

Evaluation of health services and material resources for cervical cancer screening in Ouro Preto – MG

Avaliação dos serviços de saúde e dos recursos materiais para rastreamento do câncer cervical em Ouro Preto - MG

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Abstract

The periodic Pap smear is the conventional method in Brazil for cervical cancer (CC) screening. Service strategies and material resources in the Primary Health Care units (PHC) are fundamental aspects that reflect on the quality of the screening program. **Objective:** To analyze four PHC units in the city of Ouro Preto, Minas Gerais and verify the local context of CC screening. **Methods:** A qualitative study was conducted by means of semi-structured interviews with nurses and community health agents (CHA) from the four selected UBS. **Results:** It was observed that only one PHC unit had adequate physical plant and material resources to carry out the exam. In general, the CHA carried out non-systematized active search of patients to undergo the Papanicolaou test. The procedure for informing patients of altered results was similar between the PHC units, however, there was no standardization for following up on altered cases. Furthermore, educational activities were scarce for the community and the work team. **Conclusion:** It is noticed that a quality physical structure associated with a well-trained work team promotes the establishment of successful screening programs. As it is not a reality of all local PHC units, it becomes necessary to organize the strategies for active search, registration and monitoring of patients, with the CHA and nurses being fundamental in this process. The inequality of resources between the PHC units points to the possibility of inefficiency of the CC screening program, which must be evaluated by the local authorities.

Keywords: uterine cervical neoplasms; health services; health infrastructure.

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Resumo

A realização periódica do exame de Papanicolaou é o método convencional no Brasil para o rastreamento do Câncer do Colo do Útero (CCU). As estratégias de serviço e os recursos materiais nas Unidades Básicas de Saúde (UBS) são aspectos fundamentais que refletem na qualidade do programa de rastreamento. **Objetivo:** Analisar quatro UBS do município de Ouro Preto, Minas Gerais e verificar o contexto local de rastreamento do CCU. **Métodos:** Foi realizado estudo qualitativo, baseado em entrevistas semiestruturadas com enfermeiros e agentes comunitários de saúde (ACS) das UBS selecionadas. **Resultados:** Observou-se que apenas uma UBS apresentava planta física e recursos materiais adequados à realização do exame. Em geral, as ACS realizavam busca ativa não sistematizada das pacientes para realização do exame de Papanicolaou. A conduta para informar os resultados alterados às pacientes era semelhante entre as UBS, porém, não havia padronização para realizar o seguimento dos casos alterados. Além disso, as atividades educativas eram escassas para a comunidade e para a equipe de trabalho. **Conclusão:** Percebe-se que uma estrutura física de qualidade associada a uma equipe de saúde da família (ESF) treinada favorece o estabelecimento de programas de rastreamento exitosos. Por não se tratar de uma realidade de todas as UBS locais, é necessário organizar as estratégias de busca ativa, registro e acompanhamento das pacientes, sendo os ACS e enfermeiros fundamentais neste processo. A desigualdade de recursos entre as UBS aponta para possibilidade de ineficiência do programa de rastreamento do CCU, o que deve ser avaliado pelas autoridades locais.

Palavras-chave: câncer do colo do útero; serviço de saúde; infraestrutura para a promoção de saúde.

Introduction

Cervical Cancer (CC) consists of the autonomous and disordered replication of the epithelial cells of the lining tissue of the lower anatomical portion of the uterus, which may compromise adjacent or distant structures or organs¹. Brazil has an estimated 16,710 new cases of CC every year of the 2020-2022 triennium, with an incidence of 16.35 cases per 100,000 women. This rate varies according to each part of the country: it is the second most common type of female cancer in the North, Northeast and Midwest populations. In the South, it rates the fourth position and the fifth in the Southeast region, thus, reflecting the regional differences in the Human Development Index².

