O MUNDO DA SAÚDE

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Diagnosis and treatment of cervical cancer: barriers faced by women during the Covid-19 Pandemic

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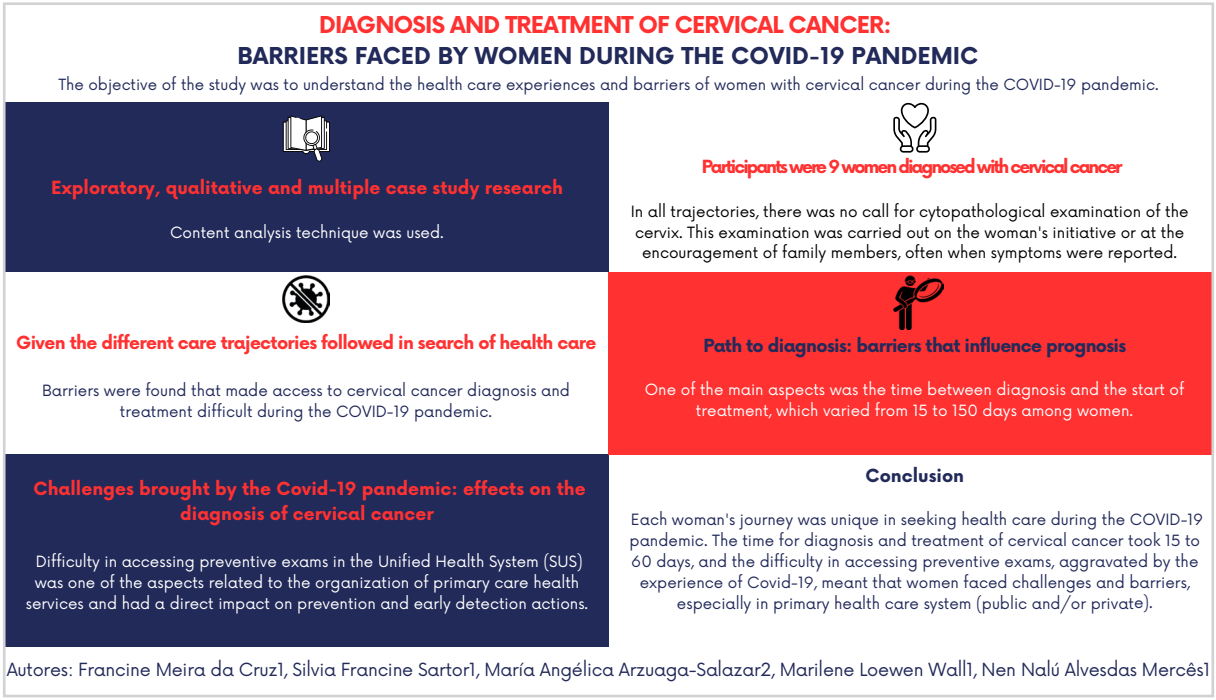
Graphic Abstract



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Abstract

The objective of this study was to understand the healthcare experiences and barriers faced by women with cervical cancer during the COVID-19 pandemic. This is an exploratory, qualitative, and multiple-case study research. Nine women with cervical cancer participated, and the content analysis technique was used. The different care trajectories within health services and the search for cancer diagnosis and treatment were evident. In all trajectories mentioned, there was no call for a cytopathological examination of the cervix. One of the outstanding aspects was the time between diagnosis and the start of treatment, which varied from 15 to 150 days among the women. Considering the trajectories uniquely in the health care system, those were different during the COVID-19 pandemic. Some barriers made it problematic to control and treat cancer. This study allows the understanding of trajectories and practices in the different logics expressed, through which the principles of comprehensiveness and resolution in health can be questioned. Thus, it supports an evaluative practice in health that privileges the experience of health or illness, as well as users' seeking for care.

Keywords: Uterine Cervical Neoplasms. Women's Health. Therapeutic Itinerary. COVID-19. Nursing.

