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ORIGINAL ARTICLE

CERVICAL CYTOPATHOLOGY AND EPIDEMIOLOGIC PROFILE OF WOMEN WITH SEXUAL ACTIVE LIFE

CITOPATOLOGIA CERVICAL E PERFIL EPIDEMIOLÓGICO DE MULHERES COM VIDA SEXUAL ATIVA

CITOPATOLOGIA CERVICAL Y PERFIL EPIDEMIOLÓGICO DE MUJERES CON VIDA SEXUAL ACTIVA

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ABSTRACT

Objective: to characterize the cervical cytopathological changes and the epidemiological profile of women with sexual active life. ***Method***: quantitative, descriptive, analytical study, cross-sectional and retrospective documentary base, held in the city of Campo Grande/MS. The test results were analyzed for the period from January 2010 to 2011. Data were collected with the instrument. The research project was approved by the Research Ethics Committee, protocol number 063/11. ***Results***: the sample was obtained from 527 tests. The cytological changes were found in younger patients with less education. The most frequent disease was inflammation (22.5%), and the most common agents were Cocci, Bacilli and Lactobacilli. ***Conclusion***: health professionals should be prepared to meet the women in their specificities and stimulate the realization of the pap smear. ***Descriptors***: Vaginal Swab; Gynecology; Cervical Neoplasms.

RESUMO

Objetivo: caracterizar as alterações citopatológicas cervicais e o perfil epidemiológico de mulheres com vida sexual ativa. ***Método:*** estudo quantitativo, descritivo, analítico, de corte transversal e base documental retrospectiva, realizado no município de Campo Grande/MS. Foram analisados os resultados dos exames citopatológicos referentes ao período de janeiro de 2010 a 2011. Os dados foram coletados com instrumento próprio. O projeto de pesquisa teve a aprovação pelo Comitê de Ética em Pesquisa, protocolo nº 063/11. ***Resultados:*** obteve-se a amostra de 527 exames. As alterações citopatológicas foram encontradas nas pacientes mais jovens, com menor nível de escolaridade. A afecção mais encontrada foi a Inflamação (22,5%) e os agentes mais comuns foram Cocos, Bacilos e Lactobacilos. ***Conclusão:*** os profissionais de saúde devem ser preparados para atender o público feminino em suas especificidades, bem como estimular a realização do exame Papanicolaou. ***Descritores:*** Esfregaço Vaginal; Ginecologia; Neoplasias do Colo do Útero.

RESUMEN

Objetivo: caracterizar las alteraciones citopatológicas cervicales y el perfil epidemiológico de mujeres con vida sexual activa. ***Método:*** estudio cuantitativo, descriptivo, analítico, de cohorte transversal y base documental retrospectiva, realizado en la ciudad de Campo Grande/MS. Fueron analizados los resultados de los exámenes citopatológicos referentes al período de enero de 2010 a 2011. Los datos fueron recogidos con instrumento propio. El proyecto de investigación fue aprobado por el Comité de Ética en Investigación, protocolo nº 063/11. ***Resultados:*** se obtuvo la muestra de 527 exámenes. Las alteraciones citopatológicas fueron encontradas en las pacientes más jóvenes, con menor nivel de escolaridad. La afección más encontrada fue la Inflamación (22,5%), y los agentes más comunes fueron Cocos, Bacilos y Lactobacilos. ***Conclusión:*** los profesionales de salud deben ser preparados para atender al público femenino en sus especificidades, bien como estimular la realización del examen Papanicolaou. ***Descriptores:*** Swab Vaginal; Ginecología; Neoplasias del Cuello Uterino.

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INTRODUCTION

The Pap Smear test (Papanicolaou) is defined as preventive examinations for cervical cancer. It is the analysis of cells coming from the ectocervix and endocervical, extracted by scraping the cervix.[1]

The location of the uterine cervix is easy to see, enabling to practice the exam, with this method and knowledge of epidemiological, etiological and progression of cervical cancer, women´s screening can detect this cancer, in a premalignant or initial phase. However, it was found that many women going through the examination have feelings of fear, anxiety, embarrassment, and many other concerns.[1]

Even the easy prevention and detection of such tumor by using the Pap smear, its incidence in developing countries is about twice as high compared to developed countries.[2]

