COVERAGE OF THE PREVENTIVE TEST FOR CERVICAL CANCER IN A FAMILY HEALTH CENTER

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ABSTRACT: This quantitative study retrospectively estimated the coverage of the Papanicolaou test in the area covered by the Santa Rita Family Health Center, in the city of Três Lagoas, in the State of Mato Grosso do Sul (MS). It used data available in Municipal and Federal Information Systems, and in electronic hospital records referent to 361 women resident in this area. The coverage of the test was 82.54% among women aged between 20 and 59 years old. Cellular changes were not observed in 94.7% of the samples. In addition to showing the epidemiological situation for cervical uterine cancer, the study provides support for improving strategies currently in use and for improving activities in women's health.

DESCRIPTORS: Cervical cancers; Primary prevention; Women's health; Nursing in community health.

COBERTURA DO EXAME PREVENTIVO DE CÂNCER DE COLO DE ÚTERO EM UMA UNIDADE DE SAÚDE DA FAMÍLIA

RESUMO: Este estudo quantitativo estimou retrospectivamente a cobertura do exame de Papanicolaou na área adscrita à Unidade de Saúde da Família Santa Rita, no município de Três Lagoas, MS, utilizando dados disponíveis em sistemas de informação municipais e federais e em prontuários eletrônicos referentes a 361 mulheres residentes nessa área. A cobertura do exame foi de 82,54% em mulheres de 20 a 59 anos de idade. Não foram constatadas alterações celulares em 94,7% das amostras. Além de revelar o quadro epidemiológico do câncer cérvico-uterino, o estudo traz subsídios para aprimorar as estratégias em curso e aperfeiçoar as atividades em saúde da mulher.

DESCRITORES: Neoplasias do colo do útero; Prevenção primária; Saúde da mulher; Enfermagem em saúde comunitária.

COBERTURA DEL EXAMEN PREVENTIVO DE CÁNCER DE CUELLO DE ÚTERO EN UNA UNIDAD DE SALUD DE LA FAMILIA

RESUMEN: Este estudio cuantitativo hizo la estimativa retrospectiva de la cobertura del examen de Papanicolaou en el área adscrita a la Unidad de Salud de la Familia Santa Rita, en el municipio de Três Lagoas, MS, utilizando datos disponibles en sistemas de información municipales y federales y en prontuarios electrónicos referentes a 361 mujeres que viven en ese área. La cobertura del examen fue de 82,54% en mujeres de 20 a 59 años de edad. No fueron constatadas alteraciones celulares en 94,7% de las muestras. Además de revelar el cuadro epidemiológico del cáncer cervical uterino, el estudio trae subsidios para perfeccionar estrategias en curso y mejorar las actividades en salud de la mujer.

DESCRIPTORES: Neoplasias del cuello del útero; Prevención primaria; Salud de la mujer; Enfermería en salud comunitaria.

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INTRODUCTION

According to a report from the World Health Organization (WHO), of the 57 million deaths worldwide in 2008, 36 million—that is, 63%—resulted from non-communicable diseases, including cancer⁽¹⁾.

In the Americas, approximately 80,710 women are diagnosed with cervical cancer each year, and of these, 36,100 die as a result of this type of cancer. It is estimated that by 2030 there will be an increase of 70% of new cases of cervical and breast cancer in Latin America and the Caribbean⁽²⁾. In Brazil, 518,510 new cases of cancer were predicted for the period 2012 – 2013⁽³⁾.

Currently, the cancers with the highest incidence among women are those of non-melanoma skin cancer, breast cancer, cervical cancer, and cancers of the colon, rectum and thyroid gland⁽³⁾. In less developed countries, cervical cancer has a higher incidence than in more developed countries, and is evidenced in the age range of 20 to 29 years old, although its risk increases from 45 to 49 years old⁽⁴⁾.

Cervical cancer is the second most frequent type of cancer in the Center-West and North-East regions of Brazil, with 28 and 18 cases occurring in each 100,000 women respectively⁽³⁾.

In Mato Grosso do Sul, its incidence in 2001 was 14.68 cases per 100,000 women, with an estimate of 35.13 per 100,000 for 2013⁽⁵⁾. This increase may be associated with improvement in diagnosis, better access to the health services, or to the population's greater exposure to risk factors for cervical cancer⁽⁵⁾.

