FACTORS RELATED TO PARTICIPATION IN THE COLPOCYTOPATHOLOGICAL EXAMINATION IN THE MUNICIPALITY OF CERRO AZUL

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ABSTRACT
This study aims to identify the factors related to participation in the colpocytopathological examination for women aged between 25 and 64, registered at the Primary Family Health Care Unit, in the municipality of Cerro Azul, state of Paraná, Brazil, in June and July 2012. A descriptive research survey of the exploratory descriptive type was carried out, using semi-structured interviews with open and closed questions for collection of data. The data was analysed by simple statistics and content analysis. The sample consisted of 81 women, of whom 54 (66.6 %) were able to highlight the importance of the exam. Regarding the frequency of the examination, 39 (48 %) women have the test annually while 12 women (15%) have never had the test at all. When asked why they rarely or never had the examination performed, most people said it was due to shame in being exposed to the health professional (65.51% of the respondents). It was also observed that fear of the result of the colpocytopathological examination and shame in being exposed were the main factors that influenced the women's decisions about whether or not to be subjected to the examination.

Keywords: Neoplasms of the Cervix. Pap (Papanicolaou) test. Women's Health.

INTRODUCTION
Cancer of the cervix takes between 10 and 20 years to develop and expresses itself through intra-epithelial changes which could develop into a malignant neoplasm. In this way, it can be understood that the illness can be avoided through prevention and early diagnosis(1).

The risk factors for cancer of the cervix are related to early start of sexual activity, infection with Human Papillomavirus (HPV), multiple sexual partners, precocious pregnancy, cigarette smoking, use of oral contraceptives and low social and economic level(2).

An important tool in diagnosis of cervical cancer is the colpocytopathological exam created by Greek physician Georgios Nikolaou Papanikolau in 1923, which later became known as the preventive test or the Pap Test, and which was developed to identify malignant or premalignant cells obtained in the region of the external orifice of the cervix and the vaginal channel(3). This examination is simple, painless, efficient and easy to perform, being acclaimed internationally. Its regular use reduces the death rate of women from cervical cancer by up to 70%.(1)

As shown by the National Cancer Institute (Instituto Nacional do Câncer - INCA), cancer of the cervix is the second most common cancer among Brazilian women, having been the cause of 5,063 deaths in 2009, being the fourth largest cause of death among Brazilian women. In 2013, it has been estimated that 17,540 new cases of the disease have been diagnosed(4).

In the current social context, the secondary prevention of cancer of the cervix has been centralised on tracking sexually active women by means of the colpocytopathological test. This test was adopted for tracking in many countries back in the 1950s, to identify pre-cancerous lesions that, if treated, reduce the occurrence of the invading cancer and, as a result, the mortality from cancer of the cervix(4).

Brazil was one of the first countries to use the colpocytopathological test in the state health network, but the women who have benefited are still only a small percentage of the female population, with cover not exceeding 8% of
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Women aged over 20 years old. This goes against the recommendations made by the World Health Organisation (WHO) that recommends coverage of between 80 and 85% of the female population aged between 25 and 59\(^5\).

In order to create a database of tracking data and diagnosis in Brazil, the Ministry for Health created the programme known as SISCOLO (Information Service on the Cervix) which, through its features, make it possible for the health institutions to manage the exam, identifying target women, generating reports with information necessary for planning and campaign actions to encourage participation in the testing process\(^1\).

Examination on a regular basis is essential, as when the disease is diagnosed early and appropriately treated, there is a 100% chance of cure\(^4\). In this way, Nursing carries out an essential role for their prevention of cervical cancer, as the nurse is a skilled and active professional person within this process, making a significant contribution to the success of the programmes in place to prevent cancer of the cervix\(^6\).

Therefore, we have based ourselves on the following guiding question: What is the local reality of women registered at the Primary Family Health Care Unit (UAPSF) in the municipality of Cerro Azul, State of Paraná, Brazil, which have an effect on the participation in the colpocytopathological examination? Therefore, the presente study seeks to assess factors related to the participation in the colpocytopathological examination by women registered at the Primary Family Health Care Centre (UAPSF) in the municipality of Cerro Azul, State of Paraná, in Southern Brazil.

