

# KNOWLEDGE, ATTITUDES AND PRACTICES OF EMPLOYEES ON PREVENTIVE EXAM OF UTERUS CERVICAL CANCER

CONHECIMENTOS, ATITUDES E PRÁTICAS DE FUNCIONÁRIAS SOBRE O EXAME PREVENTIVO DE CÂNCER DO COLO DE ÚTERO

CONOCIMIENTOS, ACTITUDES Y PRÁCTICAS DE FUNCIONARIOS SOBRE EL EXAMEN PREVENTIVO DE CÁNCER DEL CUELLO DEL ÚTERO

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#### **ABSTRACT**

**Objective**: to identify the knowledge, attitudes and practices of employees in relation to the preventive screening of cervical cancer. **Method**: descriptive, exploratory study with a quantitative approach, with 71 female employees of the administrative sector and general services of a Public Institution of Higher Education of Minas Gerais/MG. Data collection was through a questionnaire and analyzed by descriptive statistics from tables. **Results**: 38.0% employees had completed higher education, family income from five to more than five minimum wages (47.8%), had inadequate knowledge. However, they had attitudes and good practice in the preventive screening of cervical cancer. **Conclusion**: we realized the need to develop educational activities aimed at cervical cancer to strengthen the process of autonomy and search actions for promoting health in the daily lives of these women. **Descriptors**: Women's Health; Cancer of the Cervix; Knowledge.

#### RESUMO

Objetivo: identificar conhecimentos, atitudes e práticas de funcionárias em relação ao exame preventivo de câncer do colo do útero. *Método*: estudo descritivo-exploratório, com abordagem quantitativa, com 71 mulheres funcionárias do setor administrativo e serviços gerais de uma Instituição Pública de Ensino Superior de Minas Gerais/MG. A coleta de dados foi realizada por meio de um questionário e os dados foram analisados pela estatística descritiva a partir de tabelas. *Resultados*: as 38,0% funcionárias possuíam ensino superior completo, renda familiar de cinco a mais de cinco salários mínimos (47,8%), possuíam conhecimento inadequado, entretanto, atitudes e práticas adequadas em relação ao exame preventivo de câncer do colo do útero. *Conclusão*: percebeu-se a necessidade do desenvolvimento de ações educativas voltadas para o câncer do colo do útero a fim de fortalecer no cotidiano destas mulheres o processo de autonomia e de busca de ações promotoras de saúde. *Descritores*: Saúde da Mulher; Câncer de Colo do Útero; Conhecimento.

#### RESUMEN

Objetivo: identificar conocimientos, actitudes y prácticas de funcionarias en relación al examen preventivo de cáncer del cuello del útero. *Método*: estudio descriptivo-exploratorio, con enfoque cuantitativo, con 71 mujeres funcionarias del sector administrativo y servicios generales de una Institución Pública de Enseñanza Superior de Minas Gerais/MG. La recolección de datos fue por medio de un cuestionario y, analizados por la estadística descriptiva a partir de tablas. *Resultados*: las 38,0% funcionarias poseían enseñanza superior completo, renta familiar de cinco a más de cinco salarios mínimos (47,8%), poseían conocimiento inadecuado, sin embargo tenían actitudes y prácticas adecuadas en relación al examen preventivo de cáncer del cuello del útero. *Conclusión*: hubo necesidad del desarrollo de acciones educativas dirigidas para el cáncer del cuello del útero, para fortalecerles en el cotidiano de estas mujeres el proceso de autonomía, de búsqueda de acciones promotoras de salud. *Descriptors*: Salud de la Mujer; Cáncer de Cuello Uterino; Conocimiento.

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### **INTRODUCTION**

The mortality from cancer is considered as a serious public health problem worldwide, only foregoing cardiovascular diseases. In Brazil, 15,590 new cases of cervical cancer (CC) were estimated for 2014. In the Southeast region, it was the fourth type of cancer more common and the in state of Minas Gerais, the estimated incidence was 888 cases per hundred thousand inhabitants. <sup>2</sup>

Among the types of cancer, the CC shows the greatest potential for prevention and cure when diagnosed early. However, it was configured as the second cause of death in women, with higher incidence in developing countries.<sup>3-4</sup> The CC results from uncontrolled replication of epithelial cells of the uterine lining, reaching the underlying tissue (stroma) to regional site/in situ or invasive, affecting mainly women aged 20 to 29 years old, with increased risk between 50 to 60 years old.<sup>1,4</sup>

The cervical epithelium lesions go through several steps before becoming an invasive carcinoma, which depending on the epithelial origin affected, it is categorized in squamous cell carcinoma (squamous epithelium) and adenocarcinoma (glandular epithelium).<sup>1</sup>

The main risk factor for the development of CC is the infection by the Human Papilloma Virus (HPV), primarily through the serotypes 16, 18, 31, 33, 45, 58 among others, which are those with the greatest oncogenic potential. Among other risk factors, there are early onset of sexual activity, multiple sexual partners, smoking, low socioeconomic status, marital status and use of oral contraceptives. The final diagnosis is made by histology, and from this, then, further recommendations in each case individually are defined.

