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Equity of access to Pap smears: population-based study in Campinas, São Paulo, Brazil

Equidade no acesso ao exame de Papanicolaou: estudo de base populacional no município de Campinas, São Paulo, Brasil

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ABSTRACT: ***Objective:*** To determine the prevalence of the Papanicolaou exam among women aged 20 to 59 years in the city of Campinas (state of São Paulo, Brazil) and to analyze associations between this test and affiliation to private health insurance plans as well as socioeconomic/demographic variables and health-related behavior. ***Method:*** To do so, a population-based, cross-sectional study was carried out. Statistical analyses took the study design into account. ***Results:*** Despite the significant socioeconomic differences between women with and without private health plans, no differences between these groups were found regarding having been submitted to the Papanicolaou test. In fact no differences were found as to socioeconomic and health variables analyzed. Among all variables analyzed, only marital status was significantly associated with having undergone the test. The Brazilian public health system accounted for 55.7% of the exams. ***Conclusion:*** The present findings indicate social equity in the city of Campinas regarding the preventive exam for cervical cancer in the age group studied.

Keywords: Cervix neoplasms prevention. Health inequalites. Women's health. Vaginal Smears. Early detection of cancer. Cross- Sectional Studies.

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RESUMO: ***Objetivo:*** Analisar a desigualdade social na prevalência da realização do exame de Papanicolaou nos últimos três anos segundo filiação a planos privados de saúde e, também, em relação a outras variáveis socioeconômicas, demográficas e de comportamentos relacionados à saúde em mulheres de 20 a 59 anos, residentes no município Campinas (SP). ***Método:*** O estudo foi do tipo transversal, de base populacional, e as análises estatísticas consideraram o delineamento da amostra. ***Resultados:*** Apesar das significativas diferenças socioeconômicas existentes entre as mulheres filiadas e as não filiadas a planos privados de saúde, não foram observadas diferenças na realização do Papanicolaou entre os dois grupos, bem como em relação a todas as outras variáveis socioeconômicas e de saúde analisadas. Somente a situação conjugal revelou-se associada à realização do exame. O SUS foi responsável pela cobertura de 55,7% dos exames realizados. ***Conclusão:*** Os resultados apontam a existência de equidade social no município de Campinas quanto à realização do exame preventivo para o câncer do colo de útero na faixa etária estudada.

Palavras-chave: Prevenção de câncer de colo de uterino. Desigualdade em saúde. Saúde da mulher. Esfregaço vaginal. Detecção precoce do câncer. Estudos Transversais.

INTRODUCTION

Cervical cancer is the third cancer with the highest incidence in women worldwide, being the fourth leading cause of death by cancer among this population segment[1]. In Brazil, it ranks third among the malignancies that most affect women, with an estimative of 17,540 new cases in 2012[2]. Worldwide, there is an increased incidence of new cases and a decrease in the mortality rate from this condition[3].

The estimated incidence and mortality rates in Brazil have intermediate values in relation to developing countries, but are high when compared to developed countries, which have well-structured early detection programs[2].

Several factors are considered risks for the development of cervical cancer: early onset of sexual activity, multiple sexual partners, multiparity, history of sexually transmitted diseases, smoking and use of contraceptive pills[4-6]. Persistent infection with certain types of human papillomavirus (HPV), when there is an interaction with other factors, also presents itself as an important risk factor for the onset of the cells precursor to cervical cancer[4-7]. HPV is present in 99% of cervical cancers and, in 70% of these cases, types 16 and 18 are detected[4,8].

The global average prevalence of HPV infection in women who have normal results for cytology is estimated at 11.7%[9]. In Brazil, research shows that this prevalence varies between 10.4% and 24.5%[10].

The HPV vaccine is being introduced gradually in several countries as part of the strategy for the primary prevention of cervical cancer. Currently, it is recommended for girls aged 9–12 years who have not yet initiated sexual activity, so that the protective effect may only be

observed when these generations reach the age of increased risk of disease[11-13]. In Brazil, the National Immunization Program has been analyzing the adequacy of the introduction of the HPV vaccine in the immunization schedule, considering epidemiological, immunological, socioeconomic, technological and operational criteria[14].

In the current epidemiological context, cervical screening is widely recommended by medical societies and government programs as an effective method for screening and early detection of cervical cancer in sexually active women, with the reduction of mortality from this disease, observed in various parts of the world, being credited to this test[12,13,15-17].