It is this form of the disease that has the greatest potential for prevention and cure when diagnosed early⁽⁴⁾. The cervical screening test, also termed the preventive test for cervical cancer, Papanicolaou test or smear test, is a simple method that allows the detection of cervical changes based on desquamated epithelial cells and is today the most-indicated diagnostic method, as it is fast, painless, easy to undertake and low-cost⁽⁶⁾.

It is also the tracking strategy recommended by the Ministry of Health, prioritarily for women aged between 25 and 64 years old. In this age range, the test should be repeated once every three years following two tests in consecutive years with negative results. After this age, the test may be interrupted if the woman has presented two consecutive negative tests in the last five years. Women aged over 64 years old, who have never undertaken the test, must carry out two preventive tests with an interval of one to three years. If both are negative, further tests may be dispensed with⁽⁷⁻⁸⁾.

The preventive test is part of Primary Health Care, which encompasses actions directed at the promotion and protection of health, the prevention of harm to health, and at the diagnosis, treatment, rehabilitation and maintenance of health. Primary Health Care is also the gateway for the majority of service users to the health system and "represents the accumulation and the improvement of health policy" for effective consolidation of the Unified Health System (SUS) "as a public policy directed toward the ensuring of constitutional rights of citizenship" (9:25).

The present study aimed to estimate the coverage of the cytology test for cervical cancer in women in the territory of the Santa Rita Family Health Center (USF, in Portuguese) in the city of Três Lagoas in the South of the State of Mato Grasso do Sul.

METHOD

For this quantitative study, data from the following sources was retrospectively consulted: that available in electronic hospital records and in the book of records of tests of the Santa Rita USF (in the city of Três Lagoas, MS), as well as information stored in the following databases: the Cervical Cancer Information System (Siscolo, in Portuguese), the Primary Care Information System (SIAB) and CONSULFARMA (the information system used by the city).

The records referent to the women resident in the area allocated to the Santa Rita USF, who had undertaken the cervical-uterine cytology test in January – December 2011, were researched. For collecting the data from hospital records, an instrument was elaborated focusing on the following variables: age (in years) of the women who undertook the preventive test in 2011, and results of the tests collected (including microbial flora and identification of alterations of precursor lesions).

The research was undertaken following approval from the Committee for Ethics in Research in Human Beings of the Federal University of Mato Grosso do Sul (Decision CAAE 01716012.3.0000.0021), in accordance with

Resolution 196/96 of the National Health Council.

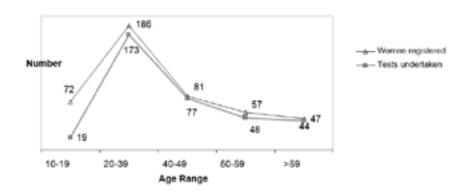
RESULTS

Among the 361 women who undertook the test in the Santa Rita USF in 2011, the age groups of 20 to 39 years old (49.9%) and 40 to 49 years old (21%) predominated.

Graph 1 correlates the number of tests undertaken, by age range, of women registered in the health center.

All the smear samples were considered satisfactory for processing by the Municipal Pathology Laboratory, which analyzed them. Of the total of samples, 94.7% (341) were shown to be cytologically normal.

The microorganisms identified in 100% (361) of the samples were cocci (28%), bacilli (21%), lactobacillic



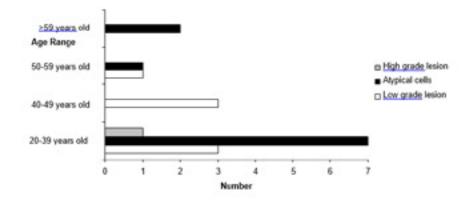
Graph 1 - Number of cervical-uterine cytology tests and number of women registered at the Santa Rita Family Health Center, by age range. Três Lagoas-MS-Brazil, 2011

acids (11%), Gadnerella vaginalis (7%), Candida albicans (4%) and Trichomonas vaginalis (3%).

Cytological changes were detected in 18 women, 11 (61.1%) of whom were aged between 20 and 39 years old. Atypical squamous cells of undetermined significance (possibly non-cancerous) (ASC-US) were observed in 13 patients (72.2%). Four (22.2%) presented low-grade intraepithelial lesions, covering cytopathic effects from HPV and cervical intraepithelial neoplasia grade I (CIN). One patient had undertaken colposcopy and biopsy, with identification of CIN grade II. There was one case (5.5%) of a high grade

intraepithelial lesion, covering CIN grade II and III: the patient proceeded to colposcopy and biopsy, with subsequent loop electrosurgical excision procedure.