The Pap smear performed periodically is the conventional method used in the country for the CC screening. This exam is effective in identifying pre-neoplastic lesions, which are susceptible to treatment and cure, which significantly contributes to reducing the incidence and mortality rates of this neoplasm³. The Brazilian Ministry of Health has guidelines for the collection and storage of the exam,

besides the patients' follow-ups and referrals to any specialized healthcare in case of abnormal results. The primary health care teams involved in the performance of the Pap smear are trained according to national guidelines, which is essential for CC screening^{4,5}. However, the screening program in the country was considered as low quality due to factors such as difficult access, delay in performing and receiving the exam guidance⁶. Besides following the guidelines of the Ministry of Health, investments are needed in the primary health care in order to improve the performance of services and to promote equity in health. This is explained by the fact that the adequacy of the physical structure, material resources and the work process itself interferes in the screening quality.

According to information from the Municipal Health Department, there are 30 Primary Health Care units (PHC) registered in Ouro Preto, Minas Gerais. In these establishments there are 20 teams assigned to family health care, of which 20 nurses, 20 doctors and more than 100 community health agents (CHA), who are

responsible for the services involving the Pap smear. Most PHC (n=21) are located in districts, in rural regions which are further away from the urban city^{7,8}. The material resources of the PHC, such as the physical structure and supplies to carry out the Pap smear, as well as the service strategies related to the identification, registration and search of women overdue for the exam, the conduct facing abnormal results, the relationship between the health care team and the secondary and tertiary health care, community awareness activities and the health care team training, are essential factors in establishing a high quality screening program. Thus, four PHC were evaluated in the city regarding these aspects to characterize the local context of CC screening.

Materials and Methods

A qualitative study was carried out based on semi-structured interviews with nurses and CHA from four PHC in the city of Ouro Preto. The PHC were selected according to non-probabilistic convenience sampling. Therefore, it was an explanatory research which occurred according to the following criteria (1) greater ease of geographic access to the PHC by the interviewers and (2) PHC professionals and researchers availability to carry out the interviews. The research was followed from 2018 to 2019 and the PHC were randomly identified by letters A, B, C and D. PHC D is located in a rural district and the others in the urban city. The interviews were conducted to collect information about the Pap smear and CC screening, besides evaluating the work organization and the local health situation. The Research Ethics Committee of the Federal University of Ouro Preto approved the project under number 2.835.265.

Two forms were used to follow the interview. Form 1 has thirty-three closed questions and was applied only to the nurses responsible for the PHC. The closed questions approach the structural aspects of the PHC: material and human resources in addition to the physical blueprint of the PHC. Form 2 includes eight open questions and was applied to nurses and CHA. The open questions were related to the following aspects: opinion about the physical structure of the PHC; searching and raising awareness strategies for screening uptake; mechanisms for identifying women who missed the exam; factors that make the control of the CC at the primary health care easy or restrict it (specific question for the Nurse) and suggestions for improving the health service (specific question for CHA). The data were compiled into tables to facilitate the extraction of information.

Results

Form 1 was answered during an interview with 4 nurses. The results obtained are described in Chart 1. Among the 4 PHC evaluated in this study, it is possible to see that PHC D presented the best evaluation in terms of structure. The only item missing from your physical blueprint was room temperature control. PHC A did not have a place for carrying out health educational activities, besides it did not have temperature control in the exam collection room. Apart from these items mentioned in PHC A and D, PHC B does not have a room with adequate ventilation, lighting and hygiene conditions for the development of activities. The physical blueprint of PHC C is considered the most precarious, as it does not present the previous items, with the aggravating factor of the absence of a waiting room with appropriate seats.

Chart 1: Description and structural characteristics of Primary Health Care Units A, B, C and D in Ouro Preto city (form 1).