INTRODUCTION

Although cervical cancer is a preventable disease, it is one of the leading causes of illness and death in low- and middle-income countries, being the third most common type of cancer among women under 45 years of age. In 2020, there were 604 thousand new cases and 304 thousand deaths worldwide, with at least 80% of them occurring in these countries. In Brazil, there were 17.7 thousand new cases and 9.2 thousand deaths, with an estimated rate of 6.3 deaths for every 100 thousand women[1].

The human papillomavirus (HPV) is etiologically involved and identified in 95% of these tumors. More than 200 types have been identified, of which 20 are known to cause cervical cancer, and genotypes 16 and 18 are the most prevalent[2]. In addition to infection with this virus, other factors can influence the disease, such as smoking, alcoholism, parity, immunosuppression, sexually transmitted co-infections, multiple partners, early initiation of sexual life, prolonged use of oral contraceptives, and unprotected sex[3].

In 2020, the World Health Organization (WHO) launched the Global strategy to eradicate cervical cancer as a public health problem, aiming at keeping the incidence below 4 per 100,000 women/year. Evidence suggests that eradication is feasible and achievable, including in low and middle-income countries, even those with the highest disease burdens[4].

This strategy provides a roadmap of proven interventions based on three pillars with associated objectives: 1) increasing HPV vaccination of girls aged 9 to 14 to 90%; 2) increasing coverage of cervical cancer screening in women aged 35 to 45 by 70%; and, 3) increasing treatment coverage for all women identified with precancerous lesions and invasive cervical cancer to 90%, all by 2030. In the long term, if all three pillars are implemented, more than 74 million cases could be avoided, and 62 million women's lives could be saved over the next century[5].

Since the first case of Coronavirus disease 19 (COVID-19) was identified in Wuhan in December 2019, the number of confirmed cases worldwide has exceeded 657 million, with 6.68 million deaths. Globally, it has been reported that there are 772,052,752 confirmed cases of COVID-19 with 6,985,278 deaths. According to a WHO report (2020), 42% of countries suffered interruptions in oncology services due to the pandemic, causing delays in achieving the goals outlined in this cervical cancer elimination strategy[6].

Oncology practices have implemented specific measures such as reducing the number of patients in outpatient clinics, elective surgical procedures, suspending clinical trials, and discharging patients from inpatient services. These measures aimed to protect

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the individual and reduce social contact[7].

Thus, the COVID-19 pandemic affected the population socially and economically, leading to declines in the healthcare system. Due to the high demand for care resulting from the disease, a large part of health resources, including the redirection of health professionals, was allocated to the pandemic, leaving a gap in health promotion and prevention, which became, a priori, invisible to health services[8].

Therefore, given the pandemic, it became necessary to understand the experiences lived during the path taken by women within the health care network, from the appearance of the first signs and symptoms, through the definition of the cancer diagnosis and therapy, until the current moment. Therefore, the guiding question for this study was defined as: what is the healthcare experience in the trajectory of women with cervical cancer during the COVID-19 pandemic?

Studies of this nature help to understand the behavior of individuals toward care and how health services are utilized and function. The path taken and its multiple repercussions, if not addressed appropriately, can result in a late diagnosis, reducing the chances of a cure and increasing the risk of sequelae and deaths[9].

Thus, the objective of the study was to understand the healthcare experiences and barriers faced by women with cervical cancer during the COVID-19 pandemic.

METHODOLOGY

Type of Research

This is a qualitative, descriptive, and exploratory multiple-case study research[10], according to the following steps: 1st step – Definition and design: phase in which theoretical propositions were defined. The cases were selected according to the objective of the research and the instruments for collecting the data developed; 2nd step – Prepare, collect, and analyze: in this stage, preparation for the collection was carried out, as well as transcription and analysis of data. The study participants were named Analysis Unit (AU) from 1 to 9, respectively in order of interview, to ensure anonymity; 3rd step – Analyze and conclude: data was analyzed to develop an understanding, explanation, and interpretation of the study, allowing us to explore the experiences, opinions, behaviors, and contexts in which the women were placed and reach a conclusion. In addition, the study met the recommendations of the Checklist for Consolidated Criteria for Reporting Qualitative Research (COREQ).