The Pap Smear test, already used for more than 40 years, is the most efficient procedure when applied as a screening method for cervical cancer. Thus, women should be guided and encouraged to carry out this examination in order to detect not only some infections, but also preventing this cancer which according to the Ministry of Health, if it is identified at an early stage, that is its asymptomatic phase, has great probability of cure due to the identification of premalignant lesions.[1,3]

It is recommended that the Pap smear test is performed every three years, after two consecutive normal tests, every one year to women from 25 to 60 years old.[4] This test, together with diagnostic confirmation and early treatment according to each case, would reduce by 80% mortality from uterine cervical cancer, emerging in 90% of cases associated with the infection of the 15 oncogenic types of Human Papillomavirus (HPV), causing skin and also mucosa damage.[3] In most cases, this virus has limited growth and it is usually resolve spontaneously. However, there were 137,000 new cases registered in this country, recognized as one of the Sexually Transmitted Diseases (STDs) very common in the world.[4]

Besides smoking, low vitamin intake, multiplicity of sexual partners, early sexual initiation and the use of oral contraceptives are some of the risk factors for acquiring cervical cancer.[5] At some point of their lives, up to 80% of women may become infected by HPV, but most of these infections are transient and will be fought by their immune system. Infection with this virus is transmitted through unprotected sex and is not yet fully prevented by using condoms, responsible only to decrease the chances of such transmission. It can also cause warts on major and minor lips, in the vaginal opening, vagina, cervix, anal and perianal regions and the penis, and in the clinical diagnosis are not considered injuries of cervical cancer since the subclinical diagnosis of cancer is only checked through the Pap smear test.[6]

Estimates for 2010, in the state of Mato Grosso do Sul, cervical cancer would occupy the second position in relation to other types of cancers. In the same year, a total of 2,360 new cases of cancer of all types in women, except non-melanoma skin, 310 new cases of cervical cancer will arise in the state and out of them, 110 will take place only in the capital, resulting in a total of 820 new cases of cancer of all types for 100 thousand women.[4]

In Brazil only 79% of women over 25 had at least screening test once. This value, however does not reach the goal of the Ministry of Health, which states that until 2011, 80% of women aged from 25 to 59 years old have undergone such test.[4] The lesions compatible with Intraepithelial Cervical Neoplasms (NIC) I and II are usually identified in women 35-49 years old, especially those who have never performed the Pap smear test.[1]

In addition to infections, the most common reasons causes of inflammation of the vaginal canal are Trichomonas vaginalis, Candida albicans and Gardnerella vaginalis, which are the protozoan cause of trichomoniasis, fungus responsible for candidiasis and Gram-negative bacteria of pleomorphic Gardnerella vaginalis.[7]

Mulheres com história ou portadoras de DST apresentam risco maior para câncer cérvico-uterino e para outros fatores que aumentam este risco, como a infecção pelo HPV. Logo, mulheres portadoras de DST devem ser submetidas à colpocitologia com maior frequência pelo risco aumentado de serem portadoras de câncer cérvicouterino ou de seus precursores.[8] Nesse contexto, esse estudo objetiva:

Women with a background or suffering from STDs are at increased risk for cervical cancer and for other factors that increase this risk, like HPV infection. Therefore, women with STDs must be submitted to smear test more often because of the increased risk of suffering from cervical cancer or their predessessors.[8] In this context, this study aims to:

- Characterize the cervical cytopathological changes and the epidemiological profile of women sexually active.

METHOD

Quantitative, descriptive, analytical study, with cross-sectional and retrospective documentary base, held in the city of Campo Grande, state capital of Mato Grosso do Sul. The study population were women with active sex life, belonging to the coverage area of the Basic Family Health Unit (UBSF) São Conrado.

This UBSF is part of the municipal public health, part of the north sanitary district under direct responsibility of the sub-coordinator in that area. The data collection of this study took place during November 2011.

The results of cytopathology exams were analyzed for the period from January 2010 to January 2011. Data were collected with the use of a proper tool for organizing the information needed to reach the proposed goal. Positive cases on cervical cytopathology test were included in the results, regardless of the agent and the diagnosed clinical form. Inconclusive tests, no date of accomplishment and with negative results were excluded. Therefore, the final study sample consisted of 527 subjects.