In order to reduce women's morbidity and mortality rates in Brazil, policies and strategic programs such as the National Comprehensive Health Care Women's Policy, Principles and Guidelines (PNAISM) Program Viva Woman, National Program for Control of cervical Cancer (PNCCU) among others have been developed and implemented by the Ministry of Health (MOH), to consolidate actions for the reduction of preventable diseases and disorders in this population, including the CC.<sup>11</sup>

The primary prevention of cervical cancer is based on the control and reduction of risk factors for its occurrence, especially those related to HPV infection. Among the actions to be taken, a newly adopted strategy in Brazil, through the National Health Surveillance Agency (ANVISA) the HPV vaccine has been marketing, which confers immunity

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to serotype 16 and 18 (bivalent) and 6, 11, 16 and 18 (quadrivalent)<sup>8-9</sup> and through the Unified Health System, the availability of the quadrivalent vaccines for adolescents from nine to thirteen, from 2014, in the basic immunization schedule.<sup>10</sup>

It is recommended the uterine cervical Pap smear (Pap smear, Pap test) as secondary prevention for screening of precursors of cervical cancer lesions from 25 years old, for women who have had sexual activity, up to 64 years old.<sup>1</sup> The period for carrying out the screening test is in the range of every three years, and after two negative tests, annually. Women 64 years old or older and those who have never performed the examination must do two tests with an interval of one to three years. If both are negative, additional examinations can be dispensed.<sup>7</sup>

Factors related to behavior, culture, adequate knowledge of preventive examinations for women, the embarrassment in the exam, and the availability and organization of health services, may interfere with the performance of the CC prevention practices. 11-12

According to the Educational Project Course (PPC) and Institutional Development Project (PDI), the health courses must have protective actions, health promotion and rehabilitation to the community, since these employees of IES are part of their community, which offers undergraduate courses in health and staff of administrative and general services sectors are made in majority by women. The following question emerged: what are the knowledge, attitudes and practices of preventing employees of a higher education institution on the Preventive Examination of Cervical Cancer?

The reason for this study was the high incidence and mortality from cervical cancer in the country, highlighting the accuracy of implementing educational actions for the prevention and control of cancer. Supporting this justification, the scientific literature shows that studies that measure the level of knowledge of a given population are paramount, since they offer contributions for effective strategies of prevention and control of diseases. <sup>12</sup>

In this perspective, the aim of this study is to identify knowledge, attitudes and practices of employees in the preventive screening of cervical cancer.

### **METHOD**

Descriptive and exploratory study with a quantitative approach, carried out in an IES of

a municipality of Minas Gerais/MG, with an estimated population of 228,643 inhabitants for 2014, and 109,188 of them are female. <sup>13</sup>

The study participants were employees of administrative and general services sectors, corresponding to a total of 198 women, and 71 of them were women included after meeting the inclusion and exclusion criteria.

Inclusion criteria were to be among the age group of 25 to 64 years old, as recommended by the Ministry of Health<sup>5</sup> to perform the screening test, working in the administrative sector and general services and agree to participate. Women were excluded if they did not initiate sexual activity (one participant) besides and those who exercising administrative functions, they were also teachers (103 women) due to influence the information. Women who were out of work (four participants) during the data collection and those who were outside the specified age group (17 women) were not involved in the study.

An average of six interviews a day were conducted, from August to September 2014, in the morning and afternoon, promoting flexible working hours, because the employees were working. Interviews were conducted in a private room, to ensure the privacy and confidentiality of the reported data.

Data collection was performed after authorization of the President of the institution and approved by the Research Ethics Committee of the study institution scenario, as reported number 764,441, CAAE: 34873714.0.0000.5115.

A form was used as a tool for data collection, in a face to face interview situation between the interviewer and the interviewee. The form for data collection was adapted from another study<sup>3</sup>, after authorization of the author, which contained information on sociodemographic data and guiding questions on the CC Preventive Exam. This study met the fundamental ethical and scientific requirements of Resolution No. 466

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of 2012. The participants were informed about the purpose of the study, the secrecy and interruptible of their participation without any kind of prejudice. Upon acceptance, they signed the Informed Consent form (TCLE).