Study Scenario

The study was conducted in a city in southern Brazil, central-south of the State of Paraná. Participants were women diagnosed with cervical cancer, registered in the Cervical Cancer Information System (SISCOLO), linked to the Unified Health System (SUS) and the Municipal Health Department. They also had registration in the Fast Medic electronic medical record used by the municipality at the time of the study. After selection, recruitment was performed via telephone or WhatsApp to invite the women, and the investigator explained the research. After acceptance, the meeting was scheduled, depending on the participant's time availability and location of choice, for data collection.

The definition of participants was carried through after searching for women with cervical cancer registered in SISCOLO, from December 2019 to December 2021. During this period, there were 54 women registered, of whom 31 had another diagnosis or duplicate entries, and one was a male registration. Therefore, 22 women had a medical diagnosis eligible for the research. From the 22 women registered, according to the searches, there were 2 deaths, 2 refusals to participate, 1 change of city, and 8 had no contact registered in the electronic medical record. Thus, 9 women participated.

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Data Source

For selection, the following inclusion criteria were established: being registered in SISCOLO; being 25 years of age or older; having a diagnosis of cervical cancer at any stage, in any treatment modality or in total remission of the disease, from December 2019 to December 2021; being aware of the cancer diagnosis, confirmed after consulting the Fast Medic electronic medical record and prior contact via telephone; living in the municipality of the study (according to the Postal Address Code, of the residence).

The exclusion criteria adopted were: having a hearing deficit that made listening and oral communication impossible (hearing impairment verified through self-reported manifestation or a medical and/or speech therapist report); having a comprehension or cognitive deficit that made oral communication impossible (verified by presenting a document proving the deficit, verbal report from the analysis unit and application of the Mini-Mental State Examination (MMSE), if necessary, in the first contact.

Data Collection

Data collection took place from February to July 2022. A printed list from SISCOLO, provided by the Municipal Health Department, containing information on women diagnosed with cervical cancer, was made available to the investigator during the period stipulated for the research. Data was collected in two stages: the first involved collecting data from SISCOLO and Fast Medic (electronic medical records) used by the municipality to collect personal identification information and clinical data existing in the system, which was later completed with the participant during the interview.

The instrument was developed for the sociodemographic and clinical characterization of the analysis unit, which included sex, age, color/race, religion, profession, marital status, individual and family income, and education, among others. The clinical data researched was lifestyle, physical activity, initiation of sexual activity, number of partners, use of contraceptives, cytopathological examination, data on pregnancy, presence of sexually transmitted infections, previous illnesses, onset of symptoms, clinical diagnosis, treatment and monitoring, contagion by COVID-19.

In the second stage, after prior telephone contact to establish rapport with participants and obtain their acceptance to participate, the interview was scheduled, and a semi-structured script was used, which included three triggering questions/sentences: 1) Tell me how you discovered that you were sick (gynecological problem). 2) Tell me how you have been following the path to treat and care for the disease. 3) How do/did you feel about the COVID-19 pandemic?

The interview was conducted by the primary investigator, audio recorded, and carried out in nine homes. During all interviews, only the researcher and the respondent were present. The interviews were conducted in places where privacy could be kept, and participants felt comfortable speaking. Their duration ranged from 36 minutes to 1 hour and 47 minutes.

After the interviews, the raw data and the investigator's notes were transcribed into a Word document. The participants were given feedback to validate their speech. Seven were provided via *WhatsApp*, one via email, and one requested a printed copy. This one was delivered personally by the researcher. There was no request for changes, as per their approval. The interviews were printed for optical scanning and stored on *Google Drive*.

During the data collection period, the investigator used a mask and alcohol for hand hygiene before and after each interview. Also, distance from the respondent was kept. Masks and alcohol were available to women who chose to use them.

