

EXPERIENCE EXCHANGE

Education and training of health visitors to undertake cervical screening

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Abstract

In Hungary, a nation-wide “call-and-recall” system of organised cervical screening has been in operation since 2003. Recently, in order to increase participation rates in those areas where there is little access to gynaecological services, smear-taking for cytology and follow-up of screened women has been added to the job description of health visitors (health professionals, equivalent to public health nurses). Establishing education and training facilities to provide them with the necessary knowledge and skill is of utmost importance.

Key Words: Cervical cancer screening, Health visitors, Cervical smear-taking, Counselling

1 Introduction

Hungary's cancer mortality statistics have been dramatically increasing for a long time, and at present, she has the highest rate of mortality due to cancer in Europe. In 2012, there were about 300,000 cancer patients and 33,790 people died of malignant neoplastic diseases (330/100,000 population). As for cervical cancer, the mortality levelled off at a rather high level (10 per 100,000 population), and it ranks in the last quarter of the European countries.^[1] The mortality rate is much higher as compared to those countries where population screening has been taking place; therefore, it seems mandatory to introduce it in the health care system of the country.

The concept of organized screening for cervical cancer (as opposed to opportunistic one) was introduced in 1986 by a Working Group convened by the International Agency for Research of Cancer of World Health Organization (IARC/WHO), and the Union International against Cancer (UICC).^[2] The main components of organised screening are the initiation of screening by the provider health care sys-

tem, individual identification and personal invitation and follow-up of each woman to be screened. The organized, cytology-based cervical screening proved to be effective in terms of detection of pre-cancerous lesions of cervix uteri (CINII/III), and reduction of mortality from cervical cancer.^[3]

In Hungary, opportunistic cervical screening implemented by gynaecologists has been in operation since the mid 1950s.^[4] The screening tool was a complete gynaecological examination including both colposcopy and cervical smear for cytological examination. The cervical smears were analysed in independent cytology laboratories. Cervical screening has become a widespread practice, however, the mortality rates from cervical cancer have remained high.^[5]

In 2003, a cytology-based nation-wide organized cervical screening programme as a public health measure was established by the health authorities, following the recommendations of the Council of the European Union.^[6] The concept of organized screening has been adopted.^[2] The Office of National Chief Medical Officer takes the responsibility for the organization, management, monitoring and evaluation

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of the National Screening Programme.^[7]

There is only one deviation from the internationally agreed protocol: the gynaecologists have remained the “gatekeepers” of the screening process:^[8] they still take the cervical smears for cytology, and the “screening”, in fact, forms part of a complete gynaecological examination. As a result, the screening of the entire population takes place as a specialist examination carried out by gynaecologists. This means there is very limited access to “screening facilities”, particularly in rural areas, scarcely covered by gynaecological services. This is why the compliance rates with the offered screening are unacceptably low, not exceeding 10% of those invited.^[8] We are working on your paper for publication.

In 2008, to increase compliance,^[9] on the proposal made by the Hungarian National Audit Office,^[10] the health government (Ministry of Human Resources) decided to improve access to screening facilities by intensifying the involvement of primary care personnel, particularly the “health visitors” (*i.e.* the public health nurses, who are ubiquitous, and qualified to provide preventive services to the female population in Hungary). They seem to be particularly suitable for taking the cervical smear as they have personal contact with virtually all the invited women. This new task would have remarkable implications for education and training of the health visitors.

2 The role of health visitors

In Hungary, public health nurses are traditionally called “health visitor” (or “védőnő”, in Hungarian, which literally means “health protector”).^[11] Their nation-wide network has been in operation since 1915. They are posted in each locality of the country. At national level, as well as in the 19 counties of Hungary, Chief Health Visitors are appointed to supervise the network.

“Health visitors” are professionals receiving higher undergraduate education, *i.e.* four years following the secondary high school graduation. They are qualified to provide preventive care to the families, the female population, in particular. They are specialized in women’s health, mother, infant and child care, and health protection of adolescents. Health visitors focus on family planning, caring for pregnant women by providing periodic “check-ups” during pregnancy, and preparing them for child-birth and motherhood, including advocacy for breastfeeding. They organize immunization programmes (most recently including HPV vaccination), in local kindergartens and schools, and various screening examinations for infants and children. Part of their task is focused on health promotion and health education, informing and advising people about healthy lifestyle.

