



EVALUATION OF THE EFFECTIVENESS OF THE SCREENING OF HPV LESIONS IN WOMEN

AVALIAÇÃO DA EFICÁCIA DO EXAME DE RASTREAMENTO DE LESÕES HPV EM MULHERES EVALUACIÓN DE LA EFICACIA DEL CRIBADO DE LESIONES HPV EN MUJERES

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ABSTRACT

Objective: to evaluate the efficacy of screening tests for HPV lesions of the cervix. **Method:** this is a descriptive and exploratory study of a quantitative approach, developed in the municipal outpatient in Brejinho/PE, with 50 women. Data collection was carried out in July 2015, with a questionnaire and then analyzed with descriptive statistics. **Results:** participants were married women with a middle educational level, the majority lives with husband; much does not use condoms and know the importance of having a cervical smear test annually. **Conclusion:** the incidence of cervical cancer is relatively low, taking into account the statistical data of research compared to other studies regarding the risk factors for development of cancer and the importance of nursing in the guidelines regarding the Pap smear. **Descriptors:** Human Papilloma Virus; Women; Cervical Cancer.

RESUMO

Objetivo: avaliar a eficácia dos exames de rastreamento das lesões HPV do colo uterino. **Método:** estudo exploratório-descritivo, com abordagem quantitativa, desenvolvido no ambulatório municipal de Brejinho/PE, com 50 mulheres. A coleta de dados foi realizada em julho de 2015, com um questionário, em seguida, analisados pela estatística descritiva. **Resultados:** participaram desse estudo mulheres casadas e com grau de escolaridade mediana, a maioria vive com esposo, grande parte não faz uso de preservativo e conhecem a importância da realização do exame preventivo anualmente. **Conclusão:** a incidência de casos de câncer de colo uterino é relativamente baixa, levando em consideração os dados estatísticos da pesquisa comparados a outros estudos, no que tange fatores de risco para desenvolvimento do câncer e a importância da enfermagem nas orientações a respeito do exame Papanicolau. **Descritores:** Papiloma Vírus Humano; Mulheres; Câncer de Colo de Útero.

RESUMEN

Objetivo: evaluar la eficacia de los testes de detección de las lesiones del VPH del cuello uterino. **Método:** este es un estudio exploratorio y descriptivo con un enfoque cuantitativo, desarrollado en el ambulatorio municipal de Brejinho/PE, con 50 mujeres. La recolección de datos se llevó a cabo en julio de 2015, con un cuestionario, después se analizaron mediante la estadística descriptiva. **Resultados:** los participantes eran mujeres casadas con la calidad de educación media, la mayoría vive con su marido, gran parte no usa condones y conoce la importancia de hacer testes preventivos anualmente. **Conclusión:** la incidencia de casos de cáncer de cuello uterino es relativamente baja, teniendo en cuenta los datos estadísticos de la investigación en comparación con otros estudios acerca de los factores de riesgo de desarrollo de cáncer y la importancia de la enfermería en las directrices relativas a la prueba de Papanicolaou. **Descritores:** Virus del Papiloma Humano; Las Mujeres; Cáncer de Cuello del Útero.

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INTRODUCTION

Cervical cancer is the sixth most common type of cancer in the Brazilian population and the second most common type of cancer among women. It is estimated that in Brazil there are 20 000 new cases of cervical cancer a year, there is a stability in mortality rates with significant reduction in the capital states. There is epidemiological evidence showing that human papillomavirus (HPV) is necessary, but not sufficient for the development of cervical cancer, and there is a low approach in screening and changes in exposure to risk factors for HPV infection.¹

Several factors have been reported in the literature as predisposing factors for the development of cervical lesions. Sociodemographic, behavioral, sexual, contraceptive, and reproductive and / or clinician aspects make women more susceptible to other factors directly involved in cervical carcinogenesis, such as local inflammation and infection by HPV. The latter is pointed out by the literature as necessary conditions for the development of squamous intraepithelial lesions of high-grade and invasive cancer of the cervix, because the viral DNA of HPV is present in more than 90% of precancerous lesions and cervical neoplasia.²

Persistent infection with oncogenic types of high risk is a necessary condition for the development, maintenance and progression of intraepithelial lesions of high level, leading to the placement of invasive carcinoma of the cervix. Other cofactors that influence the predisposition for this cancer are those related to immunity, genetics, sexual and reproductive behavior, socio-economic conditions, smoking and low approach of screening tests. These risk cofactors appear in different intensities and associations in women from different people and regions in the world, determining their level of vulnerability for the development of cervical cancer.³

