
THE ROLE OF THE NURSE IN THE CERVICAL SCREENING PROCEDURE IN WOMEN OF REPRODUCTIVE AGE

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ABSTRACT

The implementation of systematic cervical screening programs significantly reduces the incidence and mortality of cervical cancer, which is proven by the experience of countries with developed screening systems. This short scientific report highlights the role of a nurse in the process of cervical screening in women of reproductive age as a key link in the system of early detection of cervical cancer. Attention is focused on the importance of nursing intervention not only at the stage of biomaterial collection, but also in the process of informing, counseling, psychological support of patients, keeping records and monitoring repeated screening. Modern approaches to screening are analyzed, in particular, Papanicolaou test, human papillomavirus testing, co-testing, as well as the organizational component of nursing work. It is emphasized that timely detection of precancerous conditions is possible provided that the nurse's work is professionally performed, quality standards are observed and the female population is regularly covered by preventive programs. Thus, nurses perform key functions in the implementation of cervical screening programs, providing organizational support, information and educational work with the population, direct screening procedures and further monitoring of patients. Expanding the powers of nurses and developing their competencies in the field of cervical screening allows solving the problem of staff shortage, increasing the availability of preventive services and ensuring timely detection of precancerous changes in the cervix. Improving the training of nurses and standardizing their activities in the field of cervical screening creates the basis for full use of the potential of paramedical personnel in the prevention of cervical cancer. The implementation of a structured approach to organizing the work of nurses during cervical screening will ensure an increase in the overall effectiveness of screening programs and an expansion of coverage of target population groups.

Keywords: *prevention, cervical cancer, Papanicolaou test, human papillomavirus, women's health.*

Cervical cancer, as one of the most common oncological diseases in women, continues to pose a serious threat to women's health in the world, including in Ukraine, where more than three thousand new cases of this disease are registered annually [1]. Despite the availability of effective methods of prevention and early detection, in particular cervical screening, a significant part of women of reproductive age do not undergo examination due to lack of awareness, fear or unavailability of medical services. Particular attention should be

paid to the fact that cervical cancer has a long latent course and may not manifest clinically for years, which reinforces the importance of regular screening as a tool for detecting precancerous changes and pathologies at the preclinical stage. In this system, the nurse plays a leading role, because it is she who ensures the organization of the process, communicates with patients, carries out technically correct collection of material for cytological or HPV (Human PapillomaVirus) examination, builds trust in the health care system and motivates women to participate in screening programs. Such a multidisciplinary approach to nursing activities ensures not only high-quality performance of medical procedures, but also increases the effectiveness of the overall cervical cancer prevention strategy in the country.

Cervical screening is an effective tool for the prevention of cervical cancer, allowing the detec-

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tion of pathological changes in the epithelium at an early stage, when treatment is most effective. Women of reproductive age are the main group that needs regular screening, especially between the ages of 25 and 49. The essence of screening is to conduct tests, in particular the Papanicolaou (PAP) test, the HPV test, as well as visual methods that allow determining the presence of precancerous or early malignant changes. The nurse plays a key role in organizing this procedure, as she is usually the patient's first point of contact. She performs a number of tasks: explains the essence of screening, provides instructions on preparing for the examination, ensures compliance with infectious safety and ethical standards, which is extremely important for building patient trust in the healthcare system [1].

The procedure begins with preparation: the patient is explained that before taking the smear, it is necessary to abstain from sexual intercourse for 48 hours, not to use vaginal products, not to undergo ultrasound or other gynecological examination, not to douche. The nurse also records the date of the last menstrual period, checks for complaints, pregnancy, or hormonal therapy, as these factors may affect the results. Taking the material is a responsible technical procedure. The nurse must clearly know the anatomical features of the cervix and the transformation zone – it is from it that a sample of the epithelium for cytological examination is taken. Violation of the technique can lead to an uninformative smear, and this is the risk of missing dysplasia or cancer. Therefore, nursing competence is the key to high-quality diagnostics [1; 2]. After taking the material, the nurse applies the sample to a slide or places it in a liquid medium, depending on the type of test. In the future, it is important to correctly label the material and draw up accompanying documentation. Lack of clear labeling or errors in data can lead to lost results or confusion, which will negatively affect further treatment.

Equally important is the nurse's role in explaining the results to patients. For example, a negative result does not always mean the complete absence of pathology, especially if the material was taken incorrectly. And a positive result does not mean cancer, but only the need for further diagnostics – colposcopy or biopsy. The nurse also records the date of the examination in the registration card or electronic database, ensuring the formation of a plan for further repeated testing. According to international recommendations [3], the PAP test is repeated every 3 years, and co-testing –

every 5 years. Monitoring these deadlines is another duty of the nurse.

In institutions implementing a mass screening program, nurses participate in the formation of lists of women to be tested. They send out invitations, make phone calls, make reminders and conduct surveys, and also participate in the creation of mobile medical points to reach the rural population, where access to gynecological care is limited. A separate area of work is interaction with general practitioners and obstetricians-gynecologists. Nurses transmit results, participate in documentation, and may be present at consultations and follow-up examinations. Their function is to coordinate the process and accompany the patient at all stages [1; 3].

