

INADEQUATE PRACTICE RELATED OF THE PAPANICOLAOU TEST AMONG WOMEN

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ABSTRACT

Objective: to identify the factors related to inadequate practice of the Papanicolaou test among women in northeastern Brazil.

Method: cross-sectional study using a KNOWLEDGE, ATTITUDE AND PRACTICE inquiry, performed from June to October, 2013, with 240 women aged between 24 and 59 years.

Results: inadequacies were observed, particularly in knowledge, because, despite having information about the examination, it was only used to detect sexually transmitted infections. Regarding the issue of practice, it was noted that single women and those up to 29 years of age were more likely to present inadequate practice than the older and married women, increasing the likelihood of developing cervical cancer. The greater difficulty for performing the examination was the lack of materials (68.1%).

Conclusion: clarification for women regarding the examination requires effective communication between the users and health professionals, as well as guarantees and support for the continuity of care by managers.

DESCRIPTORS: Cervix neoplasms prevention. Women's health. Papanicolaou test.

PRÁTICA INADEQUADA DE MULHERES ACERCA DO PAPANICOLAOU

RESUMO

Objetivo: identificar os fatores relacionados à prática inadequada do exame Papanicolaou em mulheres do interior do Nordeste brasileiro.

Método: estudo transversal, no qual se utilizou o inquérito conhecimento, atitude e prática, no período de junho e outubro de 2013, com 240 mulheres entre 24 e 59 anos.

Resultados: observaram-se inadequações, principalmente no conhecimento, pois, apesar de possuírem informações sobre o exame, utilizavam-no apenas para detectar doenças sexualmente transmissíveis. No quesito prática, percebeu-se que mulheres solteiras de até 29 anos apresentam maiores chances de prática inadequada do que aquelas com maior idade/casadas, aumentando a probabilidade de desenvolver câncer do colo do útero. A maior dificuldade para a realização do exame foi devido à falta de material (68,1%).

Conclusão: o esclarecimento às mulheres acerca do exame necessita de comunicação efetiva entre usuárias e equipe de saúde, além da garantia e suporte à continuidade do cuidado dos gestores.

DESCRIPTORES: Prevenção de câncer de colo uterino. Saúde da mulher. Teste de Papanicolaou.

PRÁCTICA INADECUADA DE MUJERES SOBRE LA PRUEBA DE PAPANICOLAOU

RESUMEN: El objetivo fue identificar los factores relacionados con la práctica inadecuada de Papanicolaou en mujeres en el interior del noreste de Brasil. Estudio transversal en el cual se utilizó la escala de conocimientos, actitudes y prácticas, en junio y octubre de 2013, con 240 mujeres de entre 24 y 59 años. Se observaron deficiencias en el conocimiento, porque a pesar de tener información sobre el examen, este era practicado sólo para la detección de enfermedades de transmisión sexual. En el ítem práctica, se percibió que las mujeres solteras de hasta 29 años presentaban mayores chances de práctica inadecuada cuando comparadas con aquellas mayores/casadas, lo que aumenta la probabilidad de desarrollar cáncer de cuello uterino. La mayor dificultad para el examen se debió a la falta de materiales (68,1%). Al final, la explicación a las mujeres sobre el examen requiere de una comunicación efectiva entre los usuarios y los profesionales de la salud, así como la garantía y soporte continuo de la atención por parte de los administradores.

DESCRIPTORES: Prevención de cáncer de cuello uterino. Salud de la mujer. Prueba de Papanicolaou.

INTRODUCTION

Cervical cancer (CC) is considered a public health problem due to high rates of prevalence and mortality in women in the productive phase and, therefore, constitutes a great challenge for the Unified Health System to implement strategies that promote early diagnosis and adequate treatment.¹ In Brazil, CC is the second most common tumor in the female population, behind only breast cancer, and the fourth leading cause of death for women by cancer, with 4,800 fatalities per year.²

The strategy used in recent decades, in several countries, for the early detection of this cancer is the Papanicolaou test, which must be performed in women aged 25 to 64 years who have had sexual activity. The examination should be carried out every three years, after two consecutive normal tests, performed with an interval of one year, with primary health care being the main gateway to this service.³

In northeastern Brazil, despite progress in the teams of the Family Health Strategy, there has been a reduction of 8% in coverage of cytopathology examinations. It should also be noted that this region contains the highest percentage of women who have never performed the examination or did it more than three years ago.⁴⁻⁵