The research protocol was approved in its ethical and methodological aspects by the Ethics Committee for Research with Human Beings of the Dom Bosco Catholic University, according to CNS Resolution number 196/1996, revoked by CNS Resolution number 466/2012, according to protocol 063/11. It was also authorized by the Municipal Department of Health (SESAU) of Campo Grande/MS, after ethical approval.

RESULTS AND DISCUSSION

The research had the diagnosis of 527 Pap smears of sexually active women in the age group of 12-59 years old, from the coverage area of UBSF of São Conrado, North of the Municipal Health District of Campo Grande/MS.

Figure 1 shows the main results found in the reports of Pap smear tests, according to the etiologic agent and degree of inflammation.

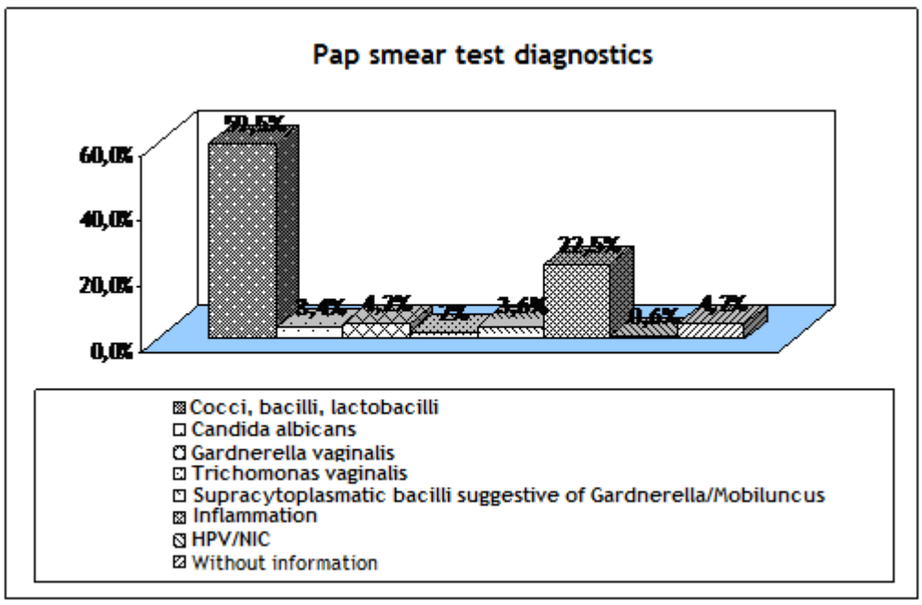

Figure 1. Pap smear test diagnostics

Figure 1 shows that the highest incidence results found in preventive tests was Cocci, Bacilli and Lactobacilli (59.5%), whose findings are considered normal by the Ministry of Health, because they are part of the vaginal flora and do not characterize infections needing for treatment.[9]

Inflammation was the second diagnosis with the highest number of cases (22.5%), usually due to the action of physical agents such as drugs and vaginal acidity on the epithelium and also occasionally by the use of intrauterine devices (IUDs), responsible for changes in endometrial cells, opposite to results found in the literature, where inflammation is the main complaint in women seeking health care.[9,10] Even with different case in the studies, it can be seen the high incidence of inflammation in cytological results.

Regarding family situation or marital status, the variable analyzed revealed that the highest incidence was among women who lived with family without a partner (single), corresponding to 55.2% of women, different from the position of another study whose main index was married women.[11]

Regardless of marital status, sexual practice was the mediator for the realization of the Pap smear as a way to prevent cervical cancer and gynecological disorders that cause uncomfortable symptoms for women often responsible for looking at health care.[11]

The analysis of education found in this study is in Figure 2.