THE PRIMARY HEALTH CARE UNITS STRUCTURE				
	A	B	C	D
PHYSICAL BLUEPRINT YES / NO				
1. Is there a waiting room with seats?	Yes	Yes	No	Yes
2. Is there an individual exam room (appointment room)?	Yes	Yes	Yes	Yes
3. Adequate hygiene and ventilation conditions?	No	Yes	No	Yes
4. Does the health office have a washing hands sink?	Yes	Yes	Yes	Yes
5. Does the health office have a bathroom?	Yes	Yes	Yes	Yes
6. Is there adequate lighting for the development of activities?	No	Yes	No	Yes
7. Is there a system to regulate the room temperature?	No	No	No	No
8. Is there a place for health educational activities?	Yes	No	Yes	No
MATERIAL RESOURCES YES/NO				
1. Table and Chairs?	Yes	Yes	Yes	Yes
2. Gynecological table?	Yes	Yes	Yes	Yes
3. Two-step ladder?	Yes	Yes	Yes	Yes
4. Auxiliary table?	Yes	Yes	Yes	Yes
5. Floodlight with flexible cable?	Yes	Yes	Yes	Yes
6. Screen or place reserved for changing clothes?	Yes	Yes	Yes	Yes
7. Trash basket?	Yes	Yes	Yes	Yes
8. Speculum of various sizes - small, medium, large and virgin?	No	No	No	Yes
9. Bucket with descaling solution in case of non-disposable instruments?	Yes	No	Yes	Yes
10. Glass blades with frosted edge?	Yes	Yes	Yes	Yes
11. Ayre's spatula?	No	No	No	Yes
12. Endocervical brush?	No	No	No	Yes
13. Pair of gloves for procedure?	No	No	No	Yes
14. Cherron forceps?	Yes	No	Yes	Yes
15. Medical gowns for woman?	Yes	Yes	No	Yes
16. Sheets?	Yes	Yes	Yes	Yes
17. Form for request for Pap smear?	Yes	Yes	Yes	Yes
HUMAN RESOURCES YES / NO				
1. Are the screening exams collected by doctors and nurses?	Yes	No	Yes	No
2. Are the screening exams only collected by doctors?	No	No	No	No
3. Are the screening exams only collected by nurses?	No	Yes	No	Yes
4. Are there professionals from other categories who collect the Pap smear?	Yes	No	Yes	No
5. Are gynecological appointments made by doctors and nurses?	Yes	Yes	Yes	No
6. Are gynecological consultations only conducted by doctors?	No	No	No	No
7. Are gynecological consultations only carried out by nurses?	No	No	No	Yes
8. Are there professionals from other categories performing gynecological consultations?	No	No	No	No

At PHC D, all material resources to perform the Pap smear were identified. However, in PHC B and PHC C, the absence of supplies such as: endocervical brushes, speculums, Ayre's spatulas and procedure gloves were reported. At PHC C, there was a lack of disposable medical

gowns to perform the exam. PHC B did not have Cheron forceps and a bucket with descaling solution for cleaning non-disposable surgical tools.

When human resources were evaluated, at PHC D, gynecological consultations and exam collections were

performed by nurses. At PHC B, doctors and nurses shared these functions. At PHC A, only the nurse performed the collection; consultations were carried out by both. Professionals from other areas can carry out exam collection at PHC B and C, but did not follow the consultations up.

Form 2 was answered during an interview with 4 nurses and 19 CHA. The most expressive statements were presented.

Information about the suitability of the physical structure and strategies for searching women are shown in Chart 2. The answers obtained during the interview corroborate the data collected through

form 1, indicating that PHC D is the most suitable among the PHC compared in terms of physical structure. Regarding the strategies for searching women who missed the exam, the vast majority of professionals reported that CHA carries out active search for patients during home visits. It is noticed a variability in the answers among the members of the same team, what is pointing to a possible lack of strategic systematization in each PHC. Many CHA take advantage of home visits to invite women to take the Pap smear, but they do not carry out this procedure in an organized way.

Chart 2: Expressive statements obtained during the survey using form 2 with Nurses and Community Health Agents in Primary Health Care units A, B, C and D of Ouro Preto City (questions 1 and 2).

