
CERVICAL CANCER SCREENING IN SLOVENIA

Maja Primic Žakelj

Epidemiology and Cancer Registry, Institute of Oncology, Ljubljana, Slovenia

Address for correspondence: M. Žakelj, Institute of Oncology Ljubljana, Epidemiology and Cancer Registry, Zaloška 2, 1000 Ljubljana, Slovenia.
E-mail: mzakelj@onko-i.si

Key words: screening, cervical, cancer, organized, opportunistic

In Slovenia, opportunistic screening was introduced in regular gynaecological practice in 1960, but in some regions already in 1955 and 1956. A preventive gynaecological exam (smear included) has been practised since then on a yearly basis and recommended to women by gynaecologic community and paid by the health insurance. According to the data of the Cancer Registry of Slovenia, the crude incidence rate of invasive cervical cancer increased from 22.5/100,000 in 1950 to 34/100,000 in 1962 and then decreased to 14/100,000 in 1979, when the incidence was the lowest. Since then till 1993 there were no major changes (though nothing had changed in gynaecological recommendations) but in 1994 the incidence rate started to increase again. Furthermore, an increase of the invasive cancer incidence in the younger age groups (30–39) has been observed. In the period 1994–1998, the age specific incidence rate in the age groups 30–34 and 35–39 was nearly the same as in the period 1959–1963, at the start of the opportunistic screening. In 1996, a decision was made by the Ministry of Health and Health insurance Company to start a pilot study to gradually introduce organised CC screening. The pilot started in 1998 in the central region of Slovenia. First, a uniform smear report form and skeleton of a computer database were constructed. From the Central Population Register, samples of women from the target population were regularly made and invited to pre-arranged gynaecologic exams. In the period 1998–2001, 28,804 invitations were sent. Personal invitations have resulted in nearly 50% participation rate in the group of women who do not regularly attend the opportunistic screening. All smear reports (in the electronic form) from all cytological laboratories in the region were gathered. A central database of the Screening Registry was thus created and then regularly updated. In the following years

the reporting of smears from all cytological laboratories from the whole country was established, so since 2003 the register is covering the whole country and constant monitoring of the coverage and quality has been established. National guidelines for quality assurance and control of all procedures involved in cervical cancer screening and treatment of intraepithelial lesions and of cervical cancer were determined. The legal basis for the programme was also established: the contents of the database is included in the law on health statistics, the special regulation for cytopathology laboratories was published by the Ministry of Health and laboratories have been reviewed to evaluate whether they comply with these standards. With the ministry's recommendation on preventive examinations in primary reproductive health care where screening policy was introduced, the national programme started in 2003. It has a name ZORA after Slovenian initials for organised cervical cancer screening programme. The central coordination office with the Screening Registry is at the Ljubljana Institute of Oncology. Each woman between ages 20 and 64 is to be invited to perform a preventive gynaecological examination together with PAP smear once in every three years (after two negative smears) – either by her “personal” gynaecologist with whom she has already been registered or from the Screening Centre in case she has not been registered yet. Women aged 65 to 74 years are not invited but are offered screening when they attend gynaecologist for other reasons.

Four years after the start of the programme, 70% of women in the target age group (20–64 years) had at least one smear registered in the Screening Registry. The percentage is about 80% till the age of 45 and smaller among older women. In 2006, 245,416 smears have been registered from 220,820 women; 176,633 women attended for screening (80%), in others smears were taken as follow-up or because of clinical indications. 5.9%

of screening smears were less adequate or inadequate and in 7.2% any cell abnormality has been found. In Cervical Pathology Registry 8,620 histological reports have been registered, more than half of them were from diagnostic biopsies. In 2006, 153 new cervical cancer patients have been registered. The linkage of their data with the Screening registry enables us to review their screening history; nearly three quarter of these patients did not attend for regular screening. According to the data from the Cancer Registry of Slovenia, the incidence rate of cervical cancer

started to decrease, especially in the age group 35 to 49 years. According to the EUROCare-4 study, the age-standardized 5-year relative survival rate in patients with cervical cancer was 65.2% (60.8–69.9) in Slovenia, while EUROCare-4 average was 60.4% (57.7–63.2).

Even though the goal of 70% of women having at least one smear in the last three years has already been achieved in Slovenia and the incidence rate started to decrease, there is still a lot of room for improvement of our programme in all critical points.