Their activities have been organized at the primary care level, working in close cooperation with local primary care physicians, and in very close personal relationship with their

target population. They have easy access to women who have difficulties in seeking gynaecological services in rural areas, and, this offers an ideal setting for the “health visitors” for their intended new role in cervical screening.

3 New role in cervical screening

Screening for early detection of cervical abnormalities is aimed at healthy, symptomless women with no complaints; therefore, it fits very well in the traditional preventive role of “health visitors”. Their job in relation to cervical screening is manifold. They receive a complete list of those women who have been invited to attend screening by the National Screening Registry, and they can personally contact each of them, motivate and encourage them to accept the offered screening. They can pay particular attention to those who have never attended a screening test, and to the less educated ones of lower socioeconomic status who are occupied with the currently pressing problems of today, and are not interested in participating in a future-oriented examination which aims at avoiding a possible disease of tomorrow. They have a golden opportunity to provide necessary pre-screening information to women on what is going to happen at the examination, on both the benefits and potential harms of screening, helping them to gain “informed decision”, which is an ethical imperative. They can arrange mutually suitable appointments. Most importantly, they can take the cervical smear for cytology in an optimal environment, and send the sample to a cytology laboratory for analysis. (Visual examination of genitalia is not explicitly their task, however, in case they find any “abnormality”, they can refer the woman to a gynaecologist).

The cytology examination takes place in cytology laboratories by properly trained pre-screener cytotechnicians supervised by a cytopathologist. After the test result is received back, the “health visitors” can do follow ups on the women. If the result is negative, they can instruct the women to turn up at the regularly scheduled time for a repeated smear (in three years time). In case of non-negative test result (*i.e.* LSIL or CIN1, HSIL or CINII/III), they can explain what the “abnormality” really means, and it is the “health visitor” who can refer the women to gynaecological services for further examination (including colposcopy), and – if necessary – for treatment. They can offer psychological support to those who receive “bad news”.

4 Education and training

The overall aim of education and training is to provide knowledge on all necessary aspects of cervical screening, and the skill required by communication with the women, and in particular taking sample for cytology analysis.^[12,13] To this end, an official petition had been sent to the proper authority to qualify the planned curriculum, and, as a result, the Commission of Vocational and Postgraduate Edu-

cation in the health field had approved it, and, preparation of health visitors to smear-taking and follow up in the frame of cervical cancer screening on a public health scale has been accredited. After that, regular education and training facilities have been established by the National Chief Medical Officer's Office (OTH), to whom the responsibility of implementation has been assigned.

A step-by-step approach has been initiated to the desired end. First, in three consecutive years (2009, 2011, 2013), pilot programmes were organised on limited scales. In order to prepare health visitors for their new task, postgraduate education and training courses (40 hours in all) were offered for approx. 250 health visitors who volunteered to participate. The course consisted of three parts. There were oral presentations and question-answer sessions on theory and practice of cervical screening emphasising the tasks the health visitors are expected to carry out. They learnt modern methods of effective communication and advisory services provided to healthy women to be screened, and the ways of providing unfavourable information for those with non-negative test result. Finally, training to gain skill in smear-taking was held. The training took place in gynaecological offices, under the close supervision of a gynaecologist. After producing 30 good quality smears, the candidate was considered skilful enough to get the licence for fieldwork. The pilot programmes have proved the feasibility of the concept.

The second stage goes one step further. With the generous support from the European Union (TÁMOP 6.1.3/A.), the programme has been extended to larger administrative areas (counties), and this gives a challenge for education and training. The curriculum for the postgraduate education has been developed, and teaching materials (training aids or broadsheets) prepared by experts. The education of some 1400 volunteers would take place in a "train the trainers" system. Trainers and training supervisors should have good teaching and communication skills and should undertake training and maintain awareness of developments in the cervical screening programme. The training to get skill in the practice of smear taking is being implemented as described above. In the end, those who demonstrate their skill meet national standards are authorized to do the job.

At the third stage, according to plans, "cervical cancer screening" would be included into the curriculum of undergraduate education of health visitors, and, all the graduates would be in possession of the necessary knowledge and skill required by the fieldwork of cervical cancer screening and follow up.

5 Curriculum

The course is designed to be used for education and training health visitors to be sample takers working in primary care.^[12] The requirements were three-fold: a theoretical

course, a course in communication, plus a period of practical training.