QUESTION	EXPRESSIVE STATEMENTS			
	PHC A	PHC B	PHC C	PHC D
1. Do you consider the structure offered at this unit suitable for Pap smear? Why?	<p>"No. The room is small to fit the patient, the physical space is not adequate, not the most appropriate to be a health post."</p> <p>"The structure is not the most appropriate, because the room is small. The building itself is not adequate."</p>	<p>"There could be more rooms for collection, there is only one."</p> <p>"No, there is a lack of material. Low quality material. It lacks an own area."</p>	<p>"No, there is mould in the room, the door doesn't close properly."</p> <p>"Dark room, bad ventilation."</p>	<p>"Yes. It has enough rooms, materials that are not lacking and a great professional."</p> <p>"Yes. It has everything new."</p>
2. Which strategies are used to inform and attract women in the prioritized age group for the Pap smear?	<p>"The CHAs have a list of patients in the system, so they can find out if the woman is in the target age group, and then they can invite the women to do the Pap smear."</p> <p>"I take advantage of the time of the visits, as we know the women, I always tell them to go to the unit to do the screening exam."</p>	<p>"CHAs and informative letter."</p> <p>"Active search for those women who accept it; in the area there are women who do not, then we talk only with women who allow it."</p>	<p>"The CHAs do active search, the doctor refers it to the nurse; she doesn't know whether the patients come for sure."</p>	<p>"I have done lectures and scheduled appointments at patients' homes through the CHA. There are approximately 35 openings to perform the examination per week."</p> <p>"Visits. The nurse made a list with the women who have already been screened and those who have not yet been screened, and the date of the last test."</p>

Chart 3 provides answers about the identification of target patients, who have missed the exam, as well as the management of altered cases. In all PHC, it was mentioned that there is a notebook used manually, where notes about the screening uptake are made. In general, this control is carried out by the nurse. At PHC

B and D the control is made in an Excel spreadsheet as it was previously mentioned. However, at PHC B, each CHA has an individual notebook but there isn't any notes control, except for the case of an abnormal exam, which is arranged in a folder for monthly consultation by the CHA. At PHC C the handwritten records

are also used, however, there is not enough time for analysis, thus blocking the use of this data to guide the active search. In all PHC, the nurse is the one who conducts the steps when facing the altered exams by asking the CHA to make contact with the patients in order to set a return

appointment to the unit. The delivery of the altered exam is performed by the nurse, during the appointment. It is noteworthy that at PHC D the contact with the patient is made as for having the appointment previously scheduled.

Chart 3: Expressive statements obtained during the interview using form 2 with Nurses and Community Health Agents in Primary Health Care units A, B, C and D of Ouro Preto city (questions 3 and 4).

QUESTION	EXPRESSIVE STATEMENT			
	PHC A	PHC B	PHC C	PHC D
3. Is there a control mechanism to identify and actively search for women who missed examinations?	<p>"Notebooks with the notes of women who have done the exam and with abnormal test results only. It is possible to verify if the woman is doing the exam every year.</p> <p>"By the exam notes in a notebook it is possible to have a control, the nurse can know if there are any women who needs to do the Pap smear."</p>	<p>"No, only when there are abnormal test results the nurse leaves them in a folder and they have to look at it once a month. They complain about the delay in delivering the results".</p> <p>"Individual notebook of the CHA and Excel spreadsheet".</p>	<p>"There is a Pap smear notebook that allows you to know who does the exam.</p> <p>"The notebook is for those who do [the exam] and there is no time to analysis it, it has a record of what is done. But, there isn't any data of those who have never done it."</p>	<p>"The nurse has control of the examination and when the patient has to come back. The nurse notifies the CHAs in order to inform these women."</p> <p>"An Excel spreadsheet with results and appointments on this spreadsheet."</p>
4. In cases of abnormal test results, what is done in the primary health care unit?	<p>"When all tests arrive at the clinic, they are first sent to the nurse. Negative exams are sent to each CHA. When there is any abnormal test result, we don't give it directly to the woman, when we go on the visit, we tell the woman to go to the unit and get the test results from the nurse, but we don't tell her if there is something wrong."</p>	<p>"Women are called in the PHC."</p> <p>"Nurses look and ask to actively search for the patient, warning her to return. Verbal orientations in the visits, CHAs deliver negative result in their houses, and about the positive ones, the CHAs tell these women to pick up the exam with the nurse."</p>	<p>"The nurse asks the CHAs to schedule the return appointment with her." "Results are only delivered at the PHC, the negative ones are delivered at the reception and the positives ones only by the nurse at the return appointment."</p>	<p>"Schedule the appointment and ask the CHAs to inform the patient."</p> <p>"The negative results stay at the reception and the patient looks for them herself. As for the positive results, the nurse schedules the appointment and only she gives the result to the patient".</p>

