



## The importance of health education in relation to cytopathology testing

### Importância da educação em saúde relacionado ao exame citopatológico

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#### ABSTRACT

The cervix, also known as the cervix, is the lower and narrower part of the uterus, establishing the connection between the vaginal canal and the internal organs of the female reproductive system, this type of cancer is mostly associated with persistent infection by the Human Papillomavirus (HPV) and is the third most common type of cancer among women. The role of the nursing professional is crucial in the process of detection and diagnosis of cervical neoplasia. Nursing actions include educating the population about the importance of periodic preventive examinations. The objective of this study is to analyze the importance of health education in the context of Pap smears, exploring the relationship between health education and the performance of this test. Methodologically, this is an integrative review of the literature in the following databases: PUBMED, SCIELO and VHL, using the following descriptors: "cytopathological examination", and "pap smear", "health education", and "patient adherence". A total of 120 articles were found, and 11 were selected for analysis, based on the analysis of the inclusion and exclusion criteria. It is concluded that awareness about testing is essential and should be done with humanized care and proximity to women. Health education is a tool that should be used by the entire multidisciplinary team. Its benefits include the dissemination of quality information to more people, increased demand for health services, counseling, thus reducing the incidence of cervical cancer, early diagnosis and effective treatment of these patients.

**Keywords** Cervical-uterine cancer, Pap smear, Health education.

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## INTRODUCTION

The uterine cervix, or cervix, is the lower and narrower part of the uterus, which connects the vaginal canal and the internal organs of the female reproductive system, projecting through the anterior vaginal wall, presenting a cone shape, with the apex usually facing the posterior vaginal wall. In this region, a neoplasm involving several epithelial cellular abnormalities may develop, beginning as intraepithelial lesions and culminating in cancer. (Saints; Silveira, Rezende, 2019).

Cervical cancer depends on the origin of the affected epithelium, and is classified as squamous cell carcinoma, which covers about 80% of cases. This type of cancer is mainly caused by persistent infection with the Human Papillomavirus (HPV), being the third most common type of cancer among women. INCA estimated about 16,370 new cases for 2018 (Costa; Saints; Mariano, 2019).

The role of the nursing professional is fundamental in this process of detection and diagnosis of neoplasia. Nursing actions are the orientation of the population on the importance of periodic preventive examinations. It is a painless, low-cost and effective test, and is performed by collecting cytological material, which should be made available to women aged 25 to 64 years who have already started sexual activity (Silva; Alves, 2019).

Women should frequently undergo cervical cancer screening, which is initially recommended once a year. After two consecutive negative annual tests, the recommended frequency is every three years. In these opportunities, women should be informed about the risk factors, and the advantages of early detection of the disease should also be emphasized. Systematic screening programs for the female population, through cytopathological examination, have been one of the most efficient, safe, and low-cost public strategies for the early detection of cervical cancer (Sousa; Alves, 2019).

Thus, the objective of the present study is to analyze the importance of health education related to Pap smears, in relation to the relationship between health education and Pap smears, in order to understand how health education can influence women's participation and adherence to this type of smear. In this way, identifying the main factors that influence women's participation in the Pap smear, corroborating the importance of the test, personal beliefs and perceptions, access to health services, among others. In order to evaluate the effectiveness of educational strategies used to promote awareness about the importance of Pap smear and increase women's adherence to it.



## METHODOLOGY

This integrative review aims to analyze the importance of health education in the context of Pap smears. The methodology adopted consists of a systematic approach to define concepts, theoretical synthesis or methodological analysis, the steps of the process include: identification of the theme and the justification for the review, search in the literature according to defined inclusion and exclusion criteria, organization of the data collected, analysis, display and comparison of the results, interpretation, presentation and synthesis of knowledge, and the conclusion (Souza; Silva; Carvalho, 2010). The guiding research question of this study is: "What is the importance of health education in promoting adherence to and understanding of Pap smears?".