The results were analyzed by frequency distribution, percentage and according to the following indicators: proper knowledge, that is, when women said they have heard of the test, and knew that it was to prevent cancer, either generally or, specifically, the uterine inadequate knowledge participants said they had heard of the test, but they did not know of its purpose); proper attitude, that is, when women considered necessary to perform the test periodically, correctly indicated the reasons for doing so; inadequate attitude (participants considered some necessary, unnecessary or had no opinion about the examination); proper practice when women said they were last tested, no more than three years after two negative tests, annually; inadequate practice (the participants said they have done the last tested since more than three years, once in life, or never did it.

#### **RESULTS**

Regarding the demographic data, this study demonstrated that, of the 71 women in the sample, 32.3% were found in the age group of 35-44 years old; 54.9% mentioned being married or living with a partner in a stable relationship of participants and 26.7% were single. Regarding education, 38% of women had completed higher education, followed by 29.5% with complete graduation and 14% had completed high school. On family income, 47.8% had five or more than five times the minimum wage. Regarding ethnicity, 60.5% considered themselves white, and 90.1% reported being Catholic (Table 1).

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Table 1. Distribution of employees from IES according to socio-demographic data. Divinópolis (MG), 2014.

Socio-demographic characteristics	n=71	%
of the employees		
Age group		
25 -34	15	21.1
35 -44	23	32.3
45 -54	19	26.7
55 -64	14	19.7
Marital status		
Single	19	26.7
Married or live with a partner	39	54.9
Other	13	18.3
Education		
Incomplete elementary school	9	12.6
Complete elementary school	4	5.6
Complete high school	10	14.0
Complete higher education	27	38.0
Complete Post-Graduation	21	29.5
Family income		
Less than 1 minimum wage	1	1.4
1 minimum wage	7	9.8
2 minimum wages	8	11.2
3 minimum wages	12	16.9
4 minimum wages	9	12.6
5 minimum wages	17	23.9
More than 5 minimum wages	17	23.9
Skin color (Ethnicity)		
White	43	60.5
Not White	28	39.4
Religion		
Catholic	64	90.1
Evangelic	2	2.8
Spiritism	2	2.8
Without religion	3	4.2

As for Obstetrics and Gynecology data (Table 2), it was observed that 49.2% of participants reported having more than one sexual partner throughout life; 47.8% of them never use condoms during sexual intercourse. As for the information about the preventive

examination of CC, 78.8% of women reported being informed by health professionals, and in the last year, 76.0% of participants reported having had gynecological consultation, and 70.3% of them were mainly due to the preventive test of CC.

Table 2. Distribution of the employees of IES according to the gynecological data. Divinópolis (MG), 2014.

Gynecological data	n=71	<u> </u>
Multiple sexual partners throughout		
life		
Yes	35	49.2
Use of condom during sexual intercourse		
Never	34	47.8
Gynecological consultation in at least 12 months		
Had consultation	54	76.0
Reason for having the gynecological consultation		
Performed preventive examination of CC	38	70.3
Information about half the preventive examination of CC		
Health Professional	56	78.8

was observed that the women participating in this study had early sexual activity from 14 to 38 years old and on average 20.4 years old. Regarding pregnancy, 69.0% of women had some pregnancy, with at least one children, equivalent average to two and a half children, and the largest number of children was four. When questioned about the risk factors for the development of cervical cancer, only one woman (1.4%) reported the three main risk factors presented in the survey correctly, they are multiple sexual partners, smoking and HPV. The remaining Knowledge, attitudes and practices of employees...

women, 98.6%, did not answer correctly or completely.

There were 64.7% of women mentioning heredity, 18.9% use of underwear from others and 8.4% could not say what were the risk factors for cervical cancer (Table 3).

Table 3. Distribution of the employees of IES according to the mentioned risk factors for CC. Divinópolis (MG), 2014.

Risk factors for cervical cancer	n=71	%
Heredity	46	64,7
Human papillomavirus	44	61,9
Smoking	32	45,0
Using underwear from someone else	12	18,9
Do not know	06	8,4
From tampon use	05	7,0
Condom use	03	4,2
Healthy eating	01	1,4

Of the interviewees, it was found that 26.7% have major concern facing the possibility of getting cervical cancer. When asked about the chance of developing cervical cancer if not performing the screening test regularly, 52.1% of women reported having great chance, and 9.8% did not know if they have chance of developing cervical cancer.