**METHODOLOGY**

The presente study used descriptive research as its methodological research, with a quantitative and a qualitative approach. The study was performed at the Primary Family Health Care Centre (UAPSF), in the municipality of Cerro Azul, in the Greater Curitiba Metropolitan Area and about 78 km from Curitiba, the capital of the state of Paraná, Brazil. The estimated population of the municipality is 16,938 people, of which 4,808 live in the city and the other 12,130 in the rural area. The average income per person is R$ 337.14 according to data presented, based on the minimum wage valid in 2010\(^7\). The municipality takes up a land area of 1,341.19 km\(^2\), and the plantation of citrus fruits is the city’s main economic activity.

The population of the study consisted of women who have signed up at the unit, with those between 25 and 64 years old being eligible for the study, as they belong to the group that is singled out by the Brazilian Ministry for Health, for the detection of cancer of the cervix.

Participants included in the study included all women served by the unit, in June and July 2012, the period during which the directors of UAPSF authorised the researchers to stay on site to carry out the study. The selection of the participants for the study has been determined by the spontaneous demand of this unit.

The collection of data was through a semistructured interview with open and closed questions, carried out in a room leased by the Health Unit. The closed questions investigated social, economic and demographic variables such as: age, marital status, educational level, number of pregnancies, family income and place of abode. The open questions investigated: the importance of the colpocytopathological examination as perceived by women; awareness of HPV and its link to cancer of the cervix by women; and also, in the perception of the women, the reasons that have led many women to not have the colpocytopathological examination.

The interviews were recorded and then fully transcribed for analysis. The quantitative variables were recorded, processed and then subjected to simple descriptive statistics techniques through Microsoft Excel®. The qualitative variables were discussed and analysed based on the studies published in periodicals indexed using the database of the Scientific Electronic Library Online (Scielo), with a time cutting for studies published over the last five years.

The research study complied with the standards mentioned in Resolution 196/96 of the National Health Council, relating to research with human subjects. This Project was approved by the Research Ethics Committee of the
Campos de Andrade University Centre, under protocol No. 440/2012. The participants were informed about the purpose of the study and also the methodology to be used. Anonymity was ensured by using a coding system based on the letter M followed by an Arabic numeral, in numerical chronological sequence as the interviews are conducted, which means M1, M2, M3 and so on in succession. All participants have agreed to participate in this study by means of an Informed Consent Form (ICF).

RESULTS AND DISCUSSION

A total of 81 women were interviewed during the study period, with the prevailing age bracket ranging from 25 to 30 years old (Table 1), corresponding to 49 (60.49%) of the women interviewed. This fact is in line with the findings of other studies that assess the execution of the colpocytopathological examination in the health network, where women aged under 35 prevail, possibly as these are the women that go to the health centres for reasons associated with child-bearing\(^2\). Women aged between 25 and 34 are the ones with the best cover of the colpocytopathological examination, as they seek medical help for antenatal care or family planning\(^8\). However, the risk of cancer of the cervix increases substantially between 45 and 49 years old, this being the age bracket with the lowest demand for the examinations performed.

In the study by Brischiliari et al.\(^8\), there was an assessment of 456 women aged between 45 and 69, to describe the tracking of the execution of the preventive examination within this age bracket, which identified a Pap Test tracking cover of 84.5%. The hormonal changes arising from this age bracket shall be taken into consideration for the risk of cervical cancer and other women’s tumours.

The lowest demand (16.06%) for the execution of the examination was for the age bracket between 46 and 64 years old (please see Table 1). This suggests that these women do not seek medical service as they are no longer concerned about aspects related to reproduction. A worrying fact is that the peak in occurrence of cancer of the cervix is in women aged between 40 and 60, and a small percentage among women under 30\(^5\).

In relation to educational level, 4.9% are illiterate, 33.3% have a primary education (Fundamental I), 20.9% have middle school education (Fundamental II), 30.8% completed high school and 9.88% have University degrees. Another cause for concern is the fact that failure to have the examination is more common among women with lower educational levels, which clearly shows the relationship between lack of knowledge regarding the examination and its benefits\(^6\).

In the item related to family income, 14.8% of all women said they earned less than one minimum wage a month, 79% earned between one and three minimum wages a month, and 6.1% earning four or more minimum wages. The low family earnings are directly linked to the low social, economic and cultural level, and have a direct influence on the early detection of cancer of the cervix, as women with low educational level and low family income are taken ill more often\(^5\). A low social and economic level strengthens the risk factors for the development of illnesses, not only through poor conditions of nutrition and housing, but also due to the participation of the women in preventive health measures\(^9\).