A systematic search of articles was carried out in the electronic databases Publisher Medline (PUBMED), Latin American Journal of Fundamental Psychopathology (SCIELO) and Virtual Health Library (VHL). The search strategy used the Boolean operator "AND" and a combination of descriptors, the terms related to cytopathological examination in English and Portuguese: "exame cytopathological examination", and "papanicolaou" ("pap smear"), "educação em saúde" (health education), and "adherence do patient" (patient adherence). The search was carried out with a time frame of 10 years.

The inclusion criteria adopted were as follows: original studies, clinical trials, articles available in full in the databases or in printed versions, in English and Portuguese, doctoral or master's theses, descriptive studies, and studies of interventions that addressed the importance of health education related to Pap smears. In addition, studies involving different populations, such as women of different age groups and cultural backgrounds, were included.

The following exclusion criteria were established: duplicate studies, articles from theoretical or bibliographic reviews, articles that do not fit the topic of the review, studies focusing on gynecological cancer screening methods other than Pap smear, and articles in languages other than English and Portuguese. The articles identified through the search strategy were submitted to a two-stage selection process. In the first stage, the titles and abstracts were evaluated to verify their relevance in relation to the research question. In the second stage, the articles selected in the previous stage were read in full to determine their final inclusion in the review.

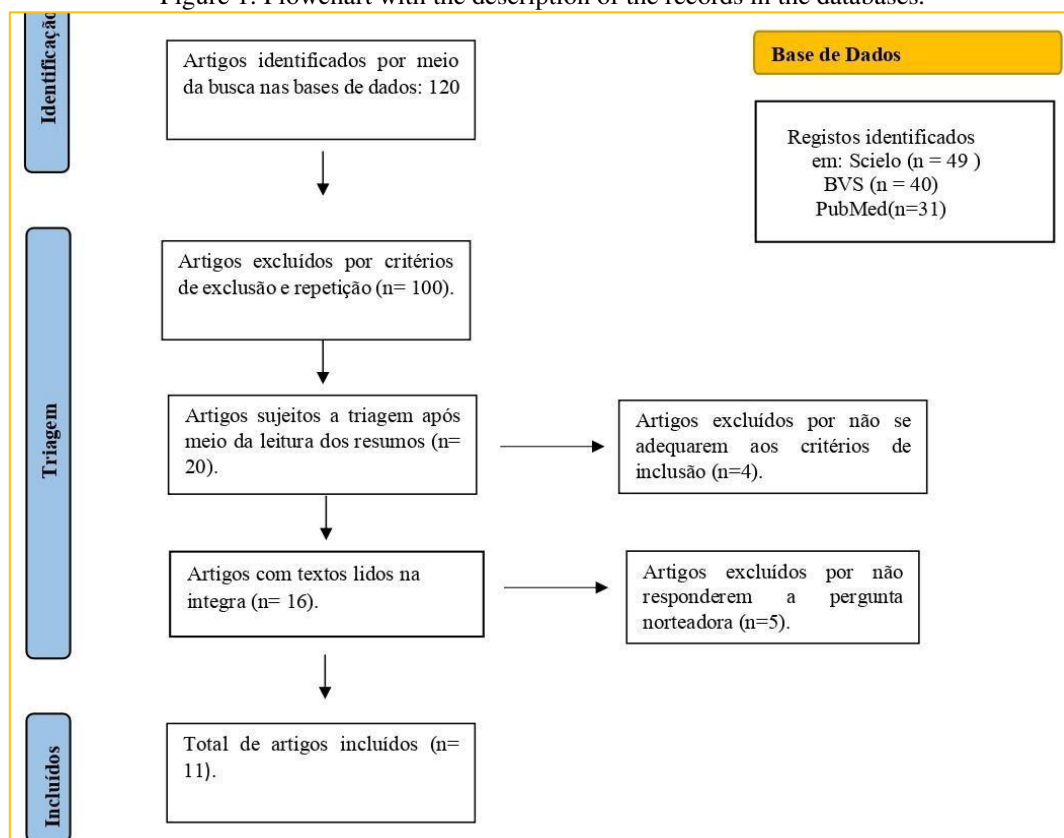
A spreadsheet was developed to extract data from the selected studies. The following data were recorded: author(s), year of publication, study objective, methodology, main results, and conclusions. This step was carried out independently by two reviewers, and any divergences

were resolved by consensus. The included studies were critically analyzed, identifying patterns and trends related to the importance of health education related to Pap smears.