Regarding the coverage of the examination in Brazil, there are few studies that show the reality of the northeast region, especially of the inner cities, which have, in most cases, human development indices (HDI) below the national average. The majority of studies show results from large urban centers, as well as from the south and southeastern regions, with the main characteristics observed in women not undergoing the Papanicolaou test being: low socioeconomic status, low education, low family income and belonging to younger age groups.³

A study conducted in the state of Ceará with 250 women in a primary care service found that older women (>35 years) with more education

(>9 years) showed higher percentages of adequate knowledge and attitude.⁶

Therefore, this study will help nurses and professionals of the multidisciplinary team working in the area of women's health in the northeastern region, especially in the inner cities, to reflect on the knowledge, attitude and practice of these women regarding the Papanicolaou test and on more adequate care in the prevention, early diagnosis, treatment and referral to specialized services for users with the greatest potential for developing cervical cancer. Thus, the study aimed to identify the factors related to the inadequate performance of the Papanicolaou test in women of northeastern Brazilian.

METHOD

This cross-sectional, quantitative study was based on a knowledge, attitude and practice (KAP) type household survey, conducted in nine health facilities in the urban area of a large city in the state of Ceará. The area has a HDI of 0.69, which is considered average, according to the United Nations Development Program, and has the lowest indicator of cytopathology examinations of the municipality.

The study population consisted of 10,159 women of childbearing age, according to the Primary Healthcare Information System (SIAB), and the sample size was calculated considering an error of 5% and 95% confidence interval, assuring statistical significance of the findings. The sample size calculation provided a sample of 240 women. The criteria used for determining the sample were adopted according to another study conducted in a similar situation.⁶ For sampling of the participants a proportion calculation was used for each of the nine teams of the study.

For data collection the women were initially approached in the waiting room of the health unit and asked to move to a comfortable room that favored privacy and confidentiality. As many

were awaiting care for themselves or other family members, they were assured that this would not be prejudiced. Thus, the study was carried out between June and October 2013, in which it was possible to attain the required number of subjects for the estimated sample. The inclusion criteria were: to be aged between 24 and 64 years, in agreement with the examination coverage recommendation of the Ministry of Health;³ to be in the unit at the time of collection, regardless of treatment; and to have initiated sexual life. The exclusion criterion was: to present some physical or cognitive condition that prevented communication at the time of the application of the instrument.

The data were collected through semi-structured questionnaires, prepared based on another study,⁷ including questions about sociodemographic, sexual and reproductive variables, assessment of knowledge, attitude and practice, as well as difficulty/ease of performing the Papanicolaou test in the Family Health Strategy. The questionnaires were applied by the researchers of the study and two undergraduate nursing students after eight hours of training. After this step, a pilot study was conducted with 25 users of another health district, allowing for adjustments to the legibility of the content.

With regard to the CAP, the study used the following adequation criteria:

a) Knowledge: Adequate - when the participant reported having heard about the examination, knew it was to detect cancer in general or specifically for cervical cancer, and was able to cite at least two required care actions that should be performed before the examination; Inappropriate - when the participant had never heard of the test or had heard, but did not know its purpose; or when she was unable to name at least two care actions required before the examination.

b) Attitude: Adequate - when the participant considered it necessary to perform the test periodically, considering that even though routine, she presented care for her health; Inadequate - when the woman considered it unimportant, unnecessary or had no opinion about the need for the examination and/or had other reasons to go to the health service for the examination other than the prevention of cervical cancer.

c) Practice: Adequate - when the participant had performed her last preventive examination within the previous three years; had returned to receive the last result and/or showed the test results to a health professional; Inadequate - when the woman

was last tested over three years before or had never performed the examination having already initiated sexual activity for more than one year; or did not return to receive the final examination result and/or did not show it to a health professional.

The data collected were double entered into an Excel® database. The consistency between the two databases was then checked. When there were inconsistent issues, the original questionnaire was referred to for correction. The database was transported to the Stata, version 12.0, program.

Descriptive statistical analysis was performed through absolute and relative frequency, followed by Pearson's chi-square test ($p \leq 0.05$) and odds ratio (OR) for the exposure variables for inadequate practice of the Papanicolaou test. The multinomial logistic regression technique was carried out, including variables with value of at least 20% ($p < 0.20$) in the crude analysis, through the discussion of the final adjusted model.⁸⁻⁹ The OR was chosen because in low prevalence outcomes, such as in the case of this study, there is little difference between the OR and prevalence ratio, as noted by other authors who used these measures.¹⁰

The standards for research with human subjects, of Resolution 466/12 of the National Health Council of Brazil, were followed. The project was registered in *Plataforma Brasil* and forwarded to the Research Ethics Committee of the Federal University of Ceará, being approved under authorization No. 229.552.

