# Performance of papa school during prenatal: Profile of pregnant women seen in a teaching assistance unit

Realização do papanicolau durante o pré-natal: Perfil das gestantes atendidas em uma unidade docente assistencial Desempeño de papa escuela durante el prenatal: Perfil de mujeres embarazadas vistas en una unidad de asistencia docente

#### **RESUMO**

Objetivo: caracterizar o perfil das gestantes atendidas em uma Unidade Docente Assistencial (UDA) com o enfoque no exame Papanicolau durante o pré-natal. Método: Trata-se de um estudo quantitativo e descritivo utilizando os prontuários entre os anos de 2020 e 2022 das usuárias atendidas na UDA que se localiza no município de Maceió/AL, como fonte de coleta de dados. Resultados: Os resultados obtidos evidenciaram que a maioria das gestantes se encontravam na faixa etária de 15 a 21 anos e não possuíam informações referente ao quesito raça/cor; 62,50% das gestantes iniciaram o acompanhamento do pré-natal no primeiro trimestre, realizaram de 4 a 6 consultas e apenas 4 de um total de 40 gestantes realizaram o exame citopatológico. Conclusão: O estudo relevou que a maioria das gestantes eram jovens, negras, primigestas e não realizaram o Papanicolau durante o pré-natal; sugere-se, portanto, novos estudos para identificar os motivos da baixa adesão.

DESCRITORES: Câncer de colo de útero; Pré-natal; Gestantes; Papanicolau.

#### **ABSTRACT**

Objective: to characterize the profile of pregnant women attended at a Teaching Care Unit (UDA) with a focus on the Papanicolaou test during prenatal care. Method: This is a quantitative and descriptive study using the medical records between the years 2020 and 2022 of the users assisted at the UDA located in the city of Maceió/AL, as a source of data collection. Results: The results showed that most pregnant women were aged between 15 and 21 years and did not have information regarding race/color; 62.50% of pregnant women started prenatal care in the first trimester, had 4 to 6 consultations and only 4 out of a total of 40 pregnant women underwent cytopathological examination. Conclusion: The study revealed that most pregnant women were young, black, primigravidae and did not undergo the Papanicolau test during prenatal care; therefore, further studies are suggested to identify the reasons for low adherence.

**DESCRIPTORS:** Cervical cancer; Prenatal; Pregnant women; Pap smear.

#### RESUMEN

Objetivo: caracterizar el perfil de las gestantes atendidas en una Unidad Docente de Atención (UDA) con enfoque en la prueba de Papanicolaou durante el control prenatal. Método: Se trata de un estudio cuantitativo y descriptivo utilizando los prontuarios entre los años 2020 y 2022 de los usuarios atendidos en la UDA ubicada en el municipio de Maceió/AL, como fuente de recolección de datos. Resultados: Los resultados mostraron que la mayoría de las gestantes tenían entre 15 y 21 años y no tenían información sobre raza/color; El 62,50% de las gestantes iniciaron control prenatal en el primer trimestre, tuvieron de 4 a 6 consultas y solo a 4 de un total de 40 gestantes se les realizó examen citopatológico. Conclusión: El estudio reveló que la mayoría de las gestantes eran jóvenes, negras, primíparas y no se realizaron la prueba de Papanicolaou durante el prenatal; por lo tanto, se sugieren más estudios para identificar las razones de la baja adherencia.

DESCRIPTORES: Cáncer cervicouterino; Prenatal; Mujeres embarazadas; Prueba de Papanicolaou.