## RESULTS

In this integrative review, an initial screening process was carried out for the articles found in the different databases. Selection based on the theme allowed us to reduce the number of articles from 120 to 100, which contained information related to Pap smear and health education. Subsequently, a more in-depth selection was carried out, focusing specifically on the importance of health education and other points relevant to the study in question. This more detailed step led to the choice of only 11 articles, considered the most pertinent and that would provide the most relevant information for the integrative review. As described in the following flowchart:

Figure 1: Flowchart with the description of the records in the databases.



Source: Prepared by the authors, 2023.

From these 11 selected articles, it was possible to carry out a thorough analysis and synthesis of the information obtained. The discussion involved the identification of the main concepts, approaches, methodologies and results found in the studies. Issues related to the

importance of health education in the promotion of Pap smear were explored, as well as other relevant points, such as the effectiveness of different educational strategies, facilitating factors and barriers to the implementation of health education in this specific context.

By performing the integrative review with this more selective approach, it was possible to obtain a more in-depth and focused view of the importance of health education related to Pap smears and to observe important points on this topic, such as: Most women seek health services to undergo cervical cancer prevention exams, motivated by symptoms, habit of taking care of oneself and concern for one's health; Women face embarrassment, shame and fear in relation to the test, including the positivity of the result, Some impediments to taking the test include low purchasing power, family responsibilities and misinformation; Facilitated and agile access to basic care can encourage women to seek health services; Continuing health education, educational activities for women, and partnerships between health services, universities, schools, and organizations are important to promote cervical cancer prevention care; Ensuring the provision of cervical cancer Pap smears in health centers is crucial to reduce mortality and the social and emotional impacts caused by the loss of women.

This approach has also made it possible to highlight key aspects, consolidate relevant evidence, and identify knowledge gaps that can guide future research.

In summary, the integrative review based on the 11 selected articles provided a comprehensive analysis on the importance of health education in the context of Pap smear, offering valuable insights for health professionals, researchers, and policymakers in the field of cancer prevention and women's health. The main results are shown in the table below:

Table 01 - Description of the studies.

AUTHOR/YEAR OF PUBLICATION	TITLE	OBJECTIVES	METHODOLOGY	CONCLUSION
ACOSTA <i>et al.</i> , (2017).	Experiencing the Pap smear: between (not) wanting and not doing.	OBJECTIVE: To analyze the perception of users of a Family Health Strategy unit about the preventive examination of cervical cancer.	This is a descriptive study with a qualitative approach	It is up to the nurses, who are co-responsible for health, to act on the obstacles that keep women away from the unit, prioritizing the humanistic dimension over the technical one.
Alves <i>et al.</i> , (2016).	Popular education as an instrument The prevention of gynecological cancer: women's perception.	Assess the perception of cervical cancer, through the practice of popular education as a participatory instrument.	Action research with an approach Qualitative. cervical cancer, through the practice of popular education as a participatory instrument.	There's a knowledge However, it is necessary for health professionals to constantly work on popular education as an instrument of dialogical

