



ORIGINAL


Pregnant women's perception about prenatal monitoring during the COVID-19 pandemic

Percepção de gestantes ao acompanhamento pré-natal durante a pandemia da COVID-19
La percepción de mujeres embarazadas con respecto al control prenatal durante la pandemia de COVID-19


Clara Carneiro Brito¹

 <https://orcid.org/0000-0001-8053-2266>


Antonio Werbert Silva da Costa²

 <https://orcid.org/0000-0002-9724-5420>


Sara Emilli Félix de Sousa Ribeiro¹

 <https://orcid.org/0000-0002-6413-5911>

Francisco Lucas de Lima Fontes²

 <https://orcid.org/0000-0003-1880-9329>

José Wicto Pereira Borges²

 <https://orcid.org/0000-0002-3292-1942>

¹Universidade Estadual do Maranhão. Colinas, Maranhão, Brasil; ²Universidade Federal do Piauí. Teresina, Piauí, Brasil.

ABSTRACT

Objective: To understand pregnant women's perception about prenatal monitoring during the COVID-19 pandemic.

Methods: An analytical study with a qualitative approach conducted with eleven pregnant women assisted by two Family Health Strategy teams from the municipality of Colinas, Maranhão. Data collection was carried out by means of semi-structured interviews, which were recorded and later transcribed. The data were processed with the aid of the IRaMuTeQ software program by means of Descending Hierarchical Classification and analyzed through interpretation of meanings.

Results: Data processing resulted in six classes which, after interpreting the meanings, gave rise to two categories: Perceptions about prenatal care during the COVID-19 pandemic; and Experiences, lessons learned and care measures in pregnancy during the pandemic. **Conclusion:** The imposition of measures to control transmission of the virus proved to create difficulties in adherence to prenatal care, affecting quality of the assistance provided. Social distancing and reduction in the length of the consultations affected the relationship established between the professionals and the pregnant women, therefore impairing care.

Descriptors: Pregnancy. Prenatal Care. COVID-19.

RESUMO

Objetivo: Compreender a percepção de gestantes no acompanhamento pré-natal durante a pandemia da COVID-19.

Métodos: Estudo analítico com abordagem qualitativa, realizado com onze gestantes atendidas por duas equipes de Estratégia Saúde da Família do município de Colinas, Maranhão. A coleta de dados foi realizada mediante entrevistas semiestruturadas gravadas e após transcritas. Os dados foram processados com o auxílio do *software* IRaMuTeQ por meio da Classificação Hierárquica Descendente e analisados por meio de interpretação de sentidos. **Resultados:** O processamento dos dados resultou em seis classes que, após a interpretação de sentidos, deram origem à duas categorias: Percepções ao atendimento pré-natal durante a pandemia da COVID-19 e Experiências, aprendizados e cuidados na gestação diante da pandemia. **Conclusão:** A aquisição de medidas para o controle da transmissão do vírus mostrou-se geradora de dificuldades na adesão ao pré-natal, afetando a qualidade do atendimento em questão. O distanciamento social e a redução do tempo de permanência nas consultas afetaram a relação estabelecida entre profissional e gestante, com isso a atenção foi prejudicada.

Descritores: Gravidez. Cuidado pré-natal. COVID-19.

RESUMÉN

Objetivo: Comprender la percepción de mujeres embarazadas con respecto al control prenatal durante la pandemia de COVID-19. **Métodos:** Estudio analítico de enfoque cualitativo, realizado con once mujeres embarazadas atendidas por dos equipos de la Estrategia de Salud de la Familia del municipio de Colinas, Maranhão. La recolección de datos tuvo lugar mediante entrevistas semiestructuradas grabadas y luego transcritas. Los datos se procesaron con la ayuda del programa de *software* IRaMuTeQ por medio de Clasificