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Puerperal care in a border zone: fragility aggravated by the COVID-19 pandemic[a]

Atenção puerperal em uma região de fronteira: fragilidades agravadas pela pandemia de COVID-19

Atención puerperal en una región fronteriza: debilidades agravadas por la pandemia de la COVID-19

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Abstract

Objective: To understand the health care of puerperal women in a border region during the COVID-19 pandemic. **Method:** Grounded Theory qualitative research, straussian strand, conducted in a border region, in primary health care, with 30 participants, who formed three sample groups among women, health professionals, and managers through semi-structured interviews conducted by voice call and in-person between August 2021 and May 2022. **Results:** Five categories were identified, according to the paradigmatic model, namely: Identifying postpartum care services; returning to primary health care in the postpartum; identifying factors that interfered in the care of postpartum women; pointing out strategies for health promotion in the postpartum period; and having fragile postpartum care. **Conclusion and implications for practice:** Existing weaknesses were exacerbated during the pandemic by COVID-19. It is recommended to qualify the counter-referral to ensure continuity of postpartum care on time; teleservice to enable follow-up when epidemiological conditions pose a risk to maternal health; public policies can strengthen assistance to foreign women and migrants in the border region.

Keywords: Primary Health Care; COVID-19; Border Areas; Postpartum Period; Grounded Theory.

Resumo

Objetivo: Compreender a atenção à saúde de puérperas em uma região de fronteira na vigência da pandemia por COVID-19. **Método:** Pesquisa qualitativa do tipo Teoria Fundamentada nos Dados, vertente straussiana, realizada em região de fronteira, na atenção primária à saúde, com 30 participantes, que formaram três grupos amostrais entre mulheres, profissionais de saúde e gestores, por meio de entrevistas semiestruturadas, realizadas por chamada de voz e de forma presencial entre agosto de 2021 a maio de 2022. **Resultados:** Identificaram-se cinco categorias, conforme modelo paradigmático, sendo elas: Identificando serviços de atenção ao puerpério; retornando para a atenção primária à saúde no puerpério; identificando fatores que interferiram no atendimento à puérpera; apontando estratégias para promoção da saúde no puerpério; e tendo uma atenção puerperal frágil. **Conclusão e implicações para a prática:** Fragilidades existentes foram agravadas no curso da pandemia por COVID-19. Recomenda-se qualificar a contrarreferência para garantir a continuidade da atenção puerperal em tempo oportuno; o teleatendimento para viabilizar o acompanhamento, quando condições epidemiológicas forem de risco para a saúde materna; políticas públicas podem fortalecer a assistência a estrangeiras e migrantes em região de fronteira.

Palavras-chave: Atenção Primária à Saúde; COVID-19; Fronteira; Puerpério; Teoria Fundamentada.

Resumen

Objetivo: Comprender la atención a la salud de puérperas en una región fronteriza durante la presencia de la pandemia por COVID-19. **Método:** Investigación cualitativa del tipo Teoría Fundamentada, vertiente straussiana, realizada en una región fronteriza, en atención primaria de salud, con 30 participantes, que conformaron tres grupos muestrales entre mujeres, profesionales de la salud y directivos, a través de entrevistas semiestructuradas, realizadas por llamada de voz y personal directivo entre agosto de 2021 y mayo de 2022. **Resultados:** Se identificaron cinco categorías, de acuerdo con el modelo paradigmático: Identificar los servicios de atención al puerperio; volver a la atención primaria de salud en el puerperio; identificar los factores que interfirieron en la atención puérpera; señalar estrategias para la promoción de la salud en el puerperio; teniendo un cuidado puerperal frágil. **Conclusión e implicaciones para la práctica:** las debilidades existentes fueron exacerbadas en el curso de la pandemia por COVID-19. Se recomienda calificar la contrarreferencia para asegurar la continuidad de la atención puerperal en tiempo y forma; el teleservicio para permitir el seguimiento, cuando las condiciones epidemiológicas representen un riesgo para la salud materna; Las políticas públicas pueden fortalecer la atención a los extranjeros y migrantes en la región fronteriza.

Palabras clave: Atencíon Primária de Salud; COVID-19: Áreas Fronterizas; Periodo Posparto; Teoría Fundamentada.