It is not yet clear how aging affects HPV prevalence in different populations worldwide. Studies show that the highest prevalence rates are found in women below 25 years old, with linear progressive decrease after this age, reaching values of less than 5% after 55 years old.⁴

The reduction in the prevalence with increasing age results from changes in sexual practices which would make women less exposed; however, there is a reduction in the prevalence of HPV infection with advancing age even in women who maintain continuous

and intense sexual activity. This suggests that this decline is independent from sexual behavior and appears to be more related to the development of type-specific immunity to infection.⁴

The HPV's relationship with carcinogenesis fundamentally depends on the viral type (high or low oncogenic risk), viral load, and its persistence and integration with the host cell. Although the prevalence of types of high oncogenic potential, 16 and 18 is similar in most human populations around the world, HPV 31, 33, 45, 52 and 58, whose oncogenic potential is also high, typically found at frequencies variable, depending on the population studied. This geographic and population distribution is directly related to the effectiveness, for example, to primary prevention of cancer of the colon programs because the current prophylactic vaccines have limited coverage to types 16 and 18.⁵

Although there has been confirmed an efficiency of almost 100% with virus-like particle vaccine (VLP) against L1 epitope of HPV 16 and 18, these vaccines offer little or no protection against other HPV types, whether related phylogenetically. It was found only a very good cross-protection for HPV 45 and HPV 31. Only partial higher prevalence of types not covered in a given population, the lower the effectiveness of vaccination in preventing the lesions.⁵

This study is justified by the need to promote health, the availability of data contributing to primary prevention, through the continuing education to the exposed individuals and sensitizing the population about the importance of secondary prevention, for carrying out the diagnosis and treatment of injuries. From this context came the interest in conducting this study in order to evaluate the effectiveness of screening tests for HPV lesions of the cervix.

METHOD

This is an exploratory and descriptive study of a quantitative approach,^{6,7} performed in 6 months, in which there were enrolled 200 women at the municipal outpatient health in Brejinho/PE. The research sample consisted of 50 women who joined the Cervical Cancer Prevention Municipal Health Program. As inclusion criteria, age was considered from 18, being present at the time of the interview and who agreed to participate. As exclusion criteria: women who had no sexual relationship.

The instrument used for data collection was a questionnaire divided into two items:

identification and socio-demographic data and related to the topic of research. Data were collected from July 2015, with estimated time of 15 minutes for each participant response, the ICU. Before starting collecting, users were informed about the study objectives and all their rights to participate or give up the search when they wish. Furthermore, this study complied with the assumptions of

Resolution 466/2012, which regulates research involving human beings, standardized by the National Health Council, thus guarantees the anonymity of study participants.⁸

After collecting, the data were analyzed using descriptive statistics.

RESULTS AND DISCUSSION

Table 1. Sociodemographic data of the interviewed. Brejinho/PE, 2015.

Sociodemographic data	%	N
Monthly income		
1 minimum wage	30%	15
1 - 2 minimum wages	64%	32
2 - 3 minimum wages	6%	3
Marital status		
Married	64%	32
Divorced	16%	8
Stable union	14%	7
Widow/widower	2%	1
Age (years)		
18	24%	12
39	10%	5
59	24%	12
Schooling		
Literate	16%	8
Illiterate	2%	1
Complete elementary school	12%	6
Incomplete elementary school	4%	2
Complete high school	40%	20
Complete higher education	12%	6
Incomplete higher education	2%	1

Regarding monthly income data, 64% (32) of the study participants had an income of one to two minimum wages and 30% (15) of women had an income of a minimum wage and 6% (3) of women had two to three minimum wages. What portrays a local reality of low-income, which usually appears in small municipalities, the neediest that demand more health services to the population.

Regarding marital status, obtained as result 64% (32) of the women were married, 16% (8) divorced, 14% (7) stable union and 6% (3) widows. What we look at is that the women in the study most were married amount. So, they had only one partner and an active sex life.

In terms of age, younger age was 18 years old with 24% (12) women and older 59 years old, also with the percentage of 24%, we also had 10% (5) women 39 years old. These were the most significant figures.