In relation to marital status, the interviewees in most cases were either married or in a stable relationship, this being observed in 70.38% of cases (57 subjects), while only 20.98% (17 subjects) were single (Table 1). In married women, the risk was due to the sexual behaviour of the partner, through possible extramarital relationships without using a condom\(^1\). However, in the case of single women, the multiplicity of sexual partners in sexual activities without precautions is strongly correlated to the increase in the occurrence of cancer of the cervix, given that most cases are observed in single women rather than in women with other marital statuses\(^5\). In the study conducted by Albuquerque et al.\(^2\), the marital situation was considered one of the risk factors for the development of cancer of the cervix.

In the next variable, number of pregnancies, most interviewees had between 1 and 3 pregnancies. This can be considered one of the risk factors associated to cancer of the cervix\(^10\). However, the condition of not having children is also associated to not having the preventive
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This situation arises from the direct relationship of accompaniment during the pregnancy, with gynaecologists (2).

In relation to place of abode, 67% live in the urban area of the municipality and 33% in the rural area (Table 1). As the characteristics of the municipality of Cerro Azul include a strong element of agricultural production, this means that a significant proportion of the women live in rural areas. This means that it is suggested that the low participation in the period considered could be due to the distance to be travelled to the health service points. Distance is indeed one of the factors that influences women when deciding whether or not to have the test, both positively and negatively, through the ease or difficulty of access (10).

In relation to the frequency of the examination, 48 of the women (59% of the universe considered) said they have the test done every year or every two years. Table 2 shows the predominance of the answers obtained.

Table 1. Social, economic and demographic profile of women who have had a colpocytopathological examination. Cerro Azul, Paraná/Brasil. June and July 2012.

<table>
<thead>
<tr>
<th>Variables</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 – 35 years</td>
<td>49</td>
<td>60.49</td>
</tr>
<tr>
<td>36 – 45 years</td>
<td>19</td>
<td>23.45</td>
</tr>
<tr>
<td>46 – 55 years</td>
<td>7</td>
<td>8.65</td>
</tr>
<tr>
<td>56 – 64 years</td>
<td>6</td>
<td>7.41</td>
</tr>
<tr>
<td>MARITAL STATUS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married/Stable Relationship</td>
<td>57</td>
<td>70.38</td>
</tr>
<tr>
<td>Single</td>
<td>17</td>
<td>20.98</td>
</tr>
<tr>
<td>Widowed</td>
<td>5</td>
<td>6.18</td>
</tr>
<tr>
<td>Divorced</td>
<td>2</td>
<td>2.46</td>
</tr>
<tr>
<td>EDUCATIONAL LEVEL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>4</td>
<td>4.94</td>
</tr>
<tr>
<td>Primary – Up to Year 4</td>
<td>27</td>
<td>33.33</td>
</tr>
<tr>
<td>Middle School</td>
<td>17</td>
<td>20.99</td>
</tr>
<tr>
<td>High School</td>
<td>25</td>
<td>30.86</td>
</tr>
<tr>
<td>University Graduate</td>
<td>8</td>
<td>9.88</td>
</tr>
<tr>
<td>NUMBER OF PREGNANCIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>13</td>
<td>16.05</td>
</tr>
<tr>
<td>1 to 3</td>
<td>53</td>
<td>65.43</td>
</tr>
<tr>
<td>4 to 7</td>
<td>15</td>
<td>18.52</td>
</tr>
<tr>
<td>FAMILY INCOME</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 1 Minimum Wage (MWg)</td>
<td>12</td>
<td>14.81</td>
</tr>
<tr>
<td>1 to 3 MWg</td>
<td>64</td>
<td>79.01</td>
</tr>
<tr>
<td>4 or more MWg</td>
<td>5</td>
<td>6.18</td>
</tr>
<tr>
<td>PLACE OF ABODE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>54</td>
<td>66.67</td>
</tr>
<tr>
<td>Rural</td>
<td>27</td>
<td>33.33</td>
</tr>
</tbody>
</table>

Table 2. Frequency of the colpocytopathological test. Cerro Azul, Paraná/Brazil. June and July 2012.