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INTRODUCTION

The puerperium is a period of physical, psychological, and social changes that involve the mother-child dyad and family members. Primary health care (PHC) professionals are responsible for: welcoming women and their families; providing clinical and educational care related to physical and psychological changes; and promoting actions related to women's and children's health.[1]

With the advent of the COVID-19 pandemic, declared by the World Health Organization (WHO) on March 11, 2020, social distancing measures had to be implemented to reduce exposure to the virus.[2] Due to the increased risk of developing severe forms of the disease, some groups were considered at risk, including pregnant and postpartum women.[3]

A study with low-income postpartum women in the United States identified that as the pandemic progressed, the barriers to access health services increased, having, among other difficulties, the scheduling of appointments in the PHC, and although they had received some care in the postpartum period, there was a delay in the physical evaluation. In this sense, there was concern with prolonged bleeding, healing in the operative wound, intrauterine device position, or delay in the appointment for prescription of contraception of their choice, in addition to concerns related to preventive care, treatment of chronic diseases, and interruptions of face-to-face care for orientations related to breastfeeding. The search for the service was postponed by them due to fear of exposure to the virus.[4]

In England, the restrictions caused by COVID-19 impacted the experience of pregnant and postpartum women, particularly regarding professional support and physical examination in person. Attendances to postpartum women took place via telephone call, at which time they were asked how they were doing.[5]

Brazil is part of the triple border zone with Paraguay and Argentina, and in this region, as for health services, residents of Paraguay and Argentina report higher quality in Brazil than in their countries, which generates increased demand for care in this country.[6] However, in the initial period of the pandemic, the borders between these countries were temporarily closed, a condition that had repercussions on the health and economy of these populations.[7]

Understanding the consequences of the COVID-19 pandemic on maternal and childcare can contribute to reducing adverse events, in addition to improving the organization of care in case of new epidemics and pandemics.[8] Accordingly, the following question is: how was the health care provided to postpartum women in a border zone during the COVID-19 pandemic? The study aimed to understand the health care of postpartum women in a border zone during the COVID -19 pandemic.

METHOD

Qualitative, descriptive, and exploratory study, with use of the Grounded Theory (GT), Straussian strand. It was carried out in the mother-child center (CMI- in Portuguese), in basic health units (BHU) and family health strategy (FHS) of the PHC in the municipality of Foz do Iguaçu, Paraná, Brazil, and followed the recommendations of the Consolidated Criteria for Reporting Qualitative Research (COREQ).

The study had three sample groups, the first composed of eight Brazilian postpartum women living in the city of Foz do Iguaçu and five Brazilian women living in Paraguay, assisted in PHC. The second sample group was composed of 13 health professionals, five doctors, six nurses and two nursing assistants, working in PHC. The third sample group included three health unit managers and a manager of the maternal and child area, totaling 30 participants.

The selection of participants was done by convenience. For the group of postpartum women, the researcher obtained a contact list provided by PHC nurses. The postpartum women were contacted by text message using the WhatsApp application to receive an explanation about the research and an invitation to participate in the study. Upon acceptance, the postpartum women indicated date and time for interview. Health professionals and unit managers were approached by the researcher in the units where they worked, and the health manager was approached via text message. A time for the interview was scheduled according to their availability. The participants were instructed as to the need for the interview to be held in a private place. The interviews were audio recorded, following a semi-structured script with an average duration of 23 minutes.

Interviews were conducted by voice call (13 participants) and in-person (17 participants). Data collection occurred between August 2021 and May 2022. The interviews were conducted by the researcher, who is a nurse and a master's student in public health in a border zone, and trained by the responsible researcher, who has expertise around qualitative research and the method.

Data analysis followed the rigor of the method whose data were collected and analyzed systematically through the process of open, axial, and selective coding, and organized according to the paradigmatic model under the Straussian perspective, which allows understanding and explaining the study phenomenon through the components: context, causal conditions, intervening conditions, strategies, and consequences. In each coding step, the codes were grouped, regrouped, and reordered into categories and subcategories, that is, an active process, which allowed the data to come and go. In addition, diagrams and memos were elaborated, which contributed to the understanding of the phenomenon.[9]

Data saturation was used as a criterion for defining the conclusion of the sample groups, considering the repetition of data and the absence of new relevant information relevant for understanding the phenomenon.[10]

The study is part of a multicenter project entitled Facing COVID-19 and Maternal and Child Care, approved by the Ethics Committee on Human Research of the Universidade Estadual do Oeste do Paraná (State University of Western Paraná) with opinion no. 4,837,617. To ensure anonymity, the participants were identified by letter(s) designating them, followed by cardinal numbers according to the order of participation in the interview.