In Brazil, the recommended interval is three years after two consecutive negative annual checkups for women aged 25 to 64 years[15]. The Pap smear is a, cheap safe, easy to perform test that is well accepted by the general female population. It is able to detect cervical cancer at an early stage, making it curable with relatively simple measures and thus allowing the disease to present a great potential for healing[15].

Despite the recommendation of the medical societies for the periodical performance of Pap smears, and despite the test being offered in primary care services, national and international studies have identified demographic, socioeconomic and geographic factors that limit access to screening. Among these factors are age, education, income, marital status, health status, membership to private health plans and access to health services, showing the need to the development of strategies for attracting women who did not perform the test properly[18-24].

Studies have consistently indicated the presence of social inequalities in access to this screening[19-21].

In Brazil, the reduction of morbidity and mortality for cervical cancer has been one of the priorities of the national policy of comprehensive women's health care, in which the Ministry of Health, in conjunction with states and municipalities, has been engaged to structure health services and improve access to the prevention program and follow-up of this condition[25].

Considering the relevance of cervical cancer and the potential for cure when diagnosed early, low cost and ease of performance of Pap smears, the national coverage target of the test and the results of previous research conducted in the city which indicated significant social disparity in the coverage of the test[18], this study aimed to detect the degree of existing social inequality in access to cervical screening test according to the possession of private health plan and other socioeconomic and health variables in the female population living in the urban area of the municipality of Campinas, São Paulo.

METHODS

This cross-sectional population-based study was developed with data from the Health Survey of Campinas (ISACAMP-2008), conducted with a sample of people living in the urban area of the municipality.

To obtain the ISACAMP-2008 sample, we used probabilistic, stratified and cluster sampling in two stages. In the first stage, 50 census tracts in the urban area of Campinas with probability proportional to size (number of households) were randomly selected. For the systematic randomized selection, sectors were ordered by the percentage of heads of households who were college educated. The survey aimed to obtain estimates for specific population subgroups: adolescents aged 10 – 19 years, adults aged 20 – 59 years and seniors aged 60 years or older.

The minimum sample size was estimated at 1,000 individuals for each of the domains, allowing the estimation of a ratio of 0.50, with maximum error between 4 and 5 percentage points, with a confidence interval of 95% (95%CI) and considering a design effect of 2. Considering the possibility of losses, 20% larger households numbers were randomly selected. To obtain the desired sample size for teenagers, adults and seniors, independent samples of 2,150, 700 and 3,900 households, respectively, were selected. In each household, all residents of the area for which the household was randomly selected were interviewed[a]. We used data from women aged 20 – 59 years for this study.

Information was obtained through a structured questionnaire in 15 thematic sections, with mostly closed questions, applied directly to the person drawn by trained interviewers. Questionnaires with incomplete or inconsistent information were returned to the field to be complimented.

The dependent variable for this study was the performance of a Pap smear. Regarding the test, were also analyzed: the last time it was performed, the reason for performing or not performing, knowledge about the test results and whether it was performed in the public or private sector. The main independent variable analyzed was having or not having a private health plan.

The following independent variables were analyzed:

- *Variáveis socioeconômicas e demográficas*: idade, cor de pele/raça (autorreferida), situação conjugal, religião, naturalidade, escolaridade, situação ocupacional, renda familiar mensal per capita (em salários mínimos) e número de bens duráveis. Para o cálculo da renda familiar per capita, foram considerados os valores dos salários mínimos vigentes no País por ocasião da realização do inquérito.
- *Variables of health-related behaviors*: physical activity in a leisure context at least once a week, smoking status (smoker, ex-smoker and non-smoker), weekly frequency of alcohol consumption and weekly consumption of fruits or vegetables.
- *Variables related to health status*: number of chronic diseases reported, hypertension, diabetes mellitus, common mental disorders assessed by the Self Reporting Questionnaire (SRQ-20), with the cutoff point used for common mental disorder being 7 or more positive responses and the presence of overweight using the body mass index (BMI = kg/m²) calculated based on weight and height.
- *Variables related to the use of health services and preventive practices*: dental visit during the year preceding the interview, undergoing a clinical breast exam in the year preceding

[a]Further details on the sampling process can be found on the website http://www.fcm.unicamp.br/centros/ccas.

the interview, performing a monthly self-examination of breasts and undergoing a mammography in the two years prior to the interview.

Data were entered into a database developed using EpiData, version 3.1. To perform the statistical analyzes, STATA 11 software (Stata Corporation, College Station, USA) was used, which allowed taking into account the variables of the sampling plan: clustering and weighting.