As shown in Chart 4, the dialogue between the family's health care team and the more complex levels of care (Secondary and Tertiary Care) occurs in an imprecise way, considering the treatment and CC control. The team has no direct contact with the secondary and tertiary levels of health care. Nurses refer patients for complementary exams in more severe cases, but there is a failure in communication, as mentioned by professionals from PHC B and D, in which the contact with the patient is missed.

Chart 4 also shows that individual or collective educational activities were poorly

developed at PHC A and B, where awareness is predominantly carried out through informative posters, in campaigns such as "October Pink" or in the patients' routine. At PHC C, difficulty in developing such activities was mentioned, due to the low adherence of the community. Only PHC D had greater commitment to individual and collective actions demonstrated: there are operative groups, conversation circles and lectures for the population.

Chart 4: Expressive statements obtained during the survey using form 2 with Nurses and Community Health Agents in Primary Health Care units A, B, C and D of Ouro Preto city (questions 5 and 6).

QUESTION	EXPRESSIVE STATEMENT			
	PHC A	PHC B	PHC C	PHC D
5. How does the interaction happen between the Family Health Team and the Secondary and Tertiary Care related to the treatment/control of cervical cancer?	<p>"The contact is made by the nurse herself."</p> <p>"Yes, the contact is when there are cases that we cannot solve in the clinic. The patients are referred to secondary care to the Polyclinic or to the Viva Vida Center."</p>	<p>"There is no direct contact with Secondary and Tertiary cares. Only the health care secretary calls and asks if they have done or are going to do something about prevention. The patient is the one who tells about the altered exams results when she is referred to Viva Vida".</p> <p>"The appointment is made by the CHA and we only know about the return if the patient tells us."</p>	<p>"It is referred directly to the "Viva Vida Center" [in Itabirito] or to a gynecologist in Ouro Preto. It depends on the severity of the alteration."</p>	<p>"The nurse is the one who knows about it."</p> <p>"Information is lacking from the "Viva Vida Center", it is necessary to ask the patient what is happening."</p>
6. Are individual or collective educational activities developed? Which ones?	<p>"It has been a time since we last did them, the most common ones are the fixation of informative posters at the unit's reception."</p> <p>"There are the activities developed along the "Pink October" month, we can use information in the waiting room and the PHC Reception."</p>	<p>"Individual activities and always in the routine. The whole team does it."</p> <p>"Sporadically, only in campaigns, it can't work properly because it's just one team."</p>	<p>"The doctor is making a group to hold lectures, but it is difficult for people to attend."</p> <p>"A women's group was made to talk about family planning. It's hard to do that kind of activity, because women don't come."</p>	<p>"Collective, groups and individual actions with the nurse." "Operative groups showing the importance of health care, conversation circle, lectures when scheduled."</p>

When asked about taking a training course that had a positive impact on their professional routine, all respondents mentioned the courses offered by the Federal University of Ouro Preto (UFOP), as shown in Chart 5. Some of them reported participating in events such as conferences, mini-courses or trainings offered by other institutions, besides taking a specialization course. Regarding the possibility of improving the service, the professionals presented suggestions by

making aspects easier in order to increase quality, such as: expanding access and encouraging training; the improvement of working conditions by adapting the physical structure of the PHC and supplying the necessary inputs; providing more vacancies and flexible appointments to serve employed women who have limited available time; besides the reduction of delivery time of exam results and access to information for a suitable patients' follow-up.