To refer to the postpartum woman, the letter PW was used; for the professional nurse, PN; professional nursing assistant, PNA; medical professional, MP; unit manager, UM; for manager, M. For example: P1, PN1, MP1.

RESULTS

Context: "Identifying postpartum care services"

The FHS units, BHU and Maternal and Child Health Center (CMI- in Portuguese) that provide care to puerperal women in the municipality of the study are part of the PHC care network, namely: Brazilian women living in the municipality of Foz do Iguaçu; Brazilian women living in the countries that border the municipality; and foreign women living both in the municipality in question and those coming from border countries. The latter usually present documents proving residence in Brazil, acquired from other people (family or friends), although they reside in another border country, often in Paraguay.

CMI was created in 2007, with the objective of providing gynecological and obstetric care to Brazilian women living in Paraguay. Currently, it also serves Brazilian women who live in the area. It was built with funds from the Health Systems of Borders (SIS-FRONTEIRAS in Portuguese) program and in partnership with the city government for the maintenance of the unit.

> [...] *the maternal and child health center, it does not belong to the municipality, it is an agreement, it is an organization; it receives resources from the municipality and receives resources from other organizations. So, we have there a care of patients that are Brazilian pregnant women who live in Paraguay* [...] (M1).

Causal conditions: "Returning to the PHC in the puerperium"

After delivery and birth of the child, the woman returns to the PHC for postpartum evaluation. Professionals express the importance of answering questions, providing guidance related to the mother-child binomial, reproductive planning, clinical assessment, promotion of exclusive breastfeeding, prevention of complications related to the puerperium and maintenance of the bond between professional and postpartum woman, among others.

> [...] *it is in the postpartum period that most pregnancies are unplanned, so the postpartum consultation in addition to preventing postpartum complications such as bleeding, infection, we can also start reproductive planning, see social issues that may not have been observed during pregnancy and create a bond with this woman so that she starts to take care of herself and maintain the care and care of the baby* (PN6).

However, from the perspective of postpartum women, the postpartum consultation was based on evaluating surgical wound, loquation, evaluation and orientation regarding breastfeeding and prescription of contraceptive method.

> *Because of the c-section, the stitches I wanted to know if everything was okay, if the bleeding was okay* [...]. *I was giving the baby the breast* [...] *she* [nurse] *looked* [...] *saw that everything was all right* [...]. *I laid down on the stretcher for her* [nurse] *to see how the* [cesarean] *cut was* [...] (PW4).
>
> [...] *he* [doctor] *cleaned the* [SW], *checked, said that* [...] *it was good that the liquid* [infectious process] *came out; that if it stayed inside* [...]. *I would have to reopen my wound* [SW], *clean everything* [...] *to then close* [...] (PW11).
>
> [...] *to be able to take the contraceptive, to see if everything was right* (PW13).

During the pandemic, consultations, especially in the immediate postpartum, were mostly in- person.

> *In 2020, in the beginning, it was offered* [telecare] [...]. *I think it leaves something to be desired* [...]. *I did some postpartum consultations, but then you can't evaluate lochia, you can't evaluate breast. It is only by the person's report. If there was an alteration that we could see and she didn't comment, we couldn't see it, so we did more of the late postpartum. If it was an early postpartum, we called the unit to evaluate it* (PN6).

Intervening conditions: "Identifying factors that interfered in postpartum care"

The category intervening conditions is presented in three subcategories: the first subcategory "accessing the health service" identified that the health units offered different forms of access to postpartum consultation (free demand, scheduling, or specific day of the week). Above all, the link between the PHC health service and postpartum women was the heel prick of the child within five days after birth. At the time of the test, they can be seen on demand, schedule a return visit or return on the day of the week intended for postpartum care, which can be done by the doctor and or nurse or only by the doctor according to the unit.

> [...] *He* [the doctor] *is always available, from Monday to Friday* [...]. *We arrived, he has time availability, and we take advantage of it* (PW5).
>
> *Every Wednesday the pregnant woman, the postpartum woman, she does not need to schedule or anything* [...], *she is oriented during prenatal care, as soon as the baby is born, on the first Wednesday after delivery, she already comes with a baby to make the consultation, the closing of prenatal care and the first evaluation of the newborn* (PN2).