Confirming the pattern of our study, the results of a survey conducted in João Pessoa-PB which analyzed 514 records of women aged 15 to 64, who revealed that there is a significant increase in sexually active women aged 25 -34 and 16-24. Thus, it is understandable that women in full exercise of sexual activity without condom use increases the risk of not only getting the HPV, but as well as other STIs, such as *Gardnerella vaginalis* and *Thicomonas vaginalis*. The same

study showed the reduction of records of women aged over 45 who sought health care for gynecological care, and to justify the stemmed hormonal climacteric changes in post-menopausal phase, which usually happens around 48 to 50 years old, can lead to the decline of sexual activity. Counter position in our collection was found that 24 women aged 59 that performed the Pap smear.⁹

Concerning schooling, from the participating women, we obtained the following results: literate 16% (8), illiterate 2% (1), complete primary education 12% (6), incomplete primary education 4% (2), high school 40% (20), university graduates, 12% (6), incomplete higher education 2% (1) woman.

In Brazil, the high prevalence and mortality from cervical cancer are also associated with low socioeconomic status. Women of this stratum, including those with low education, are the most vulnerable as they face network access barriers to health services and difficulties in detection (screening) and treatment. This health profile is similar to other countries and encompasses more distal social determinants of health, such as economic and geographical difficulties that are associated with the lack of services and cultural issues associated with the disease

itself, such as fear, disregard important symptoms and prejudice.¹⁰

According to Figure 1, the menarche of women of the research, 8% (4) had their first

menstrual period at age 10, 42% (21) to 11 years of age, 36% (18) at 12, 12% (6) after 13 and only 2% (1) to 14 years of age.

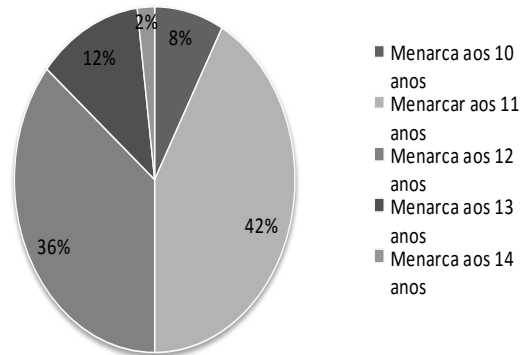


Figure 1. Age of the first menarche of the searched women. Brejinho/PE, 2015.

The average age of menarche this intertwined with race, maternal menarche age, emotional factors, environmental and nutritional states. In early menstrual cycles are irregular and anovulatory. Thus, the cycles become regular and ovulatory within two years after menarche.

Regarding the preventive test, 90% of women (45) held in the range of 1 to 2 years, and 10% (5) women underwent the range from 2 to 4 years.

The coverage recommended by the World Health Organization is 80% to 85% of tracking the risk of women with Pap tests. In Brazil it is indicated for women who have had sex, preferably women 25 to 59 years old, on an annual basis, with three-year when two consecutive annual testing proves negative for dysplasia or neoplasia.¹¹

The screening test can detect the presence of abnormal cells before the first symptoms appear. However, it is recommended for all sexually active women regardless of age. The collection of cytological can be interrupted at 65 if there are normal previous exams. The interval between cytology collections should range from one to three years based on the presence of risk factors such as early onset of sexual activity, low socioeconomic status and multiple partners. Therefore, the examination should be performed annually if some of these factors are present.¹²

Regarding the use of condoms, 64% (32) of women did not use condoms during sex, only 32% (18) women did use.

STI's are a serious public health problem resulting from the lack or ineffectiveness of educational activities. Among the factors that contribute significantly to the exacerbation of this framework include the embarrassment disability approach by health professionals.

The world of women is part of the world of men; however, such cultural issues indicate that in the game of seduction, women need to demonstrate unwilling or inexperienced sex, while the men's role is to take the initiative. So that, the sexual act is desired by men and by women consented. It being understood that this female passivity, certainly promotes serious implications for safe sex aside condom use.¹³

The amounts of sexual partners of women in the study showed that 90% (45) of the women had only one partner and only 10% (5) women had two sexual partners and had no more than two partners. With regard to marital status, perceived in this research that a percentage of women living with their partners whether they are married or in stable relationships. Under this view, studies reveal that, before the sexual behavior, married and stable women are associated with HPV infection.

Single women and without partners, whether exposed to many sexual partners have low compared with infection by comparing to have. However, it has low relationship with the infection, because these single women use condoms, which does not occur with married women in stable unions, due to a consensual sexual life, thus using contraceptives birth control purposes. Since women in consensual union predispose them to infections because it is understood that those who are in stable relationships within a pattern of confidentiality and safety for the partner are lacking adequate ways of prevention.¹⁴

In the study the women were asked in relation to smoking, and it was verified that only 30% (15) women were smokers and 70% (35) were not smoking, something quite

revealing, because smoking is a risk factor for the development of cancer. Certain risk factors are directly related to HPV infection, the number of sexual partners during their life is among the most important, as well as: Habits of partners and their age relative to women considering higher risk with increasing age partner.