Data Analysis

To qualitatively analyze the data obtained through the semi-structured interviews, the content analysis technique proposed by Creswell was adopted[11], which comprises five stages: 1) Organization and preparation of data for analysis: transcription of raw data, including complete interviews and notes. After transcription, participants were given feedback for validation; 2) Complete reading of data: gaining a general perception of the information and reflecting on its meanings; 3) Data coding: data was organized, and the text segments were grouped. This

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was carried out by the principal investigator, and reviewed by the other authors involved. Data was processed and coded into classes; 4) Data description: based on the assigned coding, categories were created for analysis; and 5) Representation of the analysis: description of themes.

Ethical Aspects of Research

The research was approved by the Human Research Ethics Committee of the Health Department of the Federal University of Paraná under Opinion number 5.703.737/2021, CAAE number 53156321.0.0000.0102, and all ethical and legal precepts in current resolutions were respected. After reading and clarifying their questions, all participants signed the Informed Consent Form. In the interviews, the recommendations of the Circular Letter number 2/2021 of the National Health Council, the Executive Secretary of the National Health Council, and the Ministry of Health, regarding research during the pandemic were considered.

RESULTS

According to Table 1, comparative data on aspects related to the documentary records in the electronic medical record and referred to by the Analysis Units during the interview are presented, outlining the objective data on becoming ill due to cervical cancer.

Table 1 - Synthesis of data on cases of women with cervical cancer studied (N=9). Brazil, 2024.

	Type	Staging	Age	First Symptoms	Gateway	Exams	Treatment	Days between diagnosis and start of treatment
P1	Well-differentiated squamous cell carcinoma	Fully advanced	62	Heavy and persistent bleeding with the presence of clots	Primary Health Care Unit	Cytopathological examination, biopsy and laboratory blood tests	Chemotherapy and radiotherapy	120
P2	Squamous cell carcinoma of the cervix	FIGO IB 2	59	Leucorrhea with foul odor	Primary Health Care Unit	Cytopathological examination, biopsy, tomography, ultrasound, magnetic resonance imaging, blood tests	Chemotherapy, radiotherapy and brachytherapy	60
P3	Well-differentiated and invasive squamous cell carcinoma	C3	43	Breakthrough bleeding after sexual intercourse	Private medical office	Cytopathological examination, biopsy and tomography	Chemotherapy, radiotherapy and brachytherapy	45
P4	Well-differentiated invasive squamous cell carcinoma	No information	68	Excessive bleeding, weakness and malaise	Private medical office	Cytopathological examination, biopsy and tomography	Chemotherapy, radiotherapy and brachytherapy	15
P5	High-grade intraepithelial lesion - grade III cervical intraepithelial neoplasia/ "*In situ*" carcinoma	Grade III	45	Pain in lower abdomen	Private medical office	Cytopathological examination, biopsy and ultrasound	Hysterectomy and radiotherapy	30
P6	Invasive non-keratinizing squamous cell carcinoma	pT1 bi (B1) / NIC III/ pT1 b1 pN0 (IBI)	44	Recurrent leucorrhea, low back pain and abdominal edema	Private medical office	Cytopathological examination, colposcopy, biopsy, abdominal and transvaginal ultrasound	Total hysterectomy	Less than 30 days

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...continuation - Table 1.

	Type	Staging	Age	First Symptoms	Gateway	Exams	Treatment	Days between diagnosis and start of treatment
P7	Moderately differentiated invasive squamous cell carcinoma associated with endocervical adenocarcinoma "*in situ*"	Grade III	27	Menstrual irregularity and breakthrough bleeding	Primary Health Care Unit	Cytopathological examination, biopsy, tomography, electrocardiogram and blood tests	Hysterectomy	150
P8	No information	Grade III	32	Abdominal pain, lower abdominal pain, abdominal distension, foul-smelling discharge, bleeding and dyspareunia	Private medical office	Cytopathological examination and biopsy	Conization	More than 30 days
P9	No information	No information	45	Leucorrhea with foul odor and bleeding	Primary Health Care Unit	Cytopathological examination, biopsy, ultrasound, tomography and laboratory blood tests	Chemotherapy, radiotherapy and brachytherapy	More than 30 days

Source: The researchers. Brazil, 2024..