All women are concerned with the prevention of cervical cancer, but only 43.6% listed the three most appropriate forms presented in the research for the prevention of cervical cancer, avoiding sex with multiple

partners, conduct preventive examinations periodically and use condom during sexual intercourse.

It was shown that 80.2% of the interviews participated in some educational activity developed by IES, highlighting the issues of Breast Cancer in 40.3% of respondents, 31.5% in ergonomics and sexually transmitted diseases/Human Immunodeficiency Virus (STD/AIDS) in 15.7% (Table 4).

Table 4. Distribution of employees of IES according to the data related to participation in educational activities developed by the institution. Divinópolis (MG), 2014.

Participation in educational activities	n=71	%	
Did not participated	14	19.7	
Participated	57	80.2	
Topics participating			
Cervical Cancer	3	5.2	
Breast cancer	23	40.3	
Ergonomics	18	31.5	
STD/AIDS	9	15.7	
Safety at work	7	12.2	
Obesity	5	8.7	
Traffic Safety	4	7.0	
Smoking	4	7.0	
SAH	4	7.0	
Self-esteem	3	5.2	
Feeding	3	5.2	
Economy	3	5.2	
Hygiene	2	3.5	
Social inclusion	1	1.7	
Did not know	3	5.2	

Regarding data relating to knowledge, attitudes and practices against the preventive examination of CC, according to the

definitions proposed<sup>14</sup> the findings in Table 5 were presented.

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Table 5. Data related to knowledge, attitude and practice against the preventive examination of CC of the employees of IES, according to the definitions of Gamarra (2005). Divinópolis (MG), 2014.

Knowledge, attitude and practice against the preventive test	n=71	%
Knowledge		_
Proper	19	26.7
Inadequate	52	73.2
Attitude		
Proper	70	98.5
Inadequate	1	1.4
Practice		
Proper	67	94.3
Inadequate	4	5.6

It was found that all women have knowledge about preventive examinations for cervical cancer when mentioning they knew of the existence and purpose of the examination. However, 73.2% of them know it improperly because they did not know what its purpose is.

It was observed that the attitudes reported by participants were considered appropriate because, 98.5% reported being required to perform the test periodically, correctly indicated the reasons given in the survey to do so, they are preventing cancer in general or prevent cervical cancer, as well as the practice, which was also demonstrated appropriate because 94.3% of participants said they had the last preventive examination in no more than three years.

#### DISCUSSION

Regarding the socio-demographic data, a study also assessed knowledge, attitude and practice of preventive examination, presented socio-demographic description of its participants, where most of them were in the age group of 20-49 years old; in the level of education was realized that women had between three and seven years of study; half were married, had a family income of two minimum wages and 49.3% of them were evangelical<sup>15</sup>, refuting the findings of this study.

In the Obstetrics and Gynecology data, studies show that women have had multiple partners since they began sexual activity, and in one of them, these women obtained changes in results when performed preventive examinations of CC.7-16 Not using a condom during sexual intercourse was configured as a risk behavior that was also shown in another study that found that half of respondents did not consistently use it in sexual intercourse. 16 More and more couples have replaced the use of condoms by other methods contraception, aiming only to avoid unplanned pregnancy, also relating this decrease in reports of behavior of sexual pleasure and overconfidence in the partner. 18

Health professionals were highlighted as key informants regarding the prevention of cervical cancer examination, they shall have the responsibility to provide clear, complete and appropriate guidelines to women about the value of performing the screening test of CC.<sup>19</sup>

The main reason raised by participants to carry out the gynecological consultation last year was for the preventive examinations for cervical cancer. A strategy that continues to be adopted for the screening of cervical cancer is the periodic completion of the screening test, which to achieve high coverage of the population defined as target, corresponding to women aged between 25 and 64 years old, results in decreased incidence and mortality by CC.<sup>1</sup>

It was observed that the women participating in this study had early sexual activity aged 14-38 years old. The initiation of early sexual activity that occurs before 18 years old is another risk factor for cervical cancer, since, until this age the uterine cervix is training and there is instability of hormone levels, which emphasize women's vulnerability to acquire any complications arising from infection by sexually transmitted diseases, including HPV.<sup>20</sup>

Regarding the pregnancy, most women already had one, with the largest number of children equivalent to four. A survey reveals that half of its participants are multiparous, more often up to three children, also emphasizing that the relationship of this risk factor with HPV infection is not fully understood.<sup>21</sup> In a study in Bauru, São Paulo, Brazil, similar results were shown where 69.5% of women did not know which report risk factors for the development of CC<sup>22</sup>. In another survey, the lack of personal hygiene and abortion was mentioned among other factors, which depicts that there is little knowledge about it.<sup>23</sup>