The probability of a woman developing invasive cervical cancer or *in situ* during the life is in the order of 0,7% to 2,0%. Although colposcopy be efficient method in reducing mortality from cervical cancer, which does not completely eliminate the cancer. It is noteworthy that the cancer that has features that allow detection of premalignant or early stages. Care actions that women use in relation to the prevention of cervical cancer has made effects periodically and with adequate professional support. It is essential to clarify the importance that these women know how to prevent for this disease because, in proportion to understand about preventive measures, maintenance or improvement of health and rehabilitation, become able to better cope with the disease and its repercussions facilitating more effective management of their lives.¹⁵

With regard to the detection of any type of STD, only 10% (5) study participants said that some STD has been detected and 90% (45) of women said they had no examination accusing STD.

Considering the current knowledge about the role of HPV in carcinogenesis of cervical cancer (cervical cancer develops in about 10 years after contact with the HPV virus) and viral infection occurs through sexual transmission, is of paramount importance all women with cytological report of ASC-H (atypical squamous cells cannot exclude high-grade squamous intraepithelial lesions) should be referred to the secondary unit to colposcopy.¹⁶ Held colposcopy, one should consider whether it is satisfactory or unsatisfactory. For women in that examination is satisfactory and no colposcopic changes, a new cytology must be obtained within six months, on the secondary drive, and should return to the primary unit after two consecutive negative cytology. In the result of cytology, while maintaining the same diagnosis or worse, even in the absence of colposcopic findings, it is recommended to Exeresis Transformation Zone (Ezt). In the presence of colposcopic changes, one must proceed to biopsy. If confirmed the presence of CIN II/III (squamous intraepithelial lesions of high-grade) or cancer, should be followed

specific recommendations for these diagnoses.¹⁷

The importance of nursing in guiding women to perform the Pap test was observed in this study, since 90% (45) of women said they had guidance nurse to perform the screening test, only 10% (5) women said they did not they had orientation of nursing.

Regular Pap smear testing remains the most widely adopted strategy for the screening of cervical cancer. Achieving high coverage of target population is defined as the most important component in the context of primary care in order to obtain significant reduction in the incidence and mortality from cervical cancer. Countries with coverage of more than 50% of cervical cancer screening conducted every three to five years have rates of less than three deaths per 100,000 women per year and, for those with coverage of more than 70%, this rate is equal to or less than two deaths 100 000 women per year. In Brazil, the current lack of a universal record of consistent population base prevents the recruitment of women as done in more developed countries, which use the invitation letters. However, one possibility is the registration of women and control of their attendance to collect specimens for cytological examination by members of the FHS professionals.¹⁷

Given the increasing number of cases of HPV infection, the use of condoms is a method widely discussed by many researchers that address sexual behavior because it is still regarded as the most effective way for primary prevention in a heterosexual or homosexual female couple can adopt not to get STDs.

In a cross-sectional study about sexuality, specifically sexual initiation and use of contraceptive methods, in Maceió/AL, in 2011, showed that women had more favorable attitudes to the adoption of preventive measures in relation to men, but the married or in a stable relationship women may feel unsafe to ask or require the use of condoms in sexual intercourse and this may be due to fear of arousing suspicion in the partner by revealing his desire, eventually allowing the man to continue taking decisions in relation to use or nonuse of condoms. So the woman remains a figure,¹⁸ in which health professionals must contribute to increased adherence to Pap smears, aiding in the prevention of gynecological disorders.

CONCLUSION

The number of sexual partners is a risk factor for development of cervical cancer and only 10% of participants had two partners. Nevertheless, these women were not using condoms during sexual intercourse, since most are married or in a stable relationship; however, the explanation about the importance of condom use is necessary since one cannot know with fidelity to its partners faithful to the relationship.

Concerning the detection of some types of STDs, women seek health services and act on prevention, which influences the low number of women with uterine lesions or cervical cancer, showing that the reality of this municipality is the standard that the Ministry of Health proposes to encourage preventive health campaigns.

Regarding nursing guidelines on Pap smear, women in the Family Health Strategy (FHS), it was observed that a significant number of women are guided by nursing to perform Pap smears. What we perceive the importance of the health professional role in the prevention of women's health.

This study showed that the incidence of cervical cancer is relatively low, taking into account the statistical data of research compared to other studies regarding the risk factors for development of cancer and the importance of nursing in the guidelines regarding Pap smear.

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