Nine women aged 40 to 49 (n=4), 59 to 68 (n=3), and one aged 27 and another aged 32 participated. Regarding the histological type, squamous cell carcinoma was observed in five women; one had in situ carcinoma, and one had squamous cell carcinoma associated with in situ adenocarcinoma. Two participants had no registration and were unaware of the histological type.

The reports leading to the suspicion of a cancer diagnosis were signs and symptoms related to the disease. However, as they were perceived sporadically, the search for health services occurred when they intensified or had previously been investigated in other systems without resolving the issue.

The most common signs were bleeding, leucorrhea, pain in the lower abdomen, menstrual irregularity, and dyspareunia. Given the signs presented, they reported seeking health services to begin the investigation process. The different care trajectories of care in the search for health services in the search for diagnosis and treatment were evident. Of the nine women, five sought medical care through the private health network. The other four used the reference primary health care service as their entry point.

In all trajectories, there was no call for a cytopathological examination of the cervix. This examination was performed on the woman's initiative or at the encouragement of family members, often when symptoms were reported.

Regarding the beginning of sexual activity, four women started at 16 years old, one at 17 years old, three at 18 years old, and one at 19 years old, characterizing the early onset. It was observed that the search for care in the health network occurred when there were concrete symptoms, and the disease was progressing, demonstrating the deficiency in screening for cervical cancer, either by not being called for the test or by not seeking the exam.

All women underwent the cytopathological examination, and once the changes were identified, they underwent additional tests, such as biopsy, abdominal and transvaginal ultrasound, computed tomography, magnetic resonance imaging, and colposcopy. These tests corroborated the findings necessary for diagnosing the disease. The treatments were carried out for five women: chemotherapy, radiotherapy, and brachytherapy; three women underwent hysterectomy; and one woman underwent conization.

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From the qualitative assessment and analysis, two categories emerged: Trajectory to Diagnosis: barriers that influence prognosis; and Challenges brought by the Covid-19 pandemic: effects on cervical cancer diagnosis. It is important to highlight that the confirmation of statements by the participants was carried out.

Trajectory to Diagnosis: barriers that influence prognosis

In the search for cancer diagnosis and treatment, the care trajectory has many paths. One of the main aspects was the time between diagnosis and the start of treatment, which varied from 15 to 150 days among the women.

When one of the women was questioned about this time, she reported the delay in being diagnosed and that she needed to be referred to specialized care to obtain diagnosis and treatment, as evidenced by the following statement: "*It took a while for them to see me. They didn't want to see me at the clinic. They gave me an injection, the bleeding stopped, and I went home. I went back to the clinic again and they didn't want to see me, so they sent me to the Y Clinic. At the clinic, I spent time consulting and after I took the exam, I went to Hospital X and they treated me very well*". (AU 1).

Reports from AUs 2 and 7 showed that the 60-day deadline for starting oncological treatment was exceeded. AU 2 took an average of 120 days, and AU 7 took an average of 150 days between diagnosis and the start of treatment.

This data reveals that the Municipality's health system did not meet the demands of women diagnosed with cancer in terms of starting treatment promptly. It was found that not all cases were initiated within 60 days of of diagnosis confirmation.

Challenges brought up by the Covid-19 pandemic: effects on cervical cancer diagnosis

In this study, the difficulty in accessing preventive examinations in the Unified Health System (SUS) was one of the aspects related to the organization of primary care health services and had a direct impact on prevention and early detection actions.

An example of a barrier to access the exam in the SUS, at a specific moment experienced by the country - the COVID-19 pandemic, is evident according to the following statement: "*I said: - Oh my God, I didn't take preventative care last year precisely because of the pandemic. At the station they weren't harvesting so I didn't take the exam*". (AU 5).