Chart 5: Expressive statements obtained during the survey using form 2 with Nurses and Community Health Agents in Primary Health Care units A, B, C and D of Ouro Preto city (questions 7 and 8).

QUESTION	EXPRESSIVE STATEMENTS			
	PHC A	PHC B	PHC C	PHC D
7. In the last two years, have you taken any course, ability building, or training that has reflected positively on your work with the cervical cancer prevention and control program?	<i>"At UNASUS and Pharmacy School courses . "All the CHAs reported that they had training, and some of them took place at UFOP (Federal University of Ouro Preto)."</i>	<i>"Yes, several with Pharmacy School, minicourses, gynecological congresses." "Yes, at UFOP about sexually transmitted infection (STI) and Human Papilloma Virus."</i>	<i>"Course done at UFOP by Ambar, there were around 6 meetings." "Women's meeting at PHC about contraception and also two minicourses at UFOP once a month in 2018."</i>	<i>"Specialization in obstetrics and revision of the Protocol done by nurses of Ouro Preto in 2018." "Yes, it has a permanent education given by the UFOP staff."</i>
8. Question asked specifically to the CHAs: What is your suggestion for improving the service quality?	<i>"Better working conditions, and that they had more access to the necessary materials." "That more courses were offered to update health professionals."</i>	<i>"Accessing the right people, the ones who don't really come. Maybe it would be more interesting for CHA to do a campaign." "More openings for prevention, more rooms, more professionals, We do collection only on Mondays."</i>	<i>"Improvement in the PHC infrastructure." "If the unit had better structure, there would be more adherence." "There is a lack of medical gowns; the room doesn't have suitable lighting. The delay in delivering the exams is something that affects adherence, and also the lack of information and strategy to make women aware."</i>	<i>"Agility in the results. Easy data consultation for the CHAs to be able to inform patients if the date of the next exam is close." "Continue to have openness concerning patients and employees, reception, a good structure of employees for a good job."</i>
8. Question specifically asked to the Nurse: What are the facilitating and restrictive factors of assistance in cervical cancer prevention and in primary care control?	<i>Restrictive factors: "if the professional who does the screening exam is a man; the time and days of the Pap smear are not accessible to all women."</i>	<i>"Access. Unfortunately you have to choose which exams because there is no vacancy. There is lack of organization and access for all, lack of inputs, structure. There must be more collective rooms."</i>	<i>"Resistance from women because of shame, fear of the exam and result. Transportation is very difficult and it takes time. There are women who always come, who have interest."</i>	<i>"Contra reference, colposcopy and biopsy are far away and take time. Sometimes I use metal speculum, because the PHC has them. Sometimes I asked women to come for the exam in a dress or skirt because I didn't have any medical gowns, so the district councilman donated the fabric and a volunteer seamstress made the medical gowns".</i>

Discussion

According to Barcelos et al.⁶, the structure of the PHC can be considered suitable for performing the Pap smear when there are at least the following items: spotlight, gloves, gynecological examination table, endocervical brush,

disposable speculum, sliding forceps, spatula Ayre, glass slide, plastic bottle with lid and test order. The structure is considered inadequate when six or fewer of these items are not available. According to this assessment, only PHC D is considered adequate to the detriment of the

others. This fact is alarming and confirms that countries with low HDI, where more than 85% of deaths from CC occur, limitations related to infrastructure and technical capacity hinder the success of their screening programs and contribute to CC, being a major public health problem^{9,10}.