During the pandemic period, there was a noticeable decrease in the demand for access to postpartum consultations. Especially at the beginning when the information was uncertain, and the disease had unknown aspects. To this was attributed the fear of contamination by COVID-19, greater concern for the newborn (NB) and other children.

> *Some said they did not want to expose the baby especially or go and end up getting contaminated and passing it to the baby* (PN6).
>
> [...] *she said that I should go to the doctor* [...] *I explained to her that it is a little complicated to take 3 children to the clinic, especially when they are treating people with COVID-19* [...] (PW3).

Access to health services was also influenced by the epidemiological situation of COVID-19, which defined the care provided to the population. Readjustments in the flow of care occurred at different times. It is worth mentioning that in certain periods, especially at the beginning of the pandemic, elective care was suspended.

The population of postpartum women was one of the priority groups with guaranteed access to services in the pandemic. Because there was little demand for face-to-face care by the population, even by priority groups, consultations for postpartum women were more agile, with no need for waiting, unlike the period before the pandemic. This condition was positive for those who sought access to the service.

> [...] *the guidance was that the routine care was suspended, except for pregnant women, childcare and postpartum care, the puerperium. The only appointments that we did not have suspended because of these orientations about the pandemic* (M1).
>
> [...] *I have already been seen because there was almost no one* [...] *I already went in with the doctor* [...]. [...] *at the time of the pandemic, the clinic had no one, I took advantage and went in as well* (PW2).

In certain periods, some BHU became a reference for exclusive care to individuals with respiratory symptoms. The flow of care to the asymptomatic population was redirected, including the postpartum period. This condition was unfavorable to postpartum women due to the temporary loss of the link with the unit of origin, or even not being attended, which can be considered as the worst situation.

> [...] *this unit became a unit for the exclusive care of patients with respiratory symptoms* [...] *we see so many patients with positive diagnosis for COVID-19 that we can't provide care on the same day, in the same environment for pregnant women, for other demands, postpartum, childcare, we ask them to avoid, to come only if they have respiratory symptoms, if not, they must wait for when we return* [...] (PN3).

It was found the absence or insufficiency of home visits (HV) to postpartum women and NBs in the first days after birth. Regarding this, the professionals reported that the visit was not a practice of the services, even before the pandemic. Of the participating postpartum women, only one reported having received a HV by the Community Health Agent (CHA), however, unrelated to the postpartum period, because it was performed more than two months after the postpartum.

> *We did not have* [home visits] [...] *make home visits* [...] *there were few* [in the pandemic]. *I think it was one or two out of ten, at most* [...] (M1).
>
> [...] *home visits are only for bedridden patients* (PN2).
>
> *She asked if the vaccine was all right, looked at the children's booklet, but so, of the postpartum in general, not me* (PW4).

The second subcategory "lack of counter-reference in the care network" identified the lack of integration and sharing of information between the different levels of care for the continuity of postpartum care in a timely manner. Since the professionals in the health units did not have access to the live birth certificates (DNV- in Portuguese), which would have facilitated the control of postpartum consultations, the women, in turn, also did not attend the service. Information regarding the birth, complications that may have occurred and/or treatments carried out in hospital care are obtained from the postpartum woman herself. Therefore, it may be incomplete or inconsistent, which can interfere with the continuity of care.

> *Not only postpartum women and pregnant women, but all patients, they enter a hospitalization, and we end up not having access to what was done there. We don't have access to the system* [...] *everything we will know about the delivery, how it was, the medical and clinical developments, we don't have access* [...] *everything we will know to put in our system is what the patient tells us, and sometimes he doesn't understand, he is a layman* [...] (MP4).
>
> [...] *in Foz do Iguaçu we don't receive the DNV, the DNV is received by the surveillance and the units don't have this information. We really need to know who our pregnant women are* [...]. *We must actively search; we do not have this information* [...] *we really need to search to know these patients* (M1).

The third subcategory "having an overloaded health system" points to increased demand for health services to an already overloaded system. Professionals reported that before the pandemic there was already a high number of users linked to the service,

an extensive coverage area, and a deficit of human resources. Despite this, the departure of professionals belonging to the risk group or to the COVID-19 infection increased the demand on those who remained working. In addition, the system absorbed care for users with suspected or diagnosed COVID-19 and COVID-19 immunization for the entire eligible population.