RECEBIDO EM: 07/01/2022 APROVADO EM: 09/02/2023

### Rebeca Apolinário Sousa

Medical Students at Tiradentes University Center ORCID: 0000-0003-2966-5690

### Sara Mikaele Souza Santos

Medical Students at Tiradentes University Center ORCID: 0000-0003-2064-9328



Sousa, R. A., Santos, S. M. S., Santana, I. J., Almeida, P. V., Silva, M. B., Brasil, A. M. V., Araújo, L Performance of papa school during prenatal: Profile of pregnant women seen in a teaching assistance unit

# Ianne Jesus Santana

Medical Students at Tiradentes University Center ORCID: 0000-0002-3445-8189

#### Pedro Vitorino Almeida

Medical Students at Tiradentes University Center ORCID: 0000-0003-3682-8136

#### Margarete Batista da Silva

Master in Society, Technology and Public Policy. Professor of the nursing course at Estácio de Alagoas College ORCID: 0000-0003-4247-4709

## Allan Mike Vieira Brazil

Master in Health Education. Professor of the Medicine Course at the Tiradentes University Center (UNIT-AL) ORCID: 0000-0002-8841-5483

# Linda Concita Nunes Araujo

Nurse, graduated from Centro Universitário Tiradentes, Master in Nursing from Universidade Federal de Alagoas ORCID: 0000-0002-2834-0336

#### INTRODUCTION

ervical cancer can be defined as a condition that causes subsequent Intraepithelial transformations that in some cases, in the absence of treatment, culminate in invasive cancerous lesions. The Human Papilloma Virus (HPV) represents the main risk factor for cervical cancer, but it is necessary that other variants coexist with this infection so that the most basic changes progress to cancer itself, which can mentioning the typing and high viral load by HPV, number of sexual partners, high parity and early onset of sexual activity 1.

This type of cancer is the fourth most frequent cause of death in women worldwide, accounting for 311,000 deaths per year and one of the most frequent in the female population. In Brazil, a total of 6,627 deaths from this neoplasm were recorded in 2020, which represents an adjusted proportion of mortality from this cancer of 4.60 per 100,000 women <sup>2</sup>.

Early diagnosis followed by treatment of precursor lesions of cervical cancer can reduce the incidence of this type of cancer by 90%, this fact is due to the slow evolution of the disease. Therefore, it is undoubted that screening measures are protagonists of this scenario, this is justified because such conducts considerably modify morbidity and mortality and the course of the disease, thus conferring a greater expectation of survival in the female population 3.

The form of screening is through the Papanicolaou test, which can also be called Oncotic Colpocytology or "Preventive"; is the one used in the Brazilian population and allows the identification of suggestive cells from pre-invasion to malignant lesions, thus the extreme importance of the method becomes evident. Furthermore, it is worth noting that the Papanicolaou test can be performed by both doctors and nurses, therefore it has a greater number of professionals for its effectiveness, in addition to being low cost, easy to perform and painless for the patient, prerequisites that makes it a relevant and valuable strategy for the public health of the country 4.

In this context, it is necessary that all pregnant women are welcomed, sensitized and guided, through educational and preventive activities, about the need to perform oncotic Pap smears also during the pregnancy period. In addition, it is important to emphasize the statement that pregnant women have the same risk of developing cervical cancer as non-pregnant women and that they can follow the gynecological examination, including whatever the period of pregnancy., however, it is worth mentioning that it is preferable that the Papanicolaou be done by the seventh month. Therefore, it becomes even clearer that prenatal care is an excellent opportunity for screening for uterine cervical cancer, therefore, one should not miss the chance to carry out the preventive examination and for precautionary purposes, the same should be done in the first prenatal consultations 5.

Thus, the current study aimed to characterize the profile of pregnant women assisted in a Teaching Care Unit with a focus on the Pap smear during prenatal

#### **METHOD**

The study was defined as quantitative and descriptive, using the records of the Teaching Assistant Unit (UDA), located in the city of Maceió/AL, as a source of data collection. The medical records analyzed in this study refer to pregnant users assisted between the years 2020 and 2022.

Until the period of data collection, the Teaching Assistance Unitcovered 151 pregnant women aged up to 38 years old. For this study, all medical records of women in the gestational period between 2020 and 2022 were used, fed with the following information: age, gestational age at the first appointment, race, vaccination, rapid test, number of previous pregnancies, number of consultations performed in the prenatal period, morbidity during the gestational period and adherence or not to cytology.

The collection instrument was composed of the information contained in the medical records, which, in turn, can be defined as a document that has the purpose of recording data that refer to the patient and examinations performed by the same, whether complementary or physical examinations, followed by health professionals<sup>6</sup>.