RESULTS

The study included 240 women, with the majority aged between 24 and 29 years (32.9%); married/stable union (76.7%); with elementary education (46.2%); catholic (85.8%); not working outside the home (62.5%); and with a family income between 1 and 2 minimum wages (83.3%).

Regarding sexual and reproductive issues, the majority of the participants had a steady partner (87.1%); did not use condoms (86.7%) or another contraceptive method (73.3%); had children (86.2%); no history of abortion (70%); or sexually transmitted infections (STIs) (98.3%); or uterine problems (83.8%).

Inadequacies were observed in the knowledge and attitude items (72.9% and 73.3%, respectively) and to a lesser extent in the practice (39.2%), as shown in Table 1.

Table 1 - Distribution of the participants according to evaluation data of the knowledge, attitude and practice. Ceará, Brazil, 2013. (n=240)

Component	Adequate		Inadequate	
	n	%	n	%
Knowledge	65	27.1	175	72.9
Attitude	64	26.7	176	73.3
Practice	146	60.8	94	39.2

Regarding the Papanicolaou test, 72.9% of the subjects had heard of the test, however, only 14.6% knew it was to prevent cervical cancer, with 17.1% saying that it was to prevent cancer, without specifying which type. The most commonly cited purpose was to detect STI/HIV (57.5%), and 10.8% did not know the purpose of the examination. When asking about the origin of this knowledge, 75% mentioned that it was from collective or individual educational activities with health professionals.

Considering care actions prior to the examination, 64.6% mentioned two actions and 25.4% did not know any. Among those mentioned, not having sex prior to the examination; trimming pubic hair; hygiene; and cleanliness were the main ones. In relation to the examination schedule, 52.9% said it should be done annually.

Regarding the attitude, 73.3% were considered inadequate. All the subjects said the examination was necessary, however, when the reasons were observed, 65.8% thought it was just routine and only 10% reported seeking it periodically with the aim of preventing cervical cancer.

In relation to the practice, although the adequacy of this item of the KAP was higher in relation

to knowledge and attitude, 39.2% of the participants presented inadequate practice. In this group, 86.7% said they had undergone the examination once in their lives, while 13.3% had never performed it. Among those who had performed the examination, 36.5% stated that this was less than one year before. Fear was highlighted as the main reason for not performing it (50%).

Regarding returning for the results of the examination, 92.7% returned to receive these, 6.7% were found to have not shown the test to a health professional, either due to institutional (84.6%) or personal reasons (15.4%).

In Table 2 the adjusted odds ratios are presented for the most representative variables, showing that age, marital status and inadequate knowledge influenced the inadequate practice. In the age variable, women between 24 and 29 showed the greatest chance (OR: 2.25) of being classified with inadequate practice compared to those of 50 to 64 (OR: 1.69) and 30 to 39 years (OR: 1.44). Regarding marital status, single women had a greater chance of inadequate practice (OR: 3.18) compared to those widowed/separated (OR: 2.8). The married women presented minimal risk.

Table 2 - Odds ratio (OR) values for the exposure variables for inadequate practice of the Papanicolaou test. Ceará, Brazil, 2013

Variables	Classification	n	%	X ² /p	OR (CI)	(OR (CI)) ^s
Age (years)	24 to 29	38	48.1	5.370	2.18(1.06-4.48)	2.25(1.04-4.90)
	30 to 39	25	35.2	0.146	1.28(0.61-2.70)	1.44(0.65-3.18)
	40 to 49	17	29.8		1	1
	50 to 64	14	42.4		1.73(0.71-4.24)	1.69(0.64-4.45)
Marital status	Single	12	60.0	8.160	2.88(1.12-7.41)	3.18(1.16-8.74)
	Stable union	63	34.2	0.017†	1	1
	Widowed/ Separated	19	52.8		2.15(1.04-4.12)	2.85(1.27-6.40)