The distribution percentages were estimated according to sociodemographic variables, as well as variables related to the Pap smear and other preventive practices, of women with and without private health insurance, in addition to the prevalence and prevalence ratio and 95%CI of the examination according to the possession of health, and according to other socioeconomic and health variables, through Poisson regression.

The research project that resulted in this study was approved by the Ethics Committee of the School of Medical Sciences of *Universidade Estadual de Campinas* under protocol No. 932/2009, in addendum to public notice No. 079/2007.

RESULTS

Of selected households in the sample of adults, in 19.6%, the surveying of residents could not be performed due to refusal (10.1%), absence of the resident (3.7%) and other reasons (5.8%). Of the 1,082 adults found in the household that should be interviewed, 11.5% refused to participate.

For this study, data from a sample of 507 women aged 20 to 59 years were analyzed. In this age group, 46.4% of women in Campinas are affiliated with private health plans.

Table 1 shows the existence of significant socioeconomic inequalities between women who have health insurance and those who are dependent on the Unified Health System (SUS). Among those who reported having private health plans, higher proportions of white, catholic women, born in Campinas, with higher levels of education, income and number of durable goods, and who had a steady income, were observed.

Regarding the performance of cervical screening, it was observed that 86.2% (95%CI 82.6 – 89.1) of women aged 20-59 years living in Campinas were scanned in the last three years, and no statistically significant difference was observed in the examination among women who have and who do not have private health insurance. Only 6.8% of women of Campinas in this age group had never performed a Pap test (Table 2).

The main reason given for the performance of the test was doing it as a routine procedure (92.8%). The main reason cited by women who have never done the test, or who had done it over three years prior to the interview, was to think it was not necessary to perform it (Table 2), and these percentages did not differ between the two social segments analyzed.

Only 4.5% of women did not know the result of the last test, and in 3.1% of tests, results indicated some alteration, and these percentages did not differ between the two groups of women. Of the total screenings performed, the public sector accounted for 55.7%, and private health plans, 44.3%, while 8.2% of women who reported having health insurance had the examination performed by SUS (Table 2).

Table 1. Demographic and socioeconomic characteristics of women aged 20 to 59 years according to affiliation to private health insurance. Campinas, ISACAMP, 2008 – 2009.

Variables	n	Health insurance		Total
		Yes	No	
		n = 226	n = 282	n = 508
Age (years)				(p = 0.6630)
20 to 39	281	55.1	56.8	56.0
40 to 59	226	44.9	43.2	44.4
Skin color (self-reported)				(p = 0.0000)
White	370	86.9	62.1	73.6
Non-white	135	13.1	37.9	26.4
Marital status				(p = 0.0419)
Married	314	61.4	62.1	61.8
Separated/divorced	57	8.4	13.3	11.0
Widowed	12	12.9	3.2	23.2
Single	125	28.9	37.9	38.2
Religion				(p = 0.0000)
Catholic	251	60.9	39.5	49.5
Evangelic/Protestant	183	23.7	46.0	35.6
Other	74	15.3	14.5	14.9
Place of birth				(p = 0.0000)
Campinas	214	48.9	36.7	42.3
Other SP municipalities	130	32.2	20.0	25.7
Other states	163	19.0	43.5	32.0
Education (years)				(p = 0.0000)
0 to 4	88	7.5	25.2	16.9
5 to 8	131	14.1	35.1	25.3
9 or more	289	78.4	39.7	57.8
Employment status				(p = 0.0002)
Employed	307	68.1	54.3	60.7
Unemployed	201	31.9	45.7	39.3
Per capita household income (in minimum wages)				(p = 0.0000)
≤ 1	226	27.0	58.7	43.9
1 to 2.5	157	30.0	31.3	30.7
2.5 or more	125	43.0	10.0	12.6
Possession of durable goods				(p = 0.0000)
6 to 9	167	20.5	42.9	32.4
10 or more	277	77.9	35.6	55.4

Is worth mentioning that the absence of inequality regarding the performance of the cervical screening did not occur in relation to preventive practices on detection of breast cancer. The performance of the annual clinical breast exam and mammography in the

Table 2. Distribution of women aged 20 to 59 years according to variables regarding the performance of cervical screening and affiliation to private health insurance. ISACAMP. 2008 – 2009.