> [...] *On a daily basis there is no team that serves a certain area,* [...] *we have difficulty in controlling these pregnant women* [...] *we could see that a pregnant woman had already had a baby because we do this spreadsheet control, when it is possible* [...]. *If we are overloaded with work, we end up leaving this control for another moment* [...] (PN6).
>
> *We are kind of on automatic, because the demand is very high, and during the pandemic, so, many professionals left, vaccination started* [...] *we were getting by.* [...] *we are dancing to the music. It is not what I would like to do. I would like to be doing it differently* [...] *two very difficult years* (PN4).
>
> [...] *today the center has a difficulty that we have a link of 44,000 people linked to this unit* [...] *it would be more or less, it would be at least 10 units, 10 family teams that should be linked to this region. And today we have* [...] *family teams, 3* [...] *we have 3 doctors who care for pregnant women* [...], *family doctor, and 4 nurses* [...] *for a very large area, for a very high demand for vaccination for COVID-19* [...] (MP5).

Another factor that overloads the PHC in the municipality is the geographical location triple border zone. Residents in neighboring countries, mainly Paraguayans or Brazilians living in Paraguay, who seek health care in Brazil, adding overload factors to an already deficient system.

> [...] *with respect to Paraguay, pregnant women come, she does all the follow-up here in Foz do Iguaçu, but since it is the border zone, there is both Paraguay and Argentina, but what impacts the region most are the pregnant women from Paraguay* [...] (M1).
>
> [...] *we end up serving patients who come from Paraguay, medical students, there is a greater demand, of people who end up not residing in Foz* (MP3).

Strategies: "Pointing out strategies for health promotion in the postpartum"

This category highlights actions by health professionals and managers to ensure assistance in the postpartum period, with emphasis on the active search for missing women, opportunity for care, promotion of breastfeeding, and prevention of COVID-19.

The active search was coordinated mainly by nurses for the promotion of puerperal women's health, although there was no control over the missing women. It was carried out through home visits or telephone contact with the help of community health agents (CHA), however, not always in a timely manner (first week after delivery).

> [...] *we do the active search, in general who is doing the active search are the nurses* [...]. [...] *generally, at this moment, she says* [...]*: I already had the baby, but he is in the hospital. Then we say* [...]*: then come to the unit even without the child, without the baby so that we can evaluate* [postpartum consultation) *and be able to make this closure* (MP5).

The opportunity of care was a strategy that consisted of taking advantage of the presence of the postpartum woman in the unit to provide care to the NB (childcare, immunizations and/or heel prick test), to capture her to perform postpartum consultation (regardless of the postpartum period).

> [...] *we take advantage that she comes for the heel prick, and we do* [postpartum consultation]. *It provides opportunities for the postpartum consultation and the baby's first childcare consultation* [...] *a very effective way of getting this* postpartum *woman for the consultation* (M1).
>
> [...] *I went the first week after I won my baby. I won him on Friday and on Monday I went to do his heel prick* [...], *I already did my consultation and got the maternity leave that I had to submit to my company* (PW5).

The promotion of breastfeeding happened during the care of the postpartum woman and the NB, a priori by the nurse through guidance and encouragement of exclusive breastfeeding until six months of life.

> [...] *the mother may decide not to breastfeed due to a problem that sometimes, in a consultation, may be helped or encouraged to persist* [...] (PN5).

The immunization against COVID-19 was encouraged and obtained satisfactory results in this study. Of the thirteen postpartum women interviewed, only two had not yet been immunized against the disease. According to the professionals, initially there was a need for medical request for immunization, but women did not show resistance. Some women preferred to wait until the birth of the baby to receive the immunization.

> *The postpartum women had no resistance that I noticed. Many waited to gain baby to then take the vaccine* [...] (PN6).

Consequences: "Having a fragile postpartum care"

This category points out an already fragile postpartum care, which was aggravated by the pandemic by COVID-19 and designates the consequences or the phenomenon of the model.

It was found a postpartum care in PHC with deficiencies aggravated during the pandemic, fundamentally related to postpartum HV; absence of health education about the puerperium since prenatal care; restricted clinical evaluation; insufficient number of consultations; focus on the NB; among others, highlighted in the intervening conditions.