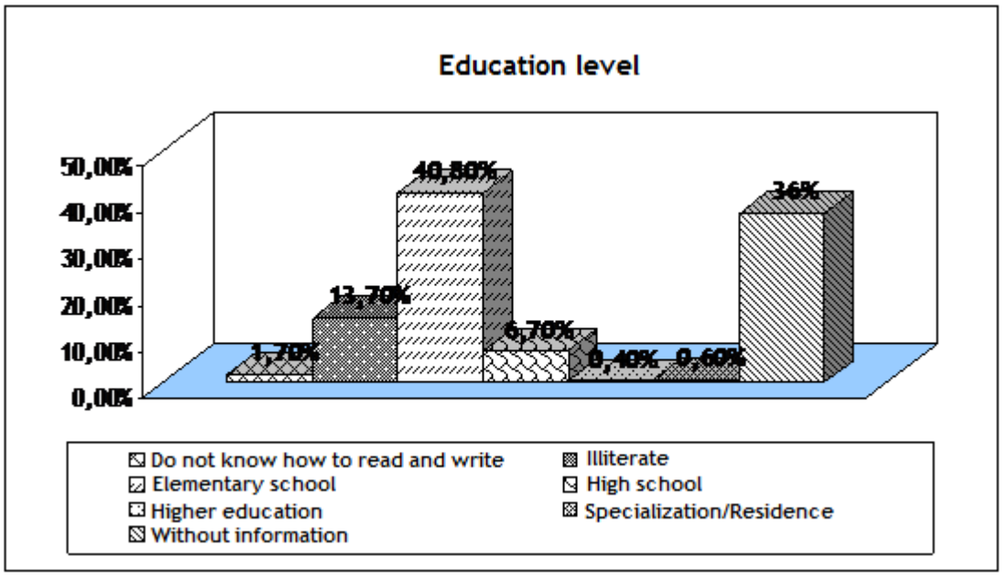

Figure 2. Education level

As the records were incomplete, the highest prevalence were cases without information (36%) making it difficult a correct analysis of the level of education of women investigated by seeking gynecological care in the UBSF studied.

There were women observed with complete elementary education (40.80%), which was also found in another study.[12]

Em relação à raça das pacientes investigadas, o resultado obtido consta na figura 3.

The level of education is an important factor in adherence of women to prevention for cervical cancer, while the lower the education the less is the level of understanding about the disease, its risk factors and treatment. Thus, health professionals should act as carriers of knowledge vehicles in order to educate patients as to the timing of the realization of the Pap smear test and its advantages, as well as maintenance of hygiene, closely linked in many gynecological diseases.[11]

In regard to race of investigated patients, the results obtained reported in Figure 3.

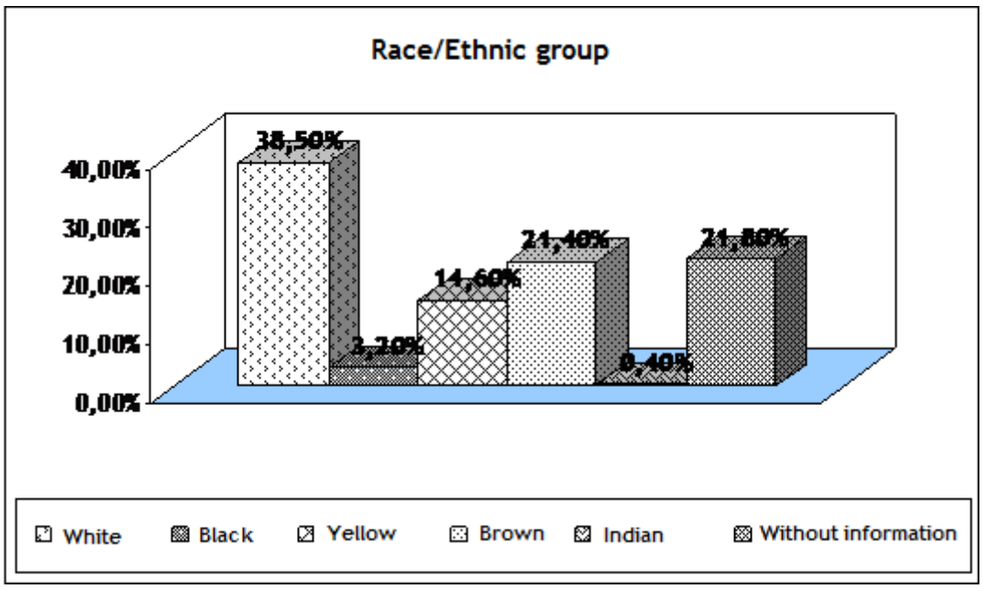

Figure 3. Race/Ethnic group

On the figure presented here, it can be seen that the highest prevalence occurred among white women (38.5%). There are studies corroborates the results to describe a large percentage of white women, and reporting the relationship still present today between race and income, where not white race people tend to be poorer when compared to white, making them to seek more health care.[13]

Figure 4 shows a relationship between age and the level of education of the patients who underwent the Pap smear tests analyzed.