Therefore, it is worth emphasizing that the medical records are extremely important, since they represent legal value and sources for epidemiological data. In addition, it is a valuable tool to assess the quality of services provided in terms of health. In this way, the need for the medical record in the context of patient care is explicit, and this is due to the fact that it offers information about the user's health history 6.

As an inclusion criterion, the medical records of women in the gestational period seen by the Teaching Care Unit between 2020 and 2022 who underwent or not the cytopathological examination regardless of age group were selected. Medical records without complete records referring to the prenatal period were excluded.

The study was previously approved by the Research Ethics Commit-(CEP), under number CAAE 60209922.4.0000.5641. After approval by the CEP and in possession of the approval document, a copy of the opinion was sent to the coordinator of the Teaching Assistance Unit, based on knowledge and authorization, data collection began. Contacts were made by medical students, linked to the Centro Universitário Tiradentes, trained in the guidelines, in accordance with the recommendations of the Ministry of Health.

The research, in turn, was developed in accordance with resolution 466/12 of the National Health Council of the Ministry of Health (CNS - MS) and resolution No. 510/2016 of the National Health Council of the Ministry of Health (CNS/MS). The collected data were recorded in proper forms and later typed in an Excel spreadsheet and analyzed using descriptive statistics in absolute and relative frequency.

#### **RESULTS:**

The data that make up the research were collected in the months of August and September 2022. During the collection process, numerous weaknesses were identified regarding the recording of information about pregnant women during prenatal care, since many medical records were incomplete. In addition, it was noticed that some consultations were no longer registered, thus making it difficult to find the appropriate segment to carry out the research. Therefore, after applying the inclusion and exclusion criteria, 40 out of 151 records were considered eligible.

The table below refers to the categorization of women during prenatal care. With regard to age group, 40.00% are between 15 and 21 years old, which corresponds to the highest percentage. The minority, who are between 34 and 38 years old, represents 12.50% of this population.

Regarding race/color, 45% of the medical records did not contain such information. However, 17 pregnant women identified themselves as brown, 03 white, 02 black and no yellow, which is equivalent to 42.50%, 7.50%, 5.00% and 0.00% respectively. Regarding the beginning of prenatal care, 62.50% of the women started the follow-up in the first quarter, 25.00% in the second and, finally, only 5.00% started the appointments in the third quarter. Regarding the number of appointments in the prenatal period, just over half (65.50%) of the pregnant women attended between 4 and 6, while around a third (32.50%) attended 7 to 9 appointments.

Regarding the history of personal antecedents, 19 patients were primigravidae, 07 were secundiparous, 08 terciparous and 03 quaternary. All pregnant women underwent the rapid tests recommended by the Ministry of Health. Regarding the immunization schedule, 80.00% of pregnant women had a complete vaccination schedule, while the rest were incomplete.

Regarding the cytopathological test, only 04 women out of a total of 40 underwent it and the other 36 were exempt. The number of pregnant women who culminated in the development of comorbidities during pregnancy corres-

Table 01 – Age range and race/color of the analyzed medical records of the pregnant women. Maceió, Alagoas, Brazil, 2022.

Age	N	%
15 to 21 years old	16	40.00%
22 to 27 years old	8	20.00%
28 to 33 years old	11	27.50%
34 to 38 years old	5	12.50%
Race/Color	N	%
It has not been identified	18	45.00%
Mixed	17	42.50%
Yellow	0	0.00%
White	3	7.50%
Black	2	5.00%
Source: Survey data, 2022.		

ponds to 06 women (15%), the other 34 (85%) did not develop any pathology during the gestational period.

### **DISCUSSION**

The medical records are entities that constitute sources of information regardless of the patient, and the same must always be fed back with the main data referring to the appointments carried out. Since, they are means of monitoring the conduct adopted by the professional and of support for the same in the face of lawsuits. However, what is seen in practice is an oversight in relation to filling in essential data that should be included in the document, which is a problem from the point of view of carrying out studies that are based on medical records, in addition to discontinuing the segment of patient care 7.