In Brazil, the CC screening program is considered non-organized and it means the invitation strategy is not used systematically. Conversely, patients who access health facilities for medical or prenatal consultations or due to gynecological complaints, are advised to undergo a Pap smear, which characterizes screening as opportunistic^{11,12}. Similarly, according to the results of the city's survey, the strategies for searching and registering women to identification and control of the target population are diffuse. There is a tendency towards active non-systematized search of the population. The records are largely done manually, the CHA carries out home visits with the focus on informing the population, identifying problems and communicating appointments, but the focus of the search on women potentially at risk for the development of CC was not mentioned. In the face of this, it is necessary to develop population-based records for the evaluation and follow-up of altered cases, besides proposing solutions for recurring problems and locating patients who have never had the exam or are missing it^{11,12,13,14}.

The conduct to inform patients about altered results is similar between the PHC, however, there is no standardization to carry the follow-up of positive cases out, with the exception of PHC D, where the responsible nurse performs direct monitoring of the results. It is noticed that the referral is made to Secondary and Tertiary Health Care when necessary, but there is a propensity to lose the patient's follow-up, if she does not return to the PHC unit. This scenario contributes to the inefficiency of screening programs, since failures in the notification of patients with

abnormal results can delay treatment and the quality of a follow-up, leading to a reduction in the potential for early pre-neoplastic lesions and CC detection¹⁵.

Educational activities are scarce, with the exception of PHC D, where lectures and conversation circles are more frequent. This contrasts with the fact that awareness actions play an essential role in the prevention of CC and contribute to increasing adherence to the Pap smear. Indirectly, health education favors the early detection and treatment of injuries and cancer; consequently, it allows the reduction of mortality and the incidence of CC^{16,17,18,19,20}. Making information available through language culturally adapted to the local population is essential to reduce the risk of developing injuries^{16,21}. Thus, educational activities deserve attention in the city, in order to increase adherence to the screening program.

In general, high-income countries have reduced CC rates, but the same has not occurred in low- and middle-income countries, where screening programs are underfunded and ineffective. The guarantee of access to health care offered by a few countries did not necessarily lead to a significant decrease in CC incidence and mortality rates, since it is necessary to organize the program logistics⁹. Therefore, considering the need to organize the flow of health care services in CC screening, CHA are essential for the active search for the target population in the territory. Although it is not an exclusive activity of CHA, the home visits carried out by these professionals are strategic due to their proximity and acceptability by the local population, thus, being able to play their role in regions of difficult access and significantly contribute to an awareness process in their health area²².

Conclusion

The association of a good PHC physical structure with a trained family health care team favors the establishment

of successful CC prevention and screening programs. However, as it is not a reality of all local PHC, it is necessary for the family health care team to develop a basic principle of organization to optimize the health service for CC screening, according to the human and material resources available at the PHC. In this case, the basic principle of organization translates into periodic actions by the team to prepare a population-based record that is reliable to reality, besides the active search and patients' follow-up. This requires an alignment of the health care team around population data. Based on these registries, the team is able to plan visits to the target population, which is a priority for encouraging the performance of the Pap smear. Furthermore, to directing the active search, the population data record helps in the patients' follow-up, which is substantial in cases of positive results for lesion or cancer.

The PHC have a multidisciplinary health team with the potential to improve

CC screening. Due to the proximity of CHA to the population and their ability to reach regions that are difficult to access and remote areas of the territory, these professionals become fundamental subjects for the implementation of organized CC screening programs through the active search for patients. Besides, nurses are essential as managers of the health care team, acting as leaders in the strategic planning of the active search. However, beyond the need to offer the best possible health service according to the conditions of each PHC, there is such inequality between the units and it can affect the quality of the CC screening program in the city. This point needs attention from the local government authorities, since the population is exposed to different approaches and material conditions to perform the Pap smear, which favors heterogeneous indicators of exam coverage and the inefficiency of the CC screening program.

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