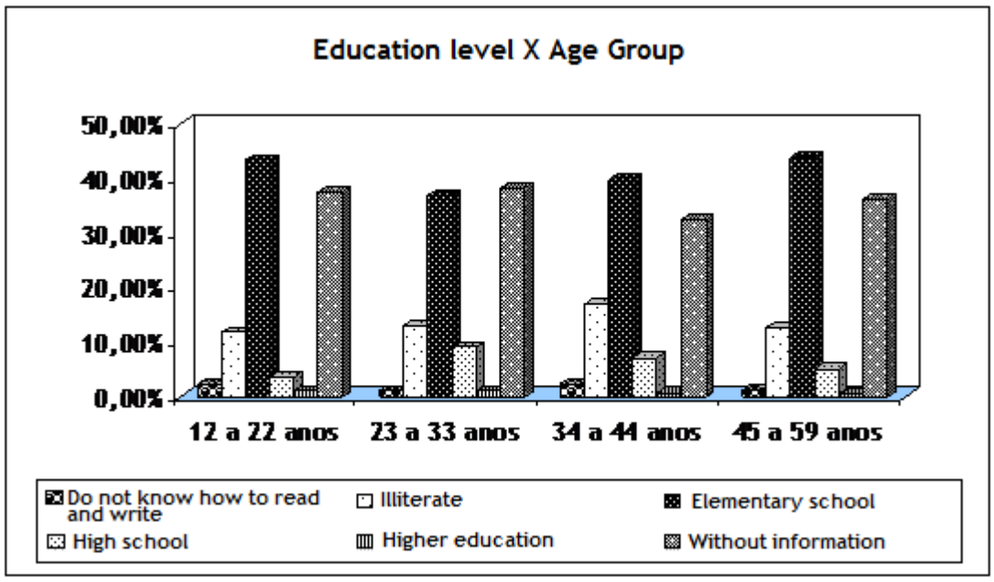

Figure 4. Education level X Age Group

Regarding age and level of education, the highest number of women who sought UBSF for this type of care had elementary school, especially for the age group between 12 and 22 years old. This highlights the precocity of early sexual activity and lack of knowledge about safer sex practices, the perceived severity of the diseases, their susceptibility and knowledge of the benefits of preventive actions.

Figure 5 expresses the relationship between age and the diagnoses found in the results of Pap smear tests.

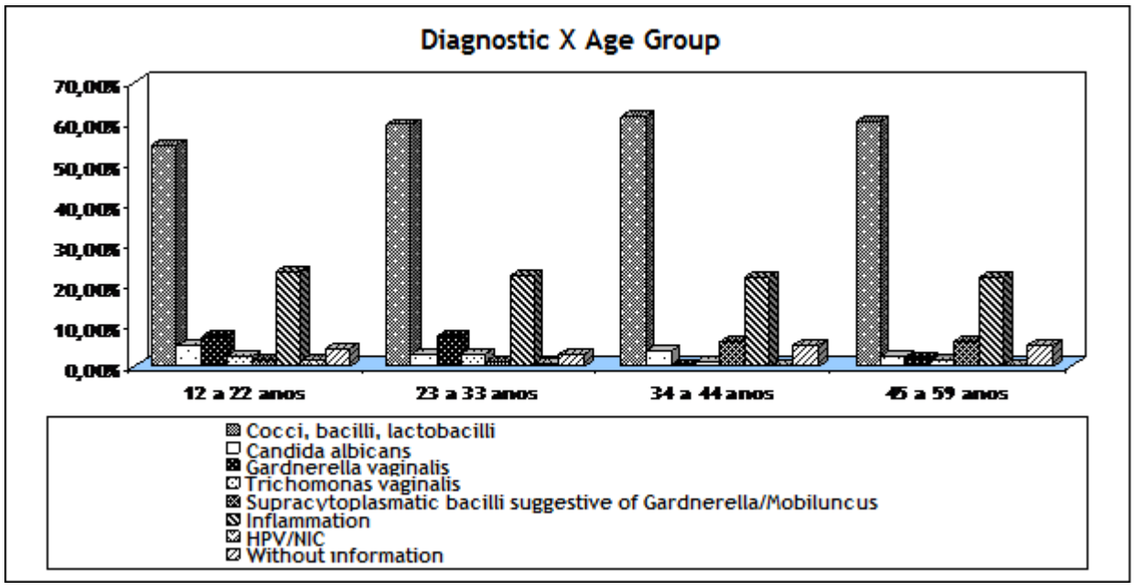

Figure 5. Diagnostic X Age Group

The ages between 12 and 22 years old can be observed as greater percentage for the diagnosis of inflammation (23.3%), followed by Gardnerella vaginalis (7.3%), Candida albicans (5.1%) and HPV/NIC (1.5%). This shows how the cases of cytological changes have increased in adolescents, related to the early sexual activity and multiple partners.