Educational and outreach activities are also important. Nurses conduct conversations in groups, schools, colleges, create information booklets, videos, and social networks. This allows them to form a culture of prevention and raise public awareness about the risks of cervical cancer and the need for vaccination and screening. Vaccination against the human papillomavirus is another vector of activity. A nurse performs vaccinations, keeps records of those vaccinated, informs about adverse reactions, and monitors the condition after vaccination. She also answers questions from parents, adolescents, and adult women, and explains the mechanism of action of the vaccine and its effectiveness [4; 5].

Nurses working in screening programs need not only clinical expertise but also strong ethical qualities, such as empathy, tact, and patience. Women are often shy or afraid of a gynecological examination, so it is the friendly attitude of a nurse that can change their attitude towards the examination and motivate them to undergo regular screening. Professional training of nurses in the field of cancer prevention is one of the priority areas for improving the quality of primary health care. Specialized training, advanced training courses, simulation training help to form the appropriate level of competencies to fulfill this mission. Special attention should be paid to the standardization of nurses' actions at all stages of cervical screening. Universal protocols developed by the Ministry of Health of Ukraine and WHO provide for the consistent implementation of clearly defined procedures – from informing the woman to monitoring the results of the analysis [6]. At the same time, there is variability in the level of training of nursing staff and the organization of the procedure itself in different medical institutions.

This requires constant internal quality audits, staff training, and creating conditions for equal access of patients to quality examinations.

For clarity, below is a summarized *Table* that demonstrates the key stages of screening and the nurse's functions at each of them.

Within the framework of integrated medical care, which involves a personalized approach to the patient, a nurse can act as a coordinator of the screening process. She knows when and who to invite for a repeat examination, who to appoint a consultation with a gynecologist or oncologist, and is also able to navigate the regulatory documents regulating the frequency of examinations. The problem of screening coverage of women from socially vulnerable groups – rural residents, women with disabilities, patients who do not have permanent access to medical services – is especially relevant. A nurse can be the link that will ensure communication between the patient and the health care system: through field visits, telephone reminders, participation in joint social initiatives. An additional component of the effective work of a nurse is the introduction of digital technologies into the screening system. Maintaining electronic databases, integration with laboratory platforms, automatic generation of invitations and reminders – all this greatly facilitates the coordination of the process and minimizes the risks of losing a patient in the surveillance system.

It is also necessary to focus on the legal and ethical component of a nurse's activities. Each manipulation should be accompanied by informed consent, confidentiality, and a safe and comfortable environment for the patient. Violation of these principles can lead not only to legal consequences, but also to a loss of trust in the medical system as a whole. In the context of the general reform of the medical system of Ukraine with an emphasis on primary health care, the role of a nurse is being transformed: from a doctor's assistant to an autonomous specialist capable of independently conducting a number of preventive measures, including screening procedures. This requires both regulatory support and a change in the attitude towards the profession on the part of patients and colleagues. The effectiveness of cervical screening largely depends on the professional training, responsibility, initiative, and ethical maturity of nurses. They perform not only technical work, but also form a culture of preventive examination, become leaders in matters of preserving women's health, which is extremely important in modern medical practice [7–9].

Conclusions

The role of a nurse in the cervical screening procedure is key and multifaceted, since it is she who provides the full cycle of support for a woman – from the first information to repeated control after receiving the results. In the context of

Table. Key stages of screening and the functions of a nurse

Screening stage	Nurse's tasks
Information and preparatory stage	Informing the patient, interviewing, signing informed consent, preparing the office
Preparing for the examination	Clarification of the anamnesis, verification of compliance with recommendations before the procedure
Biomaterial collection	Performing a swab from the transformation zone, observing asepsis and sterility
Documentation preparation	Sample labeling, filling out the accompanying form, registration in accounting forms
Organization of laboratory research	Transfer of material to the laboratory, control of deadlines and obtaining results
Providing clarifications on the results	Explaining to the patient the meaning of the result, recommendations for further actions
Organization of re-examination	Formation of a screening schedule, keeping reminder records
Communication with doctors	Transfer of results, participation in multidisciplinary discussions
Educational and outreach activities	Conducting classes, conversations, participating in public awareness campaigns
HPV vaccination	Conducting vaccinations, recording data, monitoring adverse reactions

modern medical practice, a nurse performs not only technical functions related to the collection of material, compliance with sterility protocols and documentation, but also performs the important mission of an educator, psychologist, coordinator and partner of the patient. Her ability to convey the essence of screening, reduce the patient's anxiety, provide recommendations for prevention and a healthy lifestyle, as well as help navigate further actions when pathology is detected – plays a decisive role in reducing the incidence and mortality of cervical cancer. It is important that the successful implementation of screening programs is based on the systematic and responsible work of nurses, who must have appropriate qualifications, access to continuing education, support from the administration of the healthcare facility and regulatory autonomy in certain decisions. Strengthening the role of nurses in preventive medicine, implementing electronic registries, participating in HPV vaccination, creating personalized patient routes, and using modern communication tools – all of this should become an integral part

of a modernized medical system. Only in conditions of interdisciplinary interaction, ethical sensitivity, scientific validity of actions, and high trust in medical personnel can the full functioning of the cervical screening system and a significant improvement in women's reproductive health in Ukraine be ensured.

DECLARATIONS:

Disclosure Statement

The authors have no potential conflicts of interest to disclosure, including specific financial interests, relationships, and/or affiliations relevant to the subject matter or materials included.

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