> [...] *did not talk* [...] *go there and make an appointment because you must do a follow-up* (PW12).
>
> [...] *lacks, perhaps, the orientation during prenatal care about the importance of postpartum consultation for them to really be interested and stay for these consultations* [...] (M1).
>
> [...] *I look much more for the baby, than for the issue of the mother* [...] (PN1).
>
> *The indicated, the recommended by the Ministry of Health, is up to 10 days* [home visit] [...]. [...] *we can't do that visit until the tenth day postpartum (PN6).*
>
> [...] *for me it was only one* [consultation] [...], *with the nurse, at the time of removing the stitches* (PW4).

Moreover, professionals were unaware of the monitoring related to maternal near miss of postpartum woman who had complications resulting from COVID-19.

> [...] *didn't even know* [...] *I will research about it* [near miss] (MP5).
>
> *No. I don't even know what you are talking about* [near miss] (PN2).
>
> *I left the hospital; I did not walk* [...] *I only moved the fingers of my hand. I stayed almost a month in bed, using a diaper* [...]. *I started doing physiotherapy* [...] *if I walked a little bit* [...] *I got tired* [...]. *Gave anemia* [...] [high] *cholesterol* [...], *which I did not have, and high blood pressure* (PW9).

Another aspect to be highlighted is the lack of postpartum return of Brazilian women living in other border countries (Paraguay or Argentina) or foreign women who obtained proof of residence of Brazilians to perform prenatal care in Brazil, and/or had their births in this country as well as the absence of active search of these women. A condition that hinders the continuity of postpartum care, commonly, of Paraguayan or Brazilian women residing in Paraguay.

> [...] *what happens today in the city, a triple border city, we have many foreign women, mainly from Paraguay, who come only at the time of delivery* [...] *the child who is now Brazilian, has its rights guaranteed, but she returns to the country of origin to make a segment* (PN2).
>
> *Sometimes they have the delivery, and they leave and don't return anymore.* [...] *many pregnant women we assist and then we go looking for in the postpartum and we can't find them because they went back to their city, there in Paraguay* [...] (M1).

As for the borders, the closure to contain the spread of COVID-19 in the first year of the pandemic compromised the care of Brazilian women residing in neighboring countries. Some were able to get authorization from the Brazilian consulate in Paraguay to cross the border through communication from the Brazilian health service with this body.

> [...] *prenatal care was jeopardized because they couldn't cross the bridge* [of Friendship, which connects Brazil and Paraguay]. [...] *they* [Brazilian women living in Paraguay] *performed this prenatal there* [...] (PN1).
>
> [...] *as they chose to have the baby right there in Paraguay and those who came here were seen normally, although sometimes they had to go through, we had to send them saying that they had scheduled a consultation, at the Brazilian consulate in Paraguay, then they communicated to the Friendship Bridge to be able to let them go through* (MP1).

DISCUSSION

PHC corresponds to the first level of user access to the single health system (SUS) for actions of prevention, promotion, protection, and rehabilitation of health in BHU and FHU.[11] Foz do Iguaçu, in addition to these units, has the CMI for the care of Brazilian women in the pregnancy-postpartum cycle, residents in Paraguay.[12]

It is noted that postpartum care at this level of care fulfills the evaluation of the main causes of maternal morbidity and mortality, focused on the prevention or early treatment of complications such as bleeding, infections, and changes in blood pressure, as well as actions aimed at contraception, breastfeeding, among others.[13,14] However, it is observed that postpartum care is fragmented with a focus on the child and, moreover, does not meet all the principles of the Mothers Network of Paraná (Rede Mãe Paranaense – RMP- in Portuguese).

Although the maternal and childcare guideline of the state of Paraná recommends that the PHC teams offer at least two consultations in the postpartum period, in addition to a home visit by a nursing professional until the fifth after birth for the identification of complications, guidelines on breastfeeding, self-care, and care of the NB, among other actions, their incipiency was observed. Added to this are actions related to maternal near miss whose health professionals should discuss the cases, identify fragilities, evaluate, develop action plans, individual care plan, and return the cases notified to the coordination of PHC and regional health, which was not identified in the speeches of the participants.[15]

As for the care offered to postpartum women during the pandemic, studies conducted in the United States and England describe that most occurred by telephone service. In-person

consultations were reserved for specific cases,[4,5] differently from what was observed in the data of this study, whose attendance was predominantly in-person. These appointments were faster, a positive factor for postpartum women.