From this perspective, other studies corroborate the findings and added that the incidence of cervical cancer is evident in the age group from 20 to 29 years old and the risk increases rapidly until reaching its peak, usually at the age of 45 to 49 years old, a period that corresponds the highest incidence of precursor lesions and precedes the highest death rate from cancer, a result also from the beginning early sexual activity.[15]

HPV/NIC infection transmitted sexually has become a common STDs among sexually active young people. Infections can be latent (asymptomatic), subclinical or clinical (visible condylomata acuminata - warts).[14] Thus, as the results of Candida and inflammation in this study, other research has obtained a high rate of these microorganisms among young women in reproductive age, which shows how this fungal infection is present in the vaginal flora and may be related to sex, hygiene or behavioral habits. It also pointed out that the women who were looking for gynecological were those with complaints of inflammation and irritation of the cervical tissue, which in most cases is with a blood and mucopurulent cervicitis signals.[10]

Another study shows that the highest prevalence of Gardnerella vaginalis occurred in women aged 21-30 years old with complete elementary school, similar with these reported results. However, the research has shown low prevalence of this infection in women under the age of 21 years old and the values displayed for the two age groups, as those found in this study were equivalent.[12]

Regarding Trichomonas vaginalis, there are more cases in women from 23 to 33 years old (3%) and complete elementary school. Trichomoniasis is a disease caused by a protozoan flagellate whose tank is the vagina and urethra. It is considered a sexually transmitted vaginitis and is mainly related to the lack of personal hygiene. Another study corroborates the results in reporting the incidence of it in women from 20-34 years old.[10]

Regarding normal diagnostic findings (cocci, bacilli and lactobacilli), it can be seen that their increased presence occurred in women from 34-44 years old (61.7%) and the lowest rate of normality from 12-22 years (54.7%). The vagina is physiologically protected from infections by bacteria in the normal microflora of the epithelium, which supply the growth of harmful microorganisms due to the conversion of glycogen to lactic acid and hydrogen peroxide (toxic to anaerobic microorganisms) by the presence of estrogen to induce the formation of it and leave the low vaginal pH in around 3.5 to 4.5 in the fertile phase of the woman. Its presence is also related to the immune system and hormonal conditions.[16]

Supracytoplasmatic bacilli suggestive of Gardnerella/Mobiluncus were in the age group from 45 to 59 years old with complete elementary school. This result was not observed in another study that found the prevalence of Gardnerella vaginalis and/or Mobiluncus sp, in women from 21 to 30 years old, but also with the same education level.

This is given by the decrease or absence of lactobacilli that lead to increased vaginal pH (>5) widely known for producing intense secretion (copious) grayish yellow-whitish, with odor similar to rotten fish.[12]

CONCLUSION

This research showed the main findings in the reports of the examinations of gynecological disorders diagnoses through Pap smear tests, of sexually active women, monitored by the health services of a UBSF.

Among the diagnostic results found, there were the presence of cocci, bacilli and lactobacilli; inflammation; Candida albicans; Gardnerella vaginalis; Trichomonas vaginalis; supracytoplasmatic bacilli suggestive of Gardnerella/Mobiluncus and HPV/NIC, with higher incidence found among the age group from 12 to 22 years old, with low level of education.

The relationship of young women and low level of education was the most responsible for gynecological consultations due to the insufficient level of information about safe sexual habits and hygiene. There was also NIC cases of mild and moderate levels in women of this age group, which leads to the conclusion that more women are starting their sexual life early.

With regard to Health Units, especially the Family Health Strategy, they should be prepared to meet the younger female people through educational activities, individual counseling, correct condom use and proper personal hygiene, and encourage women and the prevention of cervical cancer through the realization of the Pap smear tests, which has proved to be a suitable method for screening this risk factor so relevant to public health.

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