Another statement highlights the private network as the initial point of access due to the COVID-19 pandemic and the momentary interruption in the tracking service: "*At first, it was on the private network, then all my treatment was via SUS. I only didn't go via SUS at the beginning because it was a pandemic, it was at a standstill and the health network had restrictions and only served COVID*" (AU3).

The two statements reveal flaws in the public health system due to the failure to track women for preventive actions against the disease during the COVID-19 pandemic. When asked how they felt about the pandemic and becoming ill with cervical cancer, they demonstrated their feelings, as shown in the statements below. Feelings such as fear of contagion by COVID-19 were mentioned: "*The pandemic affected me, the fear of losing people, the fear of having COVID during this treatment interval, and not having a doctor, hospital, ICU, not having a bed to be admitted to. I stayed at home for two months, taking palliative medicines for fear of going to the emergency room and having COVID or bringing COVID into our house because my daughter was pregnant and my mother was elderly. I had no defense, so I didn't go to the emergency room. The pandemic affected me in this sense, worsening my illness, the side effect of colitis*" (AU 3). "*I was more afraid of the pandemic than of cancer. I didn't leave the house. I took care of myself*" (AU 4).

Others showed that health care needed to be redoubled given the fact that they had cancer and were experiencing the COVID-19 pandemic: "*It was difficult because, in addition to having cancer, we had to wear a mask and take care of ourselves and those who were close to us. Care ended up having to be doubled*" (AU 9).

The following statement highlights the decrease in the flow of people treated at the health service, where the necessary treatment and

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care were provided during that time: "*I underwent treatment (in the hospital) at the very beginning of the pandemic. We had to go through screening and care with alcohol, masks, and distancing. The number of people receiving treatment there significantly decreased*" (AU 2).

The AU's statements portray the precautions instituted, such as using masks, hand hygiene with alcohol, and social distancing, also highlighted by the analysis units.

Regarding COVID-19 infection, four were infected, but none presented complications due to the disease. Two AUs underwent medical consultation via primary health services and telehealth (online consultation), being treated according to the signs and symptoms presented. The other two AUs, who did not undergo a medical evaluation, self-medicated using the "*Covid kit*", composed of azithromycin, ivermectin, and chloroquine.

During the pandemic, AUs were diagnosed, started, and completed treatment, achieving a favorable prognosis with total remission of the disease or potential for cure.

DISCUSSION

The results highlighted aspects that corroborate other studies. Regarding the age group at the time of diagnosis, it ranged between 40 and 59 years, with an average age of 50.65 years. In the Netherlands, women had an average age of 47.9 years, and in another study conducted with patients diagnosed with cervical cancer and treated by the SUS in Minas Gerais, the average age was 55.3 years, and the median was 55 years[12]. Among the most prevalent histological types, squamous cell carcinoma accounts for approximately 70% of cervical cancer cases, while adenocarcinomas represent about 15% to 35% of cases[13].

The signs and symptoms of cervical cancer begin with intermittent vaginal bleeding during or after vaginal intercourse. Abnormal vaginal discharge was also prevalent as one of the main symptoms. The presence of discharge facilitates the emergence of cervical neoplasms, which, when left untreated, can trigger dysplastic lesions in the cervix, with a risk of developing into cancer. Furthermore, women with a sexually transmitted infection (STI) have a six-fold increased risk of developing cervical cancer when management is not adequate. Other signs and symptoms include pain and discomfort during sexual intercourse; intermittent or persistent lower abdominal pain, postmenopausal bleeding, presence of cervical lesions, family history, changes in menstrual periods, and intermenstrual bleeding[14].

Regarding women's experience with cervical cancer screening, it was observed that the presence of a gynecological symptom was the main reason reported for seeking and undergoing the Pap smear. Among these symptoms, pain and discomfort during sex were the most cited[15]. The symptoms that led to seeking early medical attention were lower abdominal pain, discharge, or abnormal vaginal bleeding[16].