Variables	n	Health insurance		Total
		Yes	No	
Cervical screening				(p = 0.5889)
Never performed	34	6.1	7.4	6.8
Performed less than 3 years ago	437	87.9	84.7	86.2
Performed more than 3 years ago	36	6.0	7.9	7.0
Reason for not performing				(p = 0.1826)
It is not necessary	39	67.1	55.9	60.4
Had no guidance	6	8.1	10.5	9.5
Difficulty in scheduling	3	0	8.1	4.9
I'm a virgin/embarrassing exam	8	20.5	7.6	12.7
Other reasons	8	4.3	17.8	12.4
Reason for performing				(p = 0.4473)
Routine	435	93.7	92.1	92.8
Check on health problems	20	4.6	4.0	4.3
Others	14	1.7	3.9	2.9
Knowledge of results				(p = 0.3310)
Yes	449	96.9	94.3	95.5
No	21	3.1	5.7	4.5
Results				(p = 0.2734)
Normal	435	97.7	96.2	96.9
Alteration	14	2.3	3.8	3.1
Financing of the test				(p = 0.0000)
SUS	255	8.2	99.2	55.7
Company health plan	35	16.1	0	7.7
Individual health plan	155	74.7	0	35.7
Others	4	9.4	0.8	8.8
Monthly breast self-exam				(p = 0.2065)
Does not perform the self-exam	364	78.8	73.8	76.1
Performs the self-exam	239	21.3	26.2	23.9
Clinical breast exam				(p = 0.0000)
Never performed the exam	87	10.0	25.1	18.1
Performed in the last year	320	77.1	59.0	67.3
Performed over 1 year ago	69	12.9	15.9	14.5
Mammography				(p = 0.0019)
Never performed	45	12.0	27.0	19.7
Performed less than 2 years ago	142	76.0	52.8	64.0
Performed more than 2 years ago	37	12.0	20.2	13.3

two years preceding the interview was significantly more frequent in the women affiliated to private health plans, with no difference between groups in the completion of the monthly breast self-examination (Table 2).

Table 3 shows that there was no difference in the prevalence of having Pap smears for all socioeconomic variables. Only the variable "marital status" was associated to the implementation of cervical screenings. The absence of differences is also found in Table 4 regarding the variables of health behaviors and mortality.

Table 3. Prevalence of the performance of cervical screening in the last 3 years according to demographic and socioeconomic variables. Campinas, ISACAMP 2008 – 2009.

Variables	n	Prevalence	PR (95%CI)
Age in years		(p = 0.3203)	
20 to 39	281	85.0	1
40 to 59	226	87.8	1.03 (0.96 - 1.10)
Skin color (self-reported)		(p = 0.2567)	
White	369	87.4	1
Non-white	135	82.4	0.94 (0.84 - 1.05)
Education in years		(p = 0.4861)	
0 to 4	88	81.8	1
5 to 8	130	85.3	1.04 (0.89 - 1.21)
9 or more	289	87.9	1.07(0.94 - 1.21)
Marital status		(p = 0.0002)	
Not married	193	78.6	0.86 (0.76 - 0.94)
Married	314	90.9	1
Religion		(p = 0.6021)	
Catholic	251	87.0	1
Others	256	85.4	0.98 (0.91 - 1.05)
Place of birth		(p = 0.5636)	
Campinas	214	87.7	1
Other SP municipalities	130	86.8	0.98 (0.90 - 1.08)
Other states	162	83.6	0.95 (0.86 - 1.05)
Per capita household income (in minimum wages)		(p = 0.2809)	
≤ 1	226	83.5	1
1 to 2.5	156	87.8	1.05 (0.96 - 1.14)
2.5 or more	125	89.0	1.06 (0.96 - 1.17)
Durable goods		(p = 0.2740)	
1 to 5	62	87.1	0.98 (0.86 - 1.12)
6 to 9	167	82.1	0.92 (0.84 - 1.02)
10 or more	277	88.4	1
Employment status		(p = 0.8670)	
Unemployed	200	85.8	1
Employed	307	86.4	1.00 (0.92 - 1.09)
Health insurance		(p = 0.3722)	
No	274	84.7	1
Yes	233	87.9	1.03 (0.95 - 1.12)

DISCUSSION

The study results reveal important social inequalities in living conditions and demographics between the segment of women covered by private health plans and those that are dependent on SUS, in the 20-59 years old age range population residing in urban areas in the municipality of Campinas. This finding is expected, considering the financial cost of membership in

Table 4. Prevalence of the performance of cervical screening in the last 3 years according health behaviors and morbidity. ISACAMP 2008 – 2009.

