverage by a screening test
- Cervical cancer incidence in Slovenia: <http://www.slora.si/en> – <https://zora.onko-i.si/>

- Annual programme reports
- Information for women

All pdfs available on the webpages listed above.
All documents in Slovene language only.

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