The highest incidence (61.1%) of cellular changes (Graph 2) occurred in women aged from 20 to 39 years old – the age range considered, by the Brazilian National Cancer Institute (INCA) ⁽⁷⁾ to be the target-population, as it requires the cytopathological test to be undertaken periodically for the tracking of precursor lesions for cervical cancer.



Graph 2 – Cervical-uterine cytology tests with changes (n=18), by age range, in the Santa Rita Family Health Center. Três Lagoas-MS-Brazil, 2011

DISCUSSION

Tests in the age range of 20 to 59 years old predominated (82.54%, or 298), corroborating the findings of other studies⁽¹⁰⁻¹¹⁾ in relation to the population defined by INCA⁽⁷⁾ as the target for the early detection of precursor lesions for cancer (women aged between 25 and 64 years old). Furthermore, the level of coverage of 80% stipulated by the WHO⁽⁸⁾ was exceeded. Studies undertaken in other cities showed levels of coverage of the preventive test of 72.2%⁽¹²⁾, 66.3%⁽¹³⁾ and 67%⁽¹⁴⁾, which are below that stipulated by this entity⁽¹⁵⁾.

The Municipal Pathology Laboratory considered all the swab specimens satisfactory for processing, and the cytological results were shown to be normal in 94.7% of the samples. The adequacy of the sample influences the result of the test, as the presence of purulent secretions or blood, generally resulting from dissatisfactory collection of the material, hinders the analysis of the cytological smears⁽¹⁶⁾. It is inferred, therefore, that the collection of these samples was undertaken appropriately by the nurses working in the Santa Rita USF.

Microbiological analysis showed a predominance of bacteria from the vaginal microbiota, corroborating the findings of a study⁽¹⁷⁾ undertaken in the period 2005 – 2009, in which 89.9% (368) of the samples contained microorganisms of the vaginal microbiota. Similar findings were also encountered in a separate study⁽¹⁸⁾ undertaken in March 2008 – October 2011, referent to a Primary Health Center, which revealed a predominance of cocci, bacilli and lactobacillus. In the present study, the predominant cocci, bacilli and lactobacillus were part of the vaginal microbiota, therefore not characterizing infection and not needing treatment if the patient was asymptomatic⁽⁷⁾.

The incidence of cellular changes was shown to be reduced, making up only 4.9%⁽¹⁸⁾ of the samples analyzed, with the diagnosis of ASC-US predominating in this group, in agreement with the findings of another study⁽¹⁹⁾. Other studies^(10-11,17) have indicated a low incidence of cellular changes.

Among the 18 women who presented cellular changes, 11 (61.1%) were aged between 20 and

39 years old. Similar results were indicated in a study undertaken in Rio Grande do Norte⁽²⁰⁾, in January 2000 – March 2004, in which the most frequent results for CIN I, II and III were found in this same age range.

Educational measures, whether through Nursing consultations or conversation circles, are essential for changing the population's behavior, that is, for attitudes which are preventive, or which promote health, to develop⁽²¹⁾.

The health team, in particular the nurse, who shows awareness of the clients' needs and establishes links with them, increases the probability of adherence to undertaking preventive tests for cervical cancer⁽²²⁾.

CONCLUSION

All the samples were considered satisfactory for processing. The presence of microorganisms of the vaginal microbiota predominated. Only in one case was a high grade intraepithelial alteration observed; ASC-US was found in 13 women and four presented low grade intraepithelial lesions, covering cytopathic effects from HPV and CIN grade I.

Among the 18 women who presented cellular changes, 11 (61.1%) were aged between 20 and 39 years old, that is to say, in the reproductive phase of their lives.

Although this study evidenced satisfactory coverage and collection of the preventive test for cervical cancer, it is necessary to develop the strategies undertaken in the Santa Rita USF for its prevention. These should include home visits to the women who do not return to collect the results of the test, or who undertake the test at intervals of over three years, the scheduling of nursing consultations which allow a favorable time for individual education in health and the forming of a bond, and the setting up of conversation circles for clarification of doubts and the exchange of experiences between women.

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