Variables	n	Prevalence	PR (95%CI)
Chronic diseases		(p = 0.8421)	
None	289	85.8	1
1 to 2	166	87.3	1.01 (0.94 - 1.10)
3 or more	44	84.2	0.98 (0.85 - 1.12)
Hypertension		(p = 0.5729)	
No	421	85.8	1
Yes	86	88.3	1.02 (0.93 - 1.13)
Diabetes		(p = 0.2691)	
No	479	86.4	1
Yes	24	83.6	0.96 (0.77 - 1.21)
Common Mental Disorder		(p = 0.3634)	
Absent	447	86.6	1
Present	60	83.4	0.96 (0.87 - 1.05)
Smoking habit		(p = 0.7045)	
Non-smoker	365	86.0	1
Smoker	84	85.8	0.99 (0.91 - 1.08)
Ex-smoker	57	89.7	1.04 (0.94 - 1.14)
Consumption of alcoholic beverages		(p = 0.2018)	
No	315	84.1	1
Yes	155	89.0	1.05 (0.97 - 1.14)
Weekly consumption of fruits or vegetables			
Up to 3 times	81	82.8	0.95 (0.91 - 1.08)
4 times or more	426	86.8	1
Physical activity during leisure		(p = 0.9552)	
Does not practice	383	86.1	1
Practices	123	86.3	1.00 (0.92 - 1.08)
BMI		(p = 0.8986)	
Normal	265	86.7	1
Overweight	147	85.0	0.98 (0.89 - 1.07)
Obese	95	86.5	0.99 (0.90 - 1.10)
Dental visit during the year preceding the interview		(p = 0.0637)	
No	207	82.1	1
Yes	300	89.0	1.08 (0.98 - 1.18)

private health plans; social disparity in relation to ownership of these plans is an reality in Brazil and other countries[27,28].

As for the performance of cervical screening in the three years preceding the interview, no difference between the prevalence of women affiliated and not affiliated to private health plans was observed, indicating that the public network of primary care in the city of Campinas have succeeded in promoting equity in access to Pap smears to expand coverage of the test. This finding differs from those observed in other Brazilian and foreign studies that identify higher prevalence of cytology examination in the segments of women who have private health plans[19,20,29].

The finding of equity, observed in relation to the possession of health insurance, is reinforced by verifying the absence of differences in the prevalence of having Pap smears for all socioeconomic variables. But equity does not manifest itself only in the coverage of the exam. There was also no difference as to the knowledge of the test results, nor as to the reasons for performing or not performing the test. This is the first Brazilian study, to our knowledge, that finds equitable access to Pap smears. Results of national surveys have shown significant social inequalities in access to preventive screening for cervical cancer[19,30,31]. Study conducted with data from the National Household Sample Survey (PNAD) of 2003, regarding the entire Brazilian population, showed that women with higher education and income were more likely to take the test for cytology, compared to women with lower education and income, respectively, OR = 5.14 and OR = 3.05[30]. In a study conducted in the State of Pernambuco, women with lower education levels were more likely to not performing a cervical screening (OR = 2.967)[32]. In relation to ethnicity, study conducted in Pelotas, Rio Grande do Sul, pointed out that non-white women (OR = 1.44) are more vulnerable to not performing the cervical screening than white women[33].

It is noteworthy that equity observed in this study results from recent processes, because a survey conducted in Campinas in 2001/2002, which analyzed a different age range from this study, observed significant social inequality in access to Pap smears regarding education and race/color[18]. The finding of equal access to cytology exams in Campinas generates an expectation that lower inequality can also be obtained for other preventive practices, as the network service gets quality and effectiveness. The finding also indicates that similar results compared to the Pap smear can be achieved in other locations in Brazil, as the coverage of the test expands.

This study also noted that the coverage of cervical screening in Campinas (86.2%) is above the minimum coverage recommended by the Ministry of Health, in the Pact for Life, which aims to the coverage 80% of the target women in the control of cervical cancer[34]. The coverage observed in Campinas is above the observed in the survey conducted in 2007 in 27 state capitals and the Federal District, which was of 80.9%[35].

In the present study, considering only women aged 40 – 59 years, the prevalence of examination was 87.8% (95%CI 82.7 – 91.5), showing an increase, although not statistically significant, compared to the percentage found in a previous study conducted in the city of Campinas, which was of 80.6% (95%CI 67.5 – 89.3)[18]. In the present study, age was not

associated to the performance of cervical screening, different from that observed in other national surveys[24,28,32]. Study carried out in the U.S. also found no association of age with the performance of cervical screening[22].