When questioned about the risk factors for the development of cervical cancer, there was little knowledge about it. A similar study also demonstrated lack of knowledge of women

about the risk factors for the development of cervical cancer, although the sample has said all risk factors for the disease, little is mentioned in the answers about HPV. This study also adds that even with the offered guidelines and/or received on the risk factors and its prevention, behavioral changes are inherent in every person, culture and social environment.<sup>24</sup>

The interviewees showed great concern facing the possibility of getting cervical cancer, especially if they do not perform preventive examinations periodically. The meaning attributed to cancer is still a disease that threatens life, representing a series of symbolic fusions that may cause unwanted effects, such as fear, worry, insecurity.<sup>25</sup>

All women are concerned with the prevention of cervical cancer. A study mentioned that women had a relatively low level of ignorance in relation to the main control actions for prevention of cervical cancer.<sup>23</sup>

As for the control of the CC, a secondary prevention strategy based on Pap smear testing of the cervix or preventive examination have good results and they have been held for almost four decades.<sup>26</sup>

Regarding the participation in educational activities developed by IES, most women mentioned have participated. It is known that the dissemination of information on health education through the development of educational activities that promote skills and attitudes to health care is critical throughout the life cycle, aimed at prevention and health promotion, and should take place in different collective spaces, including in the workplace. 11,27

It was found that all women have knowledge about preventive examinations for cervical cancer, when mentioning they knew of the existence and purpose of the examination. However, 73.2% of them know it improperly, because they did not know rightly what its purpose is. Other studies have shown that there is a lack of adequate knowledge of preventive examinations for cervical cancer, causing women to have doubts about the real value of this exam, worrying fact, since this knowledge can hinder the periodic search for the examination by woman. 9-28

It was observed that the attitudes reported by participants were considered appropriate because, 98.5% reported being required to perform the test periodically, correctly indicated the reasons given in the survey to do so, they are preventing cancer in general or prevent cervical cancer. Knowledge, attitudes and practices of employees...

A study in two Health Units of Primary Care in Rio de Janeiro, Brazil brought similar results, where 95.0% of participants considered necessary and required the examination, although showing gaps in knowledge and practices. 15

As recommended by the Ministry of Health in Brazil, the completion of the screening test as an early detection method for cervical-uterine lesions triggered by HPV and its complications, should prioritize women who have had sex since become exposed to infection virus, and attention to those aged 25 to 64 years old at increased risk for the development of CC, in view of the exam as of fundamental importance for the early detection of HPV and consequent reduction in morbidity and mortality from the disease. 1,4

For a proper practice, 94.3% of participants said they had the last preventive examination in more than three years. Corroborating this study mentioned a participants also had proper practice of preventive CC examination, carry it out with an interval of three years, after two negative tests, annually, even without pointing their purpose or achievement of reasons, adding the importance of health education as a tool for the control of the CC. 12 This study showed that women participants have information about the preventive examination of CC, however, there is a need to investigate how and what they know specifically.

The limitations of the study were the several variables that permeated the analysis of knowledge, attitudes and practice of preventing cervical cancer of women participants and the results were collected in a single public university. These disadvantages restrict the generalizability of the results. Nevertheless, these limitations invalidate the study, the results stimulate the continuity of this type of evaluation with a larger group for a longer time and with more detailed measurement criteria for a possible confirmation of the reported results.

#### **CONCLUSION**

The employees of the IES had high level of education. However, even though existence of preventive examinations for cervical cancer had inadequate knowledge about their real purpose, the early detection of precursor lesions of cervical cancer. This enables to realize that not always, the high education requires of specific knowledge, although it can facilitate learning. Still, these women had adequate attitudes and practices when they learned of the need

to take the exam regularly, and indeed perform in a range of up to three years.

role of health professionals educators and highlighted as health promoters, and their influence compared to the knowledge, attitudes and practices of women, for the preventive examinations for cervical cancer, since these were highlighted in this study, as the main informants on the exam. Thus, the prospect of intervening more targeted and effective, health professionals since their formation process, should develop language and/or improve guidance methodology that allows understanding of the examination, its purpose, advantages and benefits for women's health.

In order to promote the creation of teaching and learning spaces not only in external general community while in training field, but also in the academic community, it was observed the need to develop educational activities focused on this issue to strengthen the daily life of these women the process of autonomy, search actions promoting health, linked to the commitment and performance of health courses.

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Submission: 2015/06/14 Accepted: 2016/07/03 Publishing: 2016/01/08

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