<table>
<thead>
<tr>
<th>Description</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never had the test</td>
<td>12</td>
<td>15</td>
</tr>
<tr>
<td>Rarely, had the test at some time in life</td>
<td>16</td>
<td>20</td>
</tr>
<tr>
<td>Every 2 years</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Annually</td>
<td>39</td>
<td>48</td>
</tr>
<tr>
<td>Every 6 months</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>81</td>
<td>100</td>
</tr>
</tbody>
</table>

Regarding the importance of the colpocytopathological test, 54 women (66.66% of the universe) knew the importance of having the test, while 11 (13.58%) said that the test was
important but didn’t know why, just that it detects something that is wrong, and then 16 (19.75%) of the women could not say why it is important.

The statements made by the women who knew how to justify the importance of the exam mentioned care with prevention of cancer of the cervix and sexually transmitted diseases (STDs). Some statements:

Look, as far as I am aware this is a preventive exam, to prevent the cancer problem (M4).

To prevent some cancer of the uterus [...] some sexually transmitted disease (M15).

It is important for prevention of cancer (M34).

Yes, the exam is extremely important for women’s health, as it detects some STDs very early, and also prevents cancer of the cervix (M56).

Out of the 81 women investigated, 27 (33.3%) carried out the colpocytopathological examination without any specific knowledge about the need for the examination or about why it is important. Knowledge about the importance of the examination is not the main or the decisive factor which makes the women have the test, there is a need for willingness and personal conviction, to overcome insecurity and other types of block, enabling the voluntary act of going to find prevention. For this reason, the participation of health professionals in the activity of informing and educating the community for health care is, indeed, extremely important(10).

This fact can be associated to lack of knowledge about women’s health, with the consequence being low awareness of the importance of the colpocytopathological examination.

Regarding awareness of the interviewees about HPV, 57 (70.37%) of the women could not say, while some commented that they had never heard of it and others confused it with the Human Immunodeficiency Virus (HIV). A total of 15 (18.51%) women could say something about it and, out of this total, 11 (13.58%) said that it was a sexually transmitted disease (STD) but could not see a relationship between HPV and cancer of the cervix; four women (4.93%) had heard about it on television or through someone’s comments, but at that moment could not explain that it was HPV; five (6.17%) of the women knew that it was HPV and also knew about the connection with cancer of the cervix, this being a very small number of women with knowledge about an extremely important issue within the general context of women’s health.

In these findings, we see that most of the women are unaware of the aetiological cause of cancer of the cervix, which could explain the high rate of occurrence and also the advanced stages of the disease.

Here we present some statements made by these women:

This one, I’ve never heard of it (M1).

I forgot [...] I’ve heard of it, it is caused by cancer yeah (M13).

No [...] never heard of it (M23).

Well, I know it’s an illness yeah, but don’t know much [...] you can catch it through sex yeah [...] with cancer I don’t know much (M40).

AIDS? Through sexual relations [...] no (M42).

This is the virus that causes cancer, picked up in sexual relations (M34).

It is AIDS, yeah [...] no (M65).

I know it is a disease that is spread through sexual relations [...] no (M73).

I have seen on television that it is a virus, right , right, I don’t know. It is passed on by sexual relations [...] no (M80).

This lack of information about HPV can favour mistaken understanding and also have a negative effect on the behaviour of the woman carrying the disease and the people that are part of her social and family context. These findings confirm that many women in the world have no knowledge at all about HPV, and that this fact has been worrying the authorities that are responsible for women’s health(9). Professionals in the health area shall therefore stress educational measures as part of their contact with patients, especially those with a greater risk of contagious diseases.

Out of the 81 women interviewed, 68 (83.95%) said that the main barrier for having the colpocytopathological test is the feeling of shame of the health professional and also fear of the result of the examination. In addition, 17 (20.98%) of the women said that they did not
consider the test to be necessary, lack of information and lack of time, and four (4.93%) women were not able to say why they refused to have the examination.

Therefore, most of the women mentioned shame and fear, as is made evident in the statements that follow:

There are many women, I think they are ashamed and do not participate (M15).

Normally fear and shame (M37).

I think it is shame [...] some women say it is shame, yeah (M40).

