## **NOTES AND INFORMATIONS /** *NOTAS E INFORMAÇÕES*

## Pap smear in incarcerated women

Exame de Papanicolaou em mulheres encarceradas

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**ABSTRACT:** In Brazil, in 2012, 6.4% of the prison population was made up of women. The aim of the study was to verify the coverage of the Pap smear according to sociodemographic characteristics and health problems reported among incarcerated women. Cross-sectional study conducted from August 2012 to July 2013, considering the records of 702 inmates aged between 25 and 64 years and the duration of imprisonment (not less than 12 months). The average age of the women surveyed was 34.7 years. The performance of cervical cytology was reported by 26.3% of inmates. There were no difference in prevalence according to selected variables. The containment condition enables the implementation of preventive measures such as offering and realization of Pap smear for most inmates. The observed results are worrying and differ significantly from those presented in the national diagnosis on the health of incarcerated women.

Keywords: Papanicolaou test. Prisons. Women's health. Primary prevention. Epidemiologic studies. Uterine Cervical Neoplasms

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**RESUMO:** No Brasil, em 2012, 6,4% da população carcerária era constituida por mulheres. O objetivo do estudo foi verificar a cobertura do exame de Papanicolaou segundo características sociodemográficas e problemas de saúde referidos entre mulheres encarceradas. Estudo transversal realizado entre agosto de 2012 e julho de 2013. Consideraram-se os registros de 702 reeducandas com idade entre 25 e 64 anos de idade e tempo de reclusão igual ou superior a 12 meses. A média de idade das mulheres entrevistadas foi de 34,7 anos. A realização de citologia oncótica cervical foi referida por 26,3% das reeducandas. Não foram encontradas diferenças nas prevalências segundo variáveis selecionadas. A condição de confinamento possibilita a implementação de ações preventivas, como o oferecimento e a realização do exame de Papanicolaou para a maioria das reeducandas. Os resultados observados são preocupantes e divergem de forma importante daqueles apresentados em diagnóstico nacional sobre a saúde das mulheres encarceradas.

Palavras-chave: Teste de Papanicolaou. Prisões. Saúde da mulher. Prevenção primária. Estudos epidemiológicos. Neoplasias do Colo do Útero

According to the World Health Organization (WHO)<sup>1</sup>, with about 530,000 new cases per year worldwide, cervical cancer is the fourth most common cancer among women and causes the death of 265,000 women each year. This is a serious public health problem, particularly in developing countries, where it is related to approximately 85% cases and deaths from the disease, accounting for 13% of all female cancers<sup>2,3</sup>.

In Brazil, cervical cancer is the third most common in the female population, surpassed only by breast and colorectal cancer<sup>3</sup>. It is the fourth leading cause of death by cancer in women<sup>3</sup>. The country has made progress when it comes to early diagnosis of cases, however, estimates pointed 15,590 new cases in 2014<sup>3</sup>.

Human papillomavirus (HPV) are common worldwide and are responsible for most of the cervical cancer. With prevalence of 15 to 40% in the general population, cervical HPV infection is the isolate sexually transmitted disease which is most common around the world<sup>4</sup>. Although most HPV infections do not cause symptoms, in some cases cellular changes that progress to cervical cancer may occur<sup>4</sup>.

Changes in cells are easily found by Pap smear of the cervix (Papanicolaou), and are curable in almost all the cases as long as identified in the early stages of the disease, hence the importance of periodic examination. According to the WHO, with target population coverage of at least 80% and ensuring diagnosis and treatment of cases with changes, it is possible to reduce the incidence of cervix cancer by 60 to 90%. Note that the precursor lesions of disease require specialized treatment of medium complexity and moderate cost, being accessible to most health networks.

In addition to conditions related to HPV infection, factors such as age, immunity, genetics, marital status, low socioeconomic status, early onset of sexual activity, multiple sexual partners, use of oral contraceptives, multiparity, and smoking have been identified as significantly risky for the development of this cancer<sup>5</sup>.

The prisons are a location of contact with thousands of people who are often beyond the reach of conventional health systems. The female prison population is growing in all continents. In Brazil, 6.4% jailed population was composed of women in 2012<sup>6</sup>.

The aim of this study was to verify the coverage of Pap smear according to sociodemographic characteristics and health problems reported by jailed women.

A research was conducted in a female prison in the state of São Paulo, between the months of August 2012 and July 2013, entitled "Comprehensive care to women's health in prisons and servers in a Women's Prison of the State of São Paulo."

This study considered the records of 702 inmates aging between 25 and 64 years and in prison for not less than 12 months. The prevalence of Pap smear and the association between the examination and variables considered was verified by Pearson  $\chi^2$  test with significance of 5%. Analyses were performed in Stata 12 software.

The mean age of women surveyed was 34.7 years. The performance of oncotic cytology was reported by 26.3% of inmates. There were no differences in prevalence when assorted by age group, marital status, ethnicity/race, religion, education, income, work at the prison, and the fact of having children (p > 0.05). We found no statistical association between the exam and health issues such as gynecological complaints (discharge, itching, burning, wounds, vaginal wart, pain during intercourse, and pain below the belly) (p = 0.080), vaginal bleeding (p = 0.727), and urinary tract infection (p = 0.263). Overall, the findings point out limited access to the screening test that is recommended for early detection of cervical cancer in all subgroups considered.

WHO estimates an increase of 320,000 deaths from cervical cancer in 2015 to 435,000 by 2030, and 70% of these deaths will be attributed to chronic infections by HPV types 16 and 18, which in general are acquired when you initiate sexual activities<sup>1,2</sup>.

Recently, a primary level measure of prevention and specific protection was implemented in Brazil: the HPV vaccine. Another way to prevent this cancer is to improve universal access to comprehensive prevention programs tracking the cervix and cancer control, which have the potential to reach women with HPV. It comprises of an organized set of actions to prevent and reduce morbidity and mortality from cervical cancer, part of the priority actions of the global action plan for the prevention and control of noncommunicable chronic diseases  $2013 - 2020^5$ .

Cervical cancer screening is offered to women aged 25 to 64 years who have initiated sexual activity. The recommended routine in Brazil is to repeat Pap smear every 3 years after two consecutive normal tests performed with an interval of 1 year<sup>3</sup>. Improved coverage of the target population is one of the main actions at a primary level to decrease the incidence and mortality from this cancer. Countries with coverage of more than 50% of the Pap test done every 3 to 5 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 for 100,000 women per year<sup>1-5</sup>.

In this study, a reduced coverage of the Pap smear was identified among women. The confinement condition allows, by the side of the institution, to identify women at increased risk of cervical cancer and offer the Pap smear; and at the side of inmates, for easy access to this

preventive test. These results are worrying and diverge significantly from those reported in national diagnoses on the health of jailed women, that is, 92.2% of women regularly perform screening test for cancer of the cervix<sup>6</sup>.

This condition must be modified in prisons while it is happening, because it is the State's obligation to care for the health of this population. Where there is no staff available for the task, this situation could be modified through partnerships between teaching and service, so that nursing students could intern in units of the prison system and perform supervised nursing consultation with collection of Pap smear.

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