After analyzing the data obtained, it was found that the highest percentage of pregnant women were between 15 and 21 years old, corroborating the study by Fernandes et al., (2019), since Brazil is among the ten countries with the highest prevalence of teenage pregnancy. Although total fertilization rates are decreasing in women aged 10 to 19, this process has been occurring more slowly. Furthermore, the study demonstrates a significant percentage of women who gave birth between 34 and 38 years of age, which also indicates an increase in the tendency of women to get pregnant later 8.

Cytopathological examination is the screening method for cervical cancer, which is indicated for the target population aged between 25 and 64, where it should be performed every three years, after two consecutive normal annual examinations. In this context, the survey found that 60% of the women were in the recommended age range and yet the Papanicolaou test was not instituted <sup>3</sup>.

It is noteworthy in the data obtained that the majority of pregnant women who fall within the age range recommended by the Ministry of Health do

Table 02 – Medical records regarding the beginning of prenatal care. Maceió, Alagoas, Brazil, 2022

5 /			
Prenatal start quarter	N	%	
First	25	62.50%	
Second	10	25.00%	
Third	5	12.50%	
Number of appointments	N	%	
0 to 2 appointments	0	0.00%	
1 to 3 appointments	0	0.00%	
4 to 6 appointments	27	67.50%	
7 to 9 appointments	13	32.50%	
Previous pregnancies	N	%	
0	19	47.50%	
1	7	17.50%	
2	8	20.00%	
3	6	15.00%	
Source: Survey data, 2022.			

Table 03 – Information regarding prenatal care recorded in the medical record. Maceió, Alagoas, Brazil, 2022.

Rapid test	N	%
Yes	40	100.00%
No	0	0%
Vaccination	N	%
Complete	32	80.00%
Incomplete	8	20.00%
Carrying out cytopathological examination	N	%
Yes	4	10.00%
No	36	90.00%
Source: Survey data, 2022.		

not carry out the cytopathological examination. The Family Health Unit in question is based on assistance provided by professionals linked to the health care team and professors, who understand the importance of the aforementioned test. Furthermore, it is known that pregnant women seek medical care more frequently, thus making prenatal care an opportune moment for the institution of early screening for cervical cancer.

When analyzing the data corresponding to the race/color item, 47.50% of the pregnant women are black (black and brown), thus, the discrepancy between the percentage of white women, which represents about 7.50%, is evident. This information corroborates data collected by the Institute of Applied Economic Research (IPEA), where the aforementioned study shows that 74% of SUS users identify themselves as black and brown, representing the vast majo-

In the past, despite Ordinance No. 344 of February 1, 2017, establishing an obligation to include race and color identification in all medical records, current research shows that approximately half of the reviewed medical records did not contain such information. This demonstrates the need for greater training and guidance on the part of the professionals responsible for recording this item, which is extremely relevant for detailing the profile of the population of Brazilian pregnant women 10.

The Ministry of Health's High Risk Pregnancy Manual refers to prenatal care as a window of possibilities to promote and restore women's health. Thus, the diagnosis and therapeutic institution of comorbidities during pregnancy is necessary, making it essential to stratify the risk of each pregnant woman so that the treatment is individualized according to her needs. The same, still mentions that although comorbidities during pregnancy present a high risk for maternal and fetal complications including premature birth and fetal deaths, there is still a very poor policy regarding the screening of diseases in this period. Thus, the research in question pointed out that 15% of pregnant women develop some type of disease during pregnancy and the other 85% did not present any complications

The Basic Care Notebook of the Ministry of Health recommends that all pregnant women have an early diagnosis of pregnancy so that the start of prenatal follow-up takes place in the first quarter, so that it is possible to identify and treat possible intercurrences, such as prenatal care, preeclampsia, eclampsia and fetal death, that is, conditions that may pose a risk to the mother and fetus. However, although the survey points out that a majority started prenatal care in the first quarter, approximately one third had their first appointment in the second and third quarter. This fact is not consistent with what is established by the Family Health Strategy, as these pregnant women should be identified and followed up in the first weeks 11.

Regarding the number of appoint-

ments recommends a minimum number of six appointments. Thus, the established schedule requires that consultations be monthly until the 28th week, between the 28th and the 36th week fortnightly and from the 36th to the 41st weekly. In this way, there is no prenatal discharge until the end of the delivery. However, despite the fact that 30% of the pregnant women in the study did not attend the minimum appointments, 70% of them contemplated the proposed follow-up, thus benefiting from the specific assistance provided at each appointment 11.

According to the Brazilian Institute of Identification (IBGE), fertility rates between 2000 and 2020 have been plummeting, where each Brazilian woman has an average of 1.72 children. Evidence from this study reinforces the quantitative data from the IBGE, where 47.50% of the pregnant women, which corresponds to 19, were primigravidae and 17.50% were in the second pregnancy. It is known that factors such as late first pregnancy, use of contraceptive methods, higher education and thus greater access to information contribute to the reduction of these rates 12.

Studies emphasize the importance of carrying out rapid tests during prenatal care, as such a measure aims at early diagnosis and treatment/monitoring, which makes it a decisive factor in reducing the vertical transmission of diseases. The study showed that 100% of the evaluated pregnant women performed all the rapid tests, which represents a good indicator in this regard, thus promoting positive repercussions on the rates of transmissibility of congenital infections<sup>13</sup>.

The Ministry of Health's primary care notebook recommends that, in the first appointment or even in the first quarter, rapid screening tests for Syphilis and/or VDRL/RPR and for diagnosis of the human immunodeficiency virus (HIV),be carried out, in order to prevent the main congenital diseases that have an impact on the survival of the newborn. Furthermore, if both rapid tests have negative results, it is necessary to perform them again in the third trimester through serology 14.

Based on the National Immunization Policy (PNI), Oliveira et al. (2020) highlighted the importance of applying a vaccination schedule consisting of vaccines against diphtheria and tetanus (dT), triple acellular bacterial (against diphtheria, tetanus and pertussis [dTpa)]), recombinant vaccine against hepatitis B and, according to seasonality, influenza vaccine, in pregnant women. However, the study does not indicate complete vaccination coverage for all pregnant women. Thus, 20% of them had incomplete vaccination, failing to contribute to the extinction of potentially preventable diseases during this period and increasing the risks and consequences that they entail for maternal and fetal health 15.

Prenatal care has as one of its pillars the use of preventive measures through active screening for diseases that most affect the female population. That said, screening for cervical cancer during pregnancy is extremely relevant, as it is one of the most recurrent in women. Therefore, even though it is clear that there is a great opportunity to perform cytopathology in prenatal consultations, the data collected in this research show that this moment is not being used adequately for this purpose 5.

Thus, making an overview of the total number of medical records that were used to carry out this study, only 10% of the women underwent the Papanicolaou test during the gestational period. This information reflects the need for the routine implementation of oncotic cytology in prenatal care by health professionals, whether physicians or nurses. In addition, they need to emphasize and clarify the benefits that early screening offers, in addition to demystifying that the test does not predispose any risk to fetal health. That said, it is likely that there will be greater adherence to its performance by pregnant women 5.

Therefore, it is essential for the health team to monitor pregnant women

Sousa, R. A., Santos, S. M. S., Santana, I. J., Almeida, P. V., Silva, M. B., Brasil, A. M. V., Araújo, L Performance of papa school during prenatal: Profile of pregnant women seen in a teaching assistance unit

during prenatal care so that the aforementioned women are given the opportunity to receive broad assistance related to health promotion, disease prevention and early diagnosis. Ratifying the importance of using this period to perform the Pap smear and thus demystify some rooted ideas, such as that the test cannot be performed in the first trimester, material cannot be collected from the endocervix and that there is a risk of miscarriage caused by the Papanicolaou 5.

## CONCLUSION

After the beginning of the preparation of this study, some points that deserve to be highlighted become perceptible: a priori, most medical records do not include the necessary information to obtain a more reliable analysis of the pregnant women in question. In the past, it was found that, many times, consultations were no longer included in the medical record, thus making it difficult to understand logically how the consultations that were not registered there were performed.

Regarding the profile of the assisted pregnant women, most of them were black, where only 7% of them considered themselves white, and they were in an age group between 15 and 38 years. Furthermore, the highest percentage of pregnant women started prenatal consultations in the first trimester of pregnancy and most of them contemplated the number of consultations recommended by the Ministry of Health. All pregnant women underwent the rapid tests that make up the prenatal routine and most contemplated the vaccination card in its entirety..

Despite the guidelines on performing the Papanicolaou test during prenatal care, in this study, low adherence was

identified among pregnant women. Although a portion of women are under 25 years of age, even so, when we exclude this public, the number is still reduced. It is noteworthy that there were no records in the medical records about the last cytopathological examination performed, which limits the analysis by the researchers.

Finally, it is proposed to disseminate the most incisive importance of performing the Papanicolaou test during the prenatal period. Also, promote awareness on the part of health professionals and encourage them to carry out and disseminate information about the positive points that the test offers for the health of the mother and fetus. New studies are suggested that can identify the reasons why there is low adherence with regard to cytopathological examination of the cervix during prenatal care.

# REFERÊNCIAS

- 1. Ministério da Saúde. Falando sobre Câncer do Colo de Útero. 2002: 67 (32): 67
- 2. Instituto nacional de câncer josé alencar gomes da silva. Estimativa 2020: incidência do Câncer no Brasil.
- 3. Moraes ISM, Rêgo SJ, Reis LA, Moura TG. A importância do exame preventivo na detecção precoce do câncer de colo uterino: uma revisão de literatura. Revista Eletrônica Acervo Enfermagem. 2021; v. 10, e6472.2021, p. 1-7.
- 4. Maciel LMA, Aoyama EA, Souza RAGA. Importância do exame papanicolau
- realizado pelo enfermeiro para o diagnóstico do câncer de colo uterino. Revista brasileira
- interdisciplinar em saúde. 2020; vol 2(2):88-92.
- 5. Tarouco VS, Piexak RD, Mattos LM, Martins PK, Hasan PV. A importância da realização do Papanicolau durante a gestação: Uma revisão integrativa. Research, Society and Development; 2020, v. 9, n.6, e63963263.
- 6. PAVÃO ALB, Andrade D, Mendes W, Martins M, Travassos C. Estudo de incidência de qualidade de eventos adversos hospitalares, Rio de Janeiro, Brasil: avaliação do prontuário do paciente. Revista Brasileira de Epidemiologia; 2011 e.14(4): 651-61, p. 1-11.
- 7. Camelo NA. Ética em pesquisa com seres humanos: Prontuários do paciente como fonte de formação primária [tese]. Flori-

- anópolis: Centro de Ciências da Educação da Universidade Federal: 2017.
- 8. Fernandes FCGM, Santos EGO, Barbosa IS. A idade da primeira gestação no Brasil: dados da pesquisa nacional de saúde. Journal of Human Growth and Development; 2019 v. 29.
- 9. Instituto de pesquisa econômica aplicada. 2017; 4 (1): 4.
- 10. Conselho regional de medicina do estado da bahia. 2017; 1
- 11. Ministério da Saúde. Caderno de Atenção Básica. Atenção ao Pré-natal de Baixo Risco; 2012. 320 (20): 320.
- 12. Instituto brasileiro de geografia e estatística. 2022; 1 (1): 1.
- 13. Araújo CA, Monte PCB, Haber ANCA. Avaliação do pré-natal quanto à detecção de sífilis e HIV em gestantes atendidas em uma área rural do estado do Pará, Brasil. Revista Pan-Amaz Saúde; 2018 v.9.
- 14. Ministério da Saúde. Manual de Gestação de Alto Risco. 2022; 659 (228): 659.
- 15. Oliveira SC, Silva TPR, Melendez GV, Mendes LL, Martins EF, Rezende EM, Matozinhos FP. Desigualdades sociais e obstétricas e vacinação em gestantes. Revista Brasileira de Enfermagem; 2020. 73(Suppl 4):e20190099.
- 16.Instituto Nacional de Câncer. Exames Citopatológicos do Colo do Útero realizados no SUS. 2021; 10 (1): 10.