	Illiterate	4	36.4	0.240	1	-
Education	Elementary	42	37.8	0.971	1.06(0.29-3.86)	-
	High School	36	40.4		1.19(0.32-4.36)	-
	Higher	12	41.4		1.23(0.17-1.95)	-
Steady partner	Yes	79	37.8	1.25	1	-
	No	15	48.4	0.2641	1.54(0.72-3.29)	-
Use condoms	Yes	24	42.1	0.270	1.17(0.64-2.14)	-
	No	70	38.3	0.604	1	-
Other contraceptive method	Yes	29	45.3	1.37	1.41(0.79-2.53)	-
	No	65	36.9	0.242	1	-
Abortion	Yes	30	41.7	0.27	1.16(0.66-2.04)	-
	No	64	38.1	0.604	1	-
History of STI*	Yes	1	25.0	0.360	1	-
	No	93	39.4	0.546	1.95(0.20-19.04)	-
Uterine problem	Yes	12	30.8	1.410	1	-
	No	82	40.8	0.234	1.55(0.74-3.24)	-
Inadequate knowledge	Yes	78	44.6	8.270	2.46(1.30-4.66)	2.90(1.44-5.85)
	No	16	24.6	0.004†	1	1
Inadequate attitude	Yes	77	43.8	6.040	2.15(1.15-4.04)	Removed‡
	No	17	26.6	0.014†	1	-

*STI: Sexually transmitted infection; †Statistically significant association considering $p < 0.05$; ‡Model only adjusted by the variables with $p < 0.200$; †Removed aiming for a better fit of the model.

Difficulties encountered in the realization of the Papanicolaou test in the Family Health Strategy

For 39.2% of the participants that presented inadequate practice, the main reasons for not per-

forming the examination were: embarrassment in front of the professional (27.6%); not liking the professional (20.8%) and lack of materials (68.1%), according to data from Table 3.

Table 3 - Distribution of the participants with inadequate practice of the Papanicolaou test, according to the difficulties encountered in performing this in the Family Health Strategy. Ceará, Brazil, 2013

Reasons given	Inadequate practice	
	n	%
There was no space	9	19.1
There was no material	32	68.1
There was no professional to perform the exam	6	12.8
Total	47	100

DISCUSSION

In the study, the participants had low levels of education and unfavorable socioeconomic conditions, which characterizes a large part of the Brazilian population, as well as those who present inadequate performance of the examinations. In the study, education influenced the knowledge of the women regarding the examination, as in other studies, as, not knowing the purpose of the examination or not knowing when to go to the health service to

do it, influence not performing the screening examination.⁶ In a study conducted in Bangladesh, a developing country like Brazil, it was found that the low level of education and knowledge generates less screening for cancer through the Papanicolaou test.¹¹

Regarding age, marital status and income, in this study, younger women (24 to 29 years) and those with lower incomes presented higher proportions of inadequacy in the knowledge item. This fact is different from other studies in which

older women usually have less adequate knowledge and attitude regarding the examination. In a study carried out in Uberaba/Minas Gerais with 200 women, the lack of knowledge about the Papanicolaou test was reflected in inadequate attitudes to the examination.¹² This may have been related to the restricted access of these women to healthcare or to the lack of information.

Concerning the practice, a study showed that inadequacy was related to being less than 36 years of age, not having a steady partner, living far from a health unit and performing the examination for the first time.⁶ However, in the present study, it appears that the age (24-29 years), marital status (single) and inadequate knowledge variables contributed to this reality.

A study with 246 women in Turkey, living in conditions similar to Brazil, found that 93.7% knew about cervical cancer, 68.0% had heard about the Papanicolaou test and 46.1% had undergone an examination at least once or more in their lives.¹³ The group of the present study showed more positive results because (86.7%) they said they had undergone the examination at some time in their life, while (13.3%) had never performed it.

Regarding the study profile, 32.9% of the younger women (24-29 years), pointing out that there is greater demand for health services in this age group; however, through the results encountered related to the inadequacy of the practice of this examination, this age group has shown increased vulnerability to cervical cancer, which requires the attention of the teams of the Family Health Strategy, in order to sensitize them and encourage them to perform the examination.

In the Northern region of Brazil, in the city of Manaus, a study with 285 women, with 152 being under 34 years of age, showed that the majority of the female participants (96.8%) received information about the Papanicolaou test from the health team, referred to as the main source of information about the examination, followed by other media (radio/TV, school, magazine/newspaper, friends/relatives, church). There was a statistically significant association between having performed the Papanicolaou test in the previous three years and the source of information about the examination.¹⁴ This reinforces the fact that educational activities are needed in primary care to sensitize women to perform the Papanicolaou test.