In the United Kingdom, more than half of pregnant and postpartum women had their health care compromised by cancellations, rescheduling consultations, suspension of appointments and virtual appointments, in addition to interruptions in access to care.[16] It is possible to relate these data to the reality studied, except the virtual appointments, a practice little used by the participating professionals, reserved for specific cases in the initial period of the pandemic.

International studies confirm losses in postpartum care during the pandemic. Professionals' work overload and measures to restrict contact for the protection of professionals and patients interfered in the care provided in the pregnancy-postpartum cycle.[17] In Uganda, the impact involves, in addition to maternal health, reproductive, sexual, and child health.[18]

The flexibility of care for postpartum women and the capture to perform the postpartum consultation at the time they accessed the health unit to perform the heel prick of the newborn or for other child-related care, is also verified in other Brazilian realities in the period before the pandemic.[19]

With regard to the active search, an integrative review study confirms that this practice by PHC nurses usually does not include all postpartum women who are absent in postpartum consultations.[14] Moreover, another study in a border municipality corroborates that the active search is not performed for all postpartum women who live in Brazilian territory and, in the case of residents in countries bordering Brazil, it is impossible for those who report residence in the neighboring country as well as for those who inform the address of relatives or acquaintances in Brazil.[20,21]

As for COVID-19 immunization, pregnant women and infants were not included in the clinical trials, which may have made some women in the study uncertain about the immunization decision. However, there is evidence that vaccines authorized by government agencies are safe for these groups. In this sense, for a shared and safe decision, health professionals have scientific evidence subsidies to anchor their guidance to women in the pregnancy-postpartum cycle.[22] It is up to them to present such evidence to women or the question of how to access it to enable information and generate safety for immunization.

In the United States, nearly one in two women refused immunization due to safety concerns, insufficient data, and fear of adverse effects as the most cited reasons.[23] This is different from the study in the border zone, where nearly all study participants had received immunization. However, it is confirmed that pregnant women are less likely to be immunized than those who are in the postpartum period.

Access restrictions and border closures expand the restrictions on access to health care and weaken the health of refugees and migrants.[24] In Brazil, the SUS is an essential resource for the health of residents of countries that border the country and do not provide universal and comprehensive health care.[25]

The increased overload on the health system due to the pandemic represented by overcrowding, shortage of beds, lack of financial resources, human resources, problems related to the referral system as well as the demotivation of health professionals also interfered with maternal health care.[17,26]

On the other hand, intervening conditions are identified, which, consequently, make postpartum care fragile, mainly linked to the moment before the pandemic. In general, related to the absence of counter-reference, lack of information to postpartum women (in prenatal care) on the need for postpartum follow-up, focus on childcare, poor physical examination, non-institution of postpartum HV, postpartum follow-up with emphasis on the prescription of contraceptives, besides the demand for care being performed by the postpartum woman herself.[27]

Regarding the difficulties related to territorial coverage and human resource deficits, it should be noted that, in addition to the disparities and fragilities of the health system caused by the COVID-19 pandemic, the National Policy of Primary Health Care (PNAB- in Portuguese) has suffered setbacks over time. The possibility of flexibilization of the number of CHAs and reducing the workload of professionals makes total coverage of the territory unfeasible and, consequently, weakens preventive and health promotion actions and monitoring by the HV, as well as making it difficult to monitor the health care of the population.[28]

CONCLUSIONS AND IMPLICATIONS FOR PRACTICE

The study understood how the health care of postpartum women happened in a border zone during the pandemic of COVID-19 and found that already existing fragilities in postpartum care were aggravated during the pandemic time.

Qualified counter-referral with efficient communication between the different levels of care can ensure continuity of care for postpartum women in a timely manner with consistent information regarding labor and birth. Telecare can enable postpartum follow-up when the epidemiological conditions are of risk to maternal health.

It is recommended the orientation, still in the prenatal period, about the importance of monitoring the woman in the postpartum period as well as the implementation of existing recommendations for maternal care, such as HV within five days, expansion of the aspects of clinical evaluation, compliance with the two consultations until 40 days after delivery and monitoring of near miss, among others. Finally, it is suggested the development of public policies that contemplate maternal care in border zones, to ensure the guarantee of care for foreign women and migrant women.

This study is limited by the convenience sample and interviews with participants from only one border zone, which makes it impossible to compare it with other border zones. New studies are suggested in the maternal area, in other regions and borders of Brazil.

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