				participation of the participants. Subject.
Coelho, C. G. S, (2014).	Intervention Project on gynecological preventive examination: Family Health Team of Ibitité/MG.	To know the reasons why women do not adhere to the Pap smear and to develop an intervention project.	Intervention project.	The nursing professional, together with his/her team, must know the right way to approach these patients, offering constant educational activities, and if possible creating a bond between the woman and the patient. professional.
Damaceno, R. B, (2016).	Intervention project for better adherence to the Pap smear in the Family Health Strategy, São José in Ipaba-MG.	With the intervention, it was possible to increase adherence to cervical cytopathological examination and mammography.	Intervention project.	The health team's action strategies with the female public should be health education.
Lastre, W. O, (2016).	Qualification of the Cervical Cancer and Breast Cancer Prevention Program at USF Navegantes, Encantado/RS.	To improve cervical cancer prevention and breast cancer control at USF Navegantes.	Intervention project.	With the intervention, it was possible to increase adherence to cervical cytopathological examination and mammography.
Melo, E. M. F, <i>et al</i> , (2019).	Cervical-uterine cancer: knowledge, attitude and practice about the preventive examination.	To evaluate the knowledge, attitude, and practice of women about cervical cancer screening and to investigate its association with sociodemographic variables.	Cross-sectional study.	The women undergo the test, they consider it necessary, but they do not have adequate knowledge, which demonstrates the need for educational actions by nurses and other health professionals.
Monteiro, N. J., <i>et al</i> , (2019).	Evaluation of the collection service for Pap smear using the SERVQUAL scale.	OBJECTIVE: To analyze the perception of women about the quality of the Pap smear service in Belém (PA).	Quantitative-descriptive study.	All gaps showed a negative relationship between what was expected and what was perceived, expressing dissatisfaction with the service.

Oliveira, M. M. D., <i>et al</i> , (2018).	Pap smear coverage in women aged 25 to 64 years, according to The National Health Surveillance System of Risk and Protective Factors for Chronic Diseases by Telephone Survey.	Estimate and describe exam coverage Papanicolaou, The study was to compare the estimates of the Surveillance System of Risk and Protective Factors for Chronic Diseases by Telephone Survey (Vigitel System) for the same indicator in Brazilian state capitals and the Federal District in 2013.	Based on data from the PNS and Vigitel, the following were estimated: prevalences and respective 95% confidence intervals (95%CI) of women who reported having undergone a Pap smear in the last 3 years.	Pap smear coverage for the target population It is found below the target of 85%. To Comparing the data for the total capitals and the Federal District, it was found that the Vigitel System has been effective in monitoring this indicator, similar to the PNS estimates.
Ramos de Souza, K., <i>et al</i> , (2015).	Popular education as a participatory instrument for the prevention of gynecological cancer: women's perception.	To evaluate women's perception of cervical cancer through the practice of popular education as a participatory instrument.	Action research with a qualitative approach, developed in a Basic Health Unit.	There's a knowledge However, it is necessary for health professionals to work constantly on popular education as an instrument of dialogical participation of the subjects.
SENA, E. N. F., (2014).	Prevention of cervical cancer: an action plan to increase the coverage of Pap smears among women aged 25 to 64 years in the city of Ladainha, Minas Gerais, Brazil.	Increase women's adherence to Pap smears.	Intervention project.	There was a significant increase in the number of tests performed.
Silva, J. C. P. D., (2017).	Health education actions as a strategy to increase adherence to cytopathological examination at the polyclinic of São Bento do Una – PE.	Stimulate the awareness of the population.	Intervention project.	Creation and strengthening among women and health services that stimulate the awareness of the population.

## DISCUSSION

Naturally, the risk factors pointed out by the literature for the occurrence of the development of cervical cancer are early onset of sexual activities, multiple partners and contamination by the HPV virus, especially types 16 and 18, which correspond to 70% of cases of cancer (Damaceno, 2016). A survey carried out in Belém (PA) with correspondence to 10% of



the total number of primary care units in the area reveals that women expressed dissatisfaction with the collection services for oncotic Pap smear examination offered in the public primary care network, since the results that did not meet expectations ended in a negative perception of the experience (Monteiro et al, 2018). A study carried out in a UBS, Bonfim-BA, shows that the accessibility of the health unit in the neighborhood is one of the crucial factors for the user's satisfaction when seeking the appropriate treatment, providing guarantees in this process. The invisibility of nursing actions was evident in the participants' testimonies. It was observed that the difficulties and feelings mentioned by the women during the Pap smear are related to the lack of information provided by the health professionals responsible for the Pap smear. Despite this, most of the women participants recognize the importance of performing the test (Ramos de Souza *et al*, 2014).