In this study, the different care trajectories in searching for health services and seeking diagnosis and treatment became evident. Regarding the preferred gateway to Primary Health Care (PHC), women reported using primary health service as a search service for assistance actions. Another aspect considered in the same study is that some users indicated problems concerning the "opening" of the gateway via PHC by pointing out situations that could be resolved by PHC teams, whose refusal resulted in pilgrimages among other services through the health care network. It was found that after referral to specialized care, PHC disappeared from most trajectories, and about the care plan, the few users who returned to the primary health service did so on their initiative, generally due to the need to schedule appointments and exams for specialized care. In most cases, reference professionals who coordinated care in the Health Care Network (RAS) were not identified[17].

The findings in the literature corroborate this study since, in most trajectories, the first access to specialized care was guaranteed in the public network of the municipality where women live via referral from the primary health service. Women who sought the private health network out had to return to PHC for appropriate referrals,

either for medical consultation expenses or for diagnostic exams. As it is a disease that requires high-cost treatment and subsequent follow-up, the majority chose to turn to the SUS. From this point on, the procedures, consultations, and exams were scheduled directly by specialized care, distancing women from the primary health service.At no point did participants mention reference professionals who would favor care coordination.

In Brazil, the type of screening for cervical cancer is opportunistic, meaning there is no effective control of the women who undergo the exam or its frequency. In adolescents and young women in particular, screening can lead to the detection of lesions with a high potential for spontaneous regression, reducing the incidence of invasive lesions. Data from other countries shows that 67% of women aged 15-24 who started sexual activity and 13.9% without sexual initiation had undergone cytopathological examination, showing how frequent this practice is, even with contrary recommendations[18].

Regarding the treatment of cervical cancer, most women undergo concomitant radiotherapy and chemotherapy, followed by radiotherapy, chemotherapy, and hysterectomy surgery. Concerning the first treatment, there was a higher frequency of chemotherapy among those who started treatment within 60 days, while among those who started treatment after 60 days, the most frequent was radiotherapy[19].

Other studies conducted with women treated at primary health units through the SUS and diagnosed with cervical cancer also reported treatments including chemotherapy, radiotherapy, and surgery, such as hysterectomy[20]. In another study, in relation to the first treatment, there was a higher frequency of chemotherapy, especially among women who started treatment within 60 days, while among those who started treatment after 60 days, the most frequent was radiotherapy[19].

It is known that the availability and quality of health services has a direct influence on patient survival, which increases or decreases depending on access, the existence of screening programs, the effectiveness of interventions, and the availability of diagnostic and treatment resources[21]. In the studies found, it was evident that most of the women underwent treatment at an inopportune time, having started treatment after 60 days, exceeding the deadline defined by legislation and corroborating the findings of this study[22].

The studies corroborate this research, demonstrating the delay in diagnosis and initiation of treatment experienced by the participants due to the lack of access to healthcare, even with concrete signs and symptoms, often causing them to seek the private network as the first gateway. Many services were interrupted during the pandemic, mainly in preventive and screening actions for cervical cancer, leading to declines in essential health care around the world. It is acknowledged that COVID-19 affected financial resources and caused an interruption of health programs, and limited patients' access to services. Additionally, social distancing measures have also restricted access to preventive care. In turn, inequalities in access to services were exacerbated due to the pandemic, especially in low and middle-income countries such as Brazil[23].

In March 2020, after the start of the COVID-19 pandemic in Brazil, an ordinance from the National Cancer Institute (INCA) recommended that health professionals advise people not to seek health services for cancer screening. In July 2020, this ordinance was revoked due to the heterogeneity of the pandemic situation in different Brazilian states[24.] Although screening percentages remain close to those considered ideal by the WHO, a decline in coverage and inequities in access to the exam have been identified in recent years. This drop may be related to factors such as lack of investment in dissemination and active search for the population at risk, as well as lack of knowledge and awareness of the importance of carrying out the exam, difficulty in accessing care from specialized professionals and difficulty in follow-up (long waiting time) for women who presented altered results[25].