Regarding the inadequate knowledge variable, the women with this classification showed increased risk for inadequate practice. Thus, the

study participants did not have access to compelling information about the prevention of cervical cancer, causing them, therefore, to take an incorrect decision in relation to the care necessary for their own health. Therefore, health education programs should empower women in relation to the Papanicolaou test, not only for the increase of knowledge, but also in order to bring about positive change in the attitude of the women toward the examination.¹⁵

The findings show that, for the participants, the examination was performed with the aim of detecting sexually transmitted infections, revealing distorted information concerning the Papanicolaou test itself, as well as the modes of transmission and prevention; unlike the findings of another study¹¹ in which 85% of the women identified the examination as a procedure for the detection of the precursor lesions of cervical cancer, enabling an early diagnosis.

This scenario shows the need for health education activities for the population and the broad access of women to clear and consistent information that is culturally appropriate for each region, which should be an initiative of the health services at all levels of care. The staff of the Family Health Strategy need to pay attention to this reality, stimulating, through discussions and guidance on the subject, the initiative of self-care and encouraging women to voluntarily seek health services for the performance of the cytological examination. In this study, despite the setting for data collection being in the scenario of the Family Health Strategy, it was perceived that the women were not seeking the service for performance of the examination, but accompanying other relatives or for other health care.

The women in this study followed the ministerial recommendations for the examination, maintaining sexual abstinence. In relation to this issue, according to experts in the field, this recommendation is only justified when using condoms with lubricants or spermicides, since the presence of sperm does not compromise the microscopy.³

The frequency of the examination, according to recommendations, should be every three years, after two negative tests, with an interval of one year.² Analyzing the information obtained, it was concluded that no participant knew this recommendation, therefore, they must have been undergoing the examination unnecessarily, burdening the system and leading to an unrealistic increase in indicators related to the preventive examination at the federal, state and municipal levels. A study performed with 450 women in India found that 32.7% knew the

information and only 7.3% carried out the examination in the recommended period, corroborating this study with regard to incorrect frequency.¹⁶

A broad survey of 9,194 women aged 18-26 years in 25 countries across Asia, Africa and the Americas, noted that the cervical cancer screening practices were considered inadequate and efforts should be made to develop programs that can increase screening for cervical cancer,¹⁷ showing that this issue is wide ranging, requiring specific actions for change in the health promotion of women.

In relation to the attitude, researchers⁶ found that only 10% of women cited the prevention of cervical cancer as the reason for the examination; however, a study performed in northeast Brazil⁷ showed the opposite, since many of the subjects sought the examination with the aim of prevention. Perhaps the divergent results are linked to the variables of the sample at the time of each study, however, there is a need for good interpersonal relationships between users and healthcare professionals, establishing an empathetic relationship based on trust, which may contribute to the awareness of self-care.¹⁸

Considering the practice, among those who had never performed the examination, the majority mentioned fear as the main reason. In a study with Hispanic women, who lived along the US border with Mexico, fear of embarrassment, the pelvic examination and lack of access to care services¹⁹ were identified as barriers to screening. This feeling²⁰ may be related to unease faced with a real or imaginary danger, for women, as they do not know the examination and imagine that they will feel pain or discover a disease.

In this scenario, to deepen the study of human, especially female, sexuality is one of the requirements in the formation and practice of primary care nursing professionals so that they can direct their care toward the health needs of the population, in particular the health needs of the woman.²¹

Furthermore, it was verified in a study²² that integrality of the care for the woman is needed, considering the importance of good practice, of listening and of the bond in care for women, comprehending their concepts in relation to the Papanicolaou test. Therefore, the need can be perceived to develop studies that aim to construct interventions to confront this reality, increasing the knowledge of this public so that they increasingly seek actions for the prevention of cervical cancer and the promotion of sexual and reproductive health.²³

CONCLUSION

Regarding the factors associated with the realization of the Papanicolaou test in women of Northeast Brazil, inadequacies were mainly observed in the knowledge item because, despite having information about the examination, the majority of the participants highlighted the detection of sexually transmitted diseases as the reason for the examination.

It was observed in the practice aspect that the variables age, marital status and inadequate knowledge influenced single women and those aged up to 29 years to have more chance of presenting inadequate practice compared to those that were older and married.

It should be noted that, among these reasons, the lack of materials was still highlighted as a difficulty, according to the majority of the participants, and this fact in a unit can hide several causes: inadequate investment in public health, inadequate planning of the health services and inadequate logistics for the distribution of materials, among others.

From the findings, it is necessary to elucidate the factors that influence these women not to perform the test or to perform it for reasons different to its actual application, considering their culture, customs and health practices. Strategies are needed to encourage more young and single women to go to health facilities not only when faced with a sign or symptom, but for a preventive approach, seeking to encourage self-care.

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