Shame, right [...] fear, like myself, for example, I take a long time to have the test, fear that something could be wrong, lack of information (M78).

Because of the way the test is conducted, because it [...] shame in taking off your clothes, these things, I think that’s it (M4).

Shame and fear, you know, of discovering that something is wrong (M56).

The fear and shame that most women feel when they are exposed to the examination are largely related to the impersonal nature of this test, which is an invasive method with exposure of the body, which could make the sexuality issue come to the surface, conditions which are still largely taboo for women, which could in turn jeopardise the participation in the examination. The colpocytopathological examination exposes the woman’s intimacy, her values and creeds, and feelings of shame and fear are experienced by the woman during the procedure.

The identification of the factors that lead women not to have the colpocytopathological test is essential so that preventive campaigns can be successful. The approach implemented by the health professionals involved shall permeate the specific characteristics of each region, each culture, each social reality, to establish ties with women permeating the prevention of cancer of the cervix.

Thus, intervention through health policies that make access by this population easier become essential in order to reach the goals established for the prevention and control of cancer of the cervix. Implementation of prevention guidance aimed at specific segments of the population, including diversified language and times, making women’s access easier, can be another tool to be considered when tackling cancer of the cervix.

CONCLUSION

The main factors related to participation in the colpocytopathological examination, as investigated by this study, correspond to the fact that 66.66% of all women considered highlight the importance of this examination. In the sample analysed, there is prevalence of women living in the urban area, with a monthly income of between one and three minimum wages, literate, married or in stable relationships, and with one to three pregnancies to date. The lowest demand (16.06%) for the examination is for women aged between 46 and 64.

We also noticed that the fear of the result of the colpocytopathological examination, and also the shame of having to expose herself to the health professional (65.51%) were the factors that most influenced the women’s decisions about whether or not to have the examination.

These factors shall therefore be considered by health management organisations as the most important barrier to be overcome as part of the actions and interventions in the area of women’s health in the city of Cerro Azul, which has cultural characteristics highly diverse from those of major urban centres, mainly referring to the social circles of the inhabitants.
mulheres, dessas, 54 (66,6%) mulheres souberam destacar a importância em realizar o exame. Em relação à frequência de realização do exame 39 (48%) das mulheres realizam o exame anualmente e 12 mulheres (15%) nunca realizaram. Quando questionadas por quais motivos raramente ou nunca realizavam o exame, a maioria respondeu que era por vergonha do profissional de saúde ou por medo do resultado do exame sendo (65,51%) das entrevistadas. Observou-se que o medo do resultado do exame colpocitopatológico e a vergonha de se expor ao profissional de saúde foram os fatores que mais exercem influência na decisão das mulheres em realizar ou não o exame.


FACTORES RELACIONADOS CON EL INGRESO EN EL MUNICIPIO DE EXAMEN COLPOCITOPATOLÓGICO CERRO AZUL

RESUMEN
Este estudio tiene como objetivo identificar los factores relacionados a la adhesión de la prueba de Papanicolaou por mujeres de 25 a 64 años , inscriptas en la Unidad de Atención Primaria a Salud de la Familia , del municipio de Cerro Azul , Paraná/Brasil, de junio y julio de 2012. Se realizó una investigación cualitativa del tipo descriptiva exploratoria, por medio de entrevista semiestructurada con preguntas abiertas y cerradas para la recolección de los datos. Éstos fueron analizados por medio de estadística simple y análisis de contenido. La muestra estuvo compuesta por 81 mujeres, de las cuales 54 (66,6 %) supieron destacar la importancia de realizar la prueba. En cuanto a la frecuencia de realización de la prueba 39 (48%) de las mujeres realizan la prueba anualmente y 12 mujeres (15 %) nunca la han realizado. Cuando se les preguntó por qué razones raramente o nunca la han realizado, la mayoría respondió que sentía vergüenza del profesional de la salud o por miedo del resultado de la prueba, siendo el 65.51 % de las encuestadas. Se observó que el miedo del resultado de la prueba de Papanicolaou y la vergüenza de exponerse al profesional de salud fueron los factores que más ejercen influencia en la decisión de las mujeres para llevar a cabo o no la prueba.

Palabras clave: Neoplasias del cuello uterino. Prueba de Papanicolaou. Salud de la mujer.

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