The pandemic scenario affected the coverage of preventive cervical cancer exams in the short term, recording a 44.6% reduction in cytopathological exams in 2020 in Brazil. The COVID-19 pandemic could bring future losses due to interruptions of detection of this cancer, as studies have already shown a predicted increase in cases in 2027, taking these delays into account. Low and middle-income countries may be more

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affected as the prevalence of screening is further down and the incidence of advanced-stage cancer cases is elevated[26].

Brazilian data show that the percentage of women diagnosed with stage III–IVa cervical cancer (according to the International Federation of Gynecology and Obstetrics) increased from 43.3% before the pandemic to 56.8% during the pandemic. Countries like Poland, which have a Pap smear-based screening program, have proven to be the most vulnerable to the pandemic. Australia, which introduced HPV testing every five years in 2017 rather than the previously used cervical cytology performed every two years, has been less affected by the pandemic. More than 90% of women screened were HPV-free, allowing their next HPV test to be postponed until the end of 2022[27].

Therefore, action planning is fundamental to mitigate the damage caused by COVID-19 and improve health care. Active searching actions for tracking, diagnosing, and initiating treatment at the appropriate time are considered essential. To achieve this, one must count on the commitment of the Family Health Strategy team in developing activities, in addition to being responsible for the health of the community. With the help of the health team, the nurse will be able to get closer to the population and manage their practices to prevent, diagnose, and treat cervical cancer in a timely and efficient manner during the nursing consultation. The more active the nurse is and the more comprehensive the program of prevention, the better the results of their actions[8].

In addition to active searching, other strategies can be used to identify and address doubts regarding the exam, such as providing health education in the community, home visits to women who are overdue for the exam, partnerships with companies and institutions that enable its employees to attend the primary health service for gynecological consultations, publicity in the media, mainly through radio and television, as they are easily accessible to low-income people, among other strategies that promote adherence and early detection of precursor lesions in the cervix[8].

Regarding limitations, these include the number of women diagnosed during the COVID-19 pandemic, as there were refusals, deaths, and the difficulty in locating contacts to participate in the study. As a result, the sample size was limited, and the data collected cannot be generalized.

CONCLUSION

Each woman's journey was unique when searching for health care during the COVID-19 pandemic. The time for diagnosis and treatment of cervical cancer ranged from 15 to 60 days, and the difficulty in accessing preventive examinations, aggravated by the experience of Covid-19, caused women to face challenges and barriers, mainly in the primary health care system (public and/or private). These also included the fear of going to health institutions, to avoid infecting family members and sometimes fearing Covid-19 itself more than cancer.

Another important fact to be highlighted is the need to prepare for crisis situations, such as the COVID-19 pandemic, since these situations can cause significant impacts on health. Therefore, planning, communication and preparation are crucial, as well as the appropriate use of information and decision-making support technologies. Due to the high incidence rates and similar increase for the coming years, it is clear that the care provided to women is still deficient, since their needs are not met in accordance with public policies aimed at comprehensive women's health care, with emphasis on health promotion, disease prevention and early detection of cervical neoplasms at the primary level.

Most of the analysis units were diagnosed at a more advanced stage, which indicated more aggressive treatments. These results lead to reflection on the possible causes for the low regularity in performing oncotic cytology tests, as well as for the late search for health services. Thus, this reaffirms the importance of regular screening methods and early diagnosis to determine stages and define treatments with greater chances of cure, demonstrating the importance of focusing public policy actions and interventions on this age group. Improving

access to health services and information is essential for controlling cervical cancer, because despite advances in the dissemination of preventive measures, it continues to be a major health problem in the country.

Identifying and addressing the factors leading to delays in diagnosis, such as failure to perform the examination periodically and ignorance of its importance, were also identified. It was possible to verify that the route taken by women did not follow the routes previously defined by the health system. Therefore, the network in place is not always the network that absorbs, welcomes, or resolves the needs presented.

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