5.1 Knowledge on theoretical and practical aspects of cervical screening

The recommended content for the theoretical course is the following:

- burden of disease: epidemiology of cervical cancer and its precursors;
- anatomy, physiology and pathophysiology of cervix uteri;
- natural history and pathology of cervical cancer;
- theory of cancer screening, and that of cervical screening; history of cervical screening in the country; the aims of the cervical screening programme;
- age range and recommended screening intervals;
- cytopathology of cervix; Bethesda-classification; the meaning of test results, and significance of cervical abnormalities;
- psychological side-effects of screening, and ways to prevent them;
- role of health visitors in the screening process and follow up;
- referral of those with non-negative test results to gynaecology services.

5.2 Communication with the invited women

- counselling role of health visitors. Providing information before and after screening. Gaining informed consent;
- motivation and stimulation of women, particularly the socially and economically underprivileged ones, to participate in screening;
- how to overcome the barriers of attendance;
- communication of "bad news".

5.3 Training in smear taking

Practical work in the gynaecological office closest to the trainee's place of residence, under supervision of a gynaecologist:

- asking women about their general health, and whether they have any symptoms;
- providing information, gaining informed consent; answering the frequently asked questions; itemitem administrative tasks; complete the request form;
- use of equipment for taking samples (adjustable spotlight, spatula, speculum, sampling device);
- smear-taking from the uterine cervix and the cervical canal; transfer of cellular material onto the glass slide, fixation and label the sample, transport to the laboratory.

6 Quality assurance

One is pronounced skilful if thirty good quality smears are obtained as judged by a competent cytopathologists. After having completed the course, the candidates take an exam, and receive a “certificate of competency” issued by the Health Authorities that authorises them to carry out cervical screening activities in their localities, according to the screening protocol.

7 Discussion

In Hungary, gynaecologists traditionally have a key role to play in the cervical screening process by taking cervical smears themselves, in addition to assessment by colposcopy and a complex gynaecological examination. This procedure might be clinically justified, but does not fit the public health agenda.^[7] Since 2003, all elements of a nation-wide organised, “call-and-recall” system for cervical screening are in place, however, the registered attendance rates in the organised screening program are far beyond expectation, first of all, because of the hard access to the gynaecological services.

In 2008, the National Audit Office scrutinized the screening services, and recommended their reorganisation so as to reduce methodology applied in taking and analysing cervical smears, to bring the implementation closer to the primary care level, and all in all, to draw it nearer to the “state-of-the-art” represented by the recommendations of the international technical organisations.^[2] The health authorities complied with the recommendations, and, have decided to involve the countrywide network of health visitors into the organized population screening.

In Hungary, the health visitors are charged with providing preventive services to the female population. It has been decided that the activities related to the cervical screening should be added to their job description. Education and training facilities had to be established to provide the health visitors with the knowledge and skill necessary to suffice the purpose of cervical screening.

The National Chief Medical Officer’s Office has been put in charge, and, in order to test the concept, organized education and training sessions were provided for those who volunteered to participate in cervical screening. The idea seems to work. Currently, development of teaching material and aids are in progress, and, with support from the European Union, a handful of trainers are trained who – in the near future – would then train the trainers of the groups of district health visitors to carry out cervical screening in the field.

In the future, the knowledge and skills required by cervical cancer screening would be included in the curriculum of regular education and training of the would-be health visitors, and their screening activity extended nation-wide.

What can we expect to get out from the inclusion of health visitors into the organized screening of the population? First, it would improve the access to cervical screening bringing the service to the place of residence of those to be screened, particularly in those areas where gynaecology services are not available. In small settlements (with less than 5000 inhabitants) the health visitors can make use of their social contacts with the target population to accept the offered screening. Personal contact is particularly important in order to reduce the anxiety and depression of women while they are waiting for the test results, or for the results of verification process. They can share the woman’s relief if the test result is negative. In case of any abnormality, where a woman is referred to gynaecology services for further examinations, they can lend psychological support to the patient.

We hope that the involvement of health visitors in the process of cervical screening would increase the acceptance of screening by the female population, and would serve the ultimate aim of the screening programme: the improvement of women’s health. To this desired effect, organizing education and training is of utmost importance.

Conflicts of Interest Disclosure

The author declares that there is no conflict of interest statement.

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