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Cervical cancer screening in Austria

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Abstract

Austria's target population of women aged 20 years and over consists of 3 million people. There is mainly opportunistic screening, except in one county with a target population of 120 000, in which organised screening has been practiced for several years. There are approximately 1.5 million smears annually, exclusively taken by gynaecologists. The recommended screening interval is 1 year. The slides are screened by MTs with a maximum workload of 12 000 smears annually in 65 laboratories, mainly headed by pathologists. As shown by Vutuc and colleagues (*Wien Klin Wochenschr* 1999, **111**, 354–359) the opportunistic screening system covers 60% of the Austrian target population leaving an unsatisfactorily high rate of underserved, mainly postmenopausal, women. Nevertheless, the cervical cancer mortality rate could have been decreased to one third during the past 40 years. © 2000 Published by Elsevier Science Ltd.

Keywords: Cervical cancer screening; Austria; Opportunistic screening; Mortality rate

1. Introduction

Austria covers an area of 84 000 km^2 and is a federal republic. It has a population of 7 600 000 of which 3 926 000 (52%) are females. The country is divided into nine counties, each of these having its own regional government. Medical care is co-ordinated by a federal bureau. Each county and even single cities run their own public hospitals. Clerical and private hospitals also operate in the counties. All Austrian citizens have an obligatory health insurance, 80% of which is covered by the social security system. This system operates through independent companies in each of the nine counties.

The country's history with regard to opportunistic cervical cancer screening began in 1950 in two major hospitals and in the early 1960s became nationwide. The screening rate at that time was approximately 250 000 smears annually and a mortality rate of 900 (per 100 000). Today, the screening rate has increased to 1.5 million smears annually, with the mortality decreasing to 350 (per 100 000).

The proportion of population covered by opportunistic screening is 60% for women with two or more smears, 10% for women with one smear in her lifetime and 30% are women who have never had a smear [1]. Women eligible to have a cervical smear are those aged 20 years and over, thus the target population at the national level is 3 000 000 women. No upper age limit has been set. The number of women screened annually is 1.5 million. This number, therefore, constitutes 50% of the target population in the whole country.

A regional pilot project for organised cervical cancer screening with data collection was initiated in 1970 in the county of Vorarberg. This is the smallest of the nine counties of Austria and has a female population of 160 000, of which 120 000 are 20 years of age and over (i.e. the target population). In this project, invitation letters are sent annually from the age of 20 years and over and no upper age limit has been set. In the remaining counties, approximately 60 laboratories perform slide reading in a non-organised screening system. National health insurance provides financial coverage of the screening programme.

2. Population and methods

Invitation to the examination is via letter only in Vorarberg. Participation in the opportunistic screening is following advertisements on TV, in the press or through contact with general practitioners (GPs).

The screening programme at the national level is not population-based and applies to all women aged 20 years and above, without an upper age limit. The proportion

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of the target population covered by the national opportunistic screening is 50%, while in Vorarberg it is 85%.

2.1. Local organisation and screening practices

The cervical smear is accompanied by a gynaecological examination. A 1-year screening interval following a negative result is recommended. Smear sampling is performed using a cyto-cervical-brush, spatula and cotton swab. The number of slides read in the laboratories varies from 3000 to 150 000 with an average of 25 000 per year. The maximal time interval after the initial test recommended by the gynaecologist is 1 year. The screening test result is reported by mail/telephone to the gynaecologist for normal and suspicious results alike. Regarding colposcopy, it is always performed by the gynaecologist and mainly in out-patient clinics. The numbers of annually performed examinations are not available. Biopsy register and histology reports are documented in laboratories and hospitals. The recommended time interval for action following an unsatisfactory smear is 3 months [2].

2.2. Quality assurance: state of the art in quality assurance at the national level

The guidelines for cervical cancer screening in Austria are national and issued by the Austrian Society of Pathology, the Austrian Society of Cytology, as well as the national health insurance. The guidelines of the Austrian Society of Cytology include a quality assurance protocol covering technical aspects, quality control of smear readings/second readings, auditing of misread cases, personnel training/recruitment, communication of results, follow-up of abnormal tests. Unfortunately, there are discrepancies in performance between the guidelines and actual practice. Continuing education and proficiency testing of cytotechnologists are encouraged, but not compulsory.

2.3. Cervical cancer screening personnel

The personnel involved in the cervical cancer screening are medical and paramedical. The smear taker is a qualified gynaecologist or at least a fellow in gynaecology. The smear reader must be a qualified medical technologist, with further training in cytology. The reading is usually conducted at the particular laboratory where the reader is employed. As a result, the level of education varies per individual and differs from laboratory to laboratory. An upper limit of 12 000 annually examined slides has been set.

2.4. Data collection

Incidence/mortality data are transferred by the gynaecologist by mail and collected at the Central Office for Statistical Data Analysis. Screening data are collected on a voluntary basis by the Austrian Society of Cytology which include: number of performed examinations, comparison of results (Papanicolaou classification), percentage of quality controls performed in the participating laboratory, comparison of the adequacy of the specimens, percentage of follow-up smears and correlation of cytology/histology. The reporting of results is according to modified Papanicolaou classification (Munich II classification) with short descriptive diagnosis when there are suspicious or malignant findings followed by treatment recommendations [3].

3. Discussion

In Austria, the opportunistic screening system covers 60% of the target population, but there is an unsatisfactory high rate of women whose needs are not served [1].

4. Conclusion

As a consequence of widespread opportunistic screening in the past 40 years, the mortality rate has decreased by approximately two-thirds. However, the results show that the general approach to motivate women who are underserved to participate in the present screening system currently needs to be improved.

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