In a study carried out in a primary health care unit in the city of Rio Grande, Rio Grande do Sul, it was also found that few women had real knowledge about the purpose of the Pap smear. The lack of information about the Pap smear is in line with national and international research, revealing that 42% of the women surveyed underwent the test without understanding its importance. In addition, confusion between pelvic exams and Pap smears is common (Acosta *et al*, 2017).

According to Melo *et al*. 2018, the high proportion of women with inadequate knowledge about cervical cancer prevention highlights the need for nursing to reassess its preventive approach to health education. Therefore, it is crucial to change the reality of these women, empowering them to become multiplying agents of change not only within the community, but also outside of it.

The PNS elucidates that Pap smear coverage is below 80%, in which it is possible to identify which regional factors can impact the coverage of the test, giving a negative outcome in the achievement of Pap smear coverage goals (Oliveira et al, 2017). Already in a positive aspect. In Recife-PE, a cross-sectional study was carried out with 500 women registered in the Basic Health Units, showing that women underwent the test, recognize its importance, but often lack adequate knowledge, evidencing the need for educational actions by nurses and other health professionals (Melo *et al*, 2018).

A study carried out at the UBS of Encantados/RS reveals that the expansion of the search for women who are outside the coverage area considerably increases the indicators of adherence to treatment, as it increases access to the coverage of the exam and then reaches the largest proportion of individuals, bringing them closer to the prevention of cervical and breast cancer



(Lastre, 2015). Simple and beneficial strategies should be executed with precision, such as extended hours at the health unit, collection efforts, mobile units, mass dissemination, and the proposition of health actions. With this objectification, the number of tests performed increases considerably (Sena, 2014). Primary care should be responsible for expanding the indicators related to women's coverage in the Pap smear, which should be a goal in health professions (Coelho, 2014).

The HPV vaccine represents an important preventive measure against cervical cancer, acting to control one of the main risk factors. This vaccine should be given to children, pubescents, and adolescents. It is crucial to promote the scheduling and regular convocation of women, to carry out continuing education of the team responsible for collecting the test and to prepare educational lectures addressing the theme of women's health and the prevention of cervical cancer. These integrated actions contribute significantly to women's awareness and active participation in the prevention of this disease (Damaceno, 2016).

The prevention and early diagnosis of cervical cancer are essential to ensure that, over time, early diagnosis leads to the use of simpler, more cost-effective and more effective treatments, making it treatable and reducing the number of deaths (Silva, 2017). In this scenario, nurses are co-responsible for health, and are responsible for dealing with the obstacles that keep women away from the health unit, so they should always prioritize a humanistic approach together with the technique so that there is better adherence and education of women in the Pap smear (Acosta *et al*, 2017).

Health education plays an essential role in health promotion and disease prevention, and this is especially true in the case of Pap smears. It is important to note that cervical cancer tends to affect women of low socioeconomic status the most, who may have difficulties accessing screening and prevention services. This correlation highlights that cervical cancer is associated with developmental inequalities between different populations (Sena, 2014).

In summary, health education plays a crucial role in promoting cervical cancer awareness, prevention, and early detection through Pap smear. By providing adequate information, demystifying the test, and promoting healthy behaviors, we can increase women's adherence to the test and thus reduce cervical cancer-related incidence and mortality (Vieira *et al.*, 2022).



## CONCLUSION

Awareness about testing is essential and should be done with humanized care and proximity to the woman. From the studies analyzed, it is clear that establishing a margin can encourage these women to persist in nursing exams and consultations. These actions promote integrated care and bring people closer to medical services.

Health education is a tool that should be used by the entire multidisciplinary team. Its benefits include the dissemination of quality information to more people, increased demand for health services, counseling, thus reducing the incidence of cervical cancer, early diagnosis and effective treatment of these patients.

The focus on women's health can be seen in several changes at the institutional, team, and individual levels. For example, when developed with health professionals, it directed actions to these women, on the importance of regular exams for the early diagnosis of cervical cancer, and training the professionals responsible for the exams so that they can provide a pleasant and humanized care environment. It is hoped that care teams will be able to minimize the discomfort inherent to surgery, leading to increased demand and diagnosis and treatment early.



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