Marital status was the only variable significantly associated with the performance of cervical screening, similar to the findings of other studies that also found that women who are married or have partners have a higher prevalence in the test compared to those who do not have a partner[19,24,32,35]. This result could indicate that women consider that the Pap smear would only be necessary in situations of regular intercourse. It is understood to be under the responsibility of health services the disclosure of information through health education groups or in the waiting room, on the importance of the exam, regardless of the frequency of sexual activity, as a means of early detection of cervical cancer.

An increasing trend was observed in the municipality, although not statistically significant, of the proportion of Pap smear tests performed by SUS (55.7%; 95%CI 46.4 – 64.6) compared to that observed in a previous study conducted in 2001 – 2002 (43.2%; 95%CI 33.1 – 54.0)[18]. In this study, it was observed that SUS also conducted tests for women who reported membership in private health plans (8.2%), thus fulfilling one of its guiding principles: universality. The Ministry of Health, since 2006, through the Pact for Life, reaffirmed as a SUS priority the control of cervical cancer and, therefore, pointed out, with the states and municipalities, the need for reorganization of actions aimed at the early detection of this condition by expanding the supply of primary care in cytology not only as a component of the gynecological consultation[34]. The collection of Pap smear in Campinas is also performed by nurses, which helps to expand the supply of the examination in the health services of the municipal network[37].

Regarding the reasons for not having Pap smears, the study showed that women, affiliated or not affiliated with private health plans, reported as the main reason the exam not finding it to be necessary, and this result is similar to that found in a previous study conducted in Campinas, as well as in a research conducted in the city of São Paulo[18,38]. This finding points to the need for health services, public and private, to incorporate, systematically and continuously, educational activities for clarification about the importance of the exam to women.

The present study also showed that, of the women who underwent the Pap smear test, 92.8% did so as a routine test, and that only a small proportion of women (4.5%) were unaware of the outcome. And, as a very important finding, these percentages did not differ between the segments of women with and without private health insurance. The results show that the performance of the Pap smear test is being incorporated by women as a regular, routine care, and recognized as necessary for the maintenance of their health. And equity in access to knowledge of the test results indicates that the practice is not only accessible to all social segments of the municipality, but also that the organization of health services is being best suited to ensure the return of women to the service, and the opportunity for them to know the results of the test.

One limitation of this study is that the information on the performance of the Pap smear test and on the other variables was obtained through interviews and therefore are subject to memory and information bias. The respondent may have been mistaken as to the time elapsed from the last test, or may even have said that they were tested by considering that to be the appropriate and expected response. National[19,24] and international[21,22,38] studies carried out on the coverage of the Pap smear test have also used self-reported information. Studies carried out in the USA found a high correlation between self-reported data on preventive practices for various types of cancer, including cervical cancer, and data from medical records of people interviewed, pointing to interviews as a reliable and less expensive method for obtaining such information[39,40]. Another limitation is the cross-sectional design, which also restricts the ability to interpret the associations found as derived from cause-effect relationships.

On the positive side, the study shows the importance of conducting health surveys as tools for evaluating the incorporation of health care practices, more particularly the access to preventive examinations and therefore the possibility of monitoring the coverage of these exams and the social inequalities in access.

Failure to verify the association between the performance of cervical screening and the affiliation to a private health plan, as well as all other socioeconomic variables, demonstrates the existence of equity in the municipality of Campinas, in the period studied, regarding the performance of preventive test for cervical cancer. It was also observed equity in the knowledge of the test result, which indicates that both the SUS and private services have provided accompaniment for women after the exam. Campinas has a broad and structured network of public health services with extended hours of service, which facilitates the access of the population to the offered services, including the collection of cytology and groups of delivery of the test results. The Ministry of Health, in turn, guides and encourages states and municipalities to develop strategies for attracting women not already covered by the examination, as well as for the development of educational activities in health for clarification on the need of the regular use of certain preventive practices.

Despite these results, the study also noted the existence of a small portion of the population that has never performed the Pap smear test or who has performed it more than three years prior to the interview. For these women, there is a need that public health services find suitable strategies to motivate them to adhere to this practice, considering that the reasons given for not performing the test are eligible for educational activities. There is a need for studies to better understand the reasons for non-performance, since a small portion (4.9%) reported difficulty in scheduling the examination.

The equity achieved in the access to cervical screening in this municipality indicates the possibility of a similar result in other places and in the country as a whole, as well as the possibility of greater equity in other health practices, depending on a better structure, organization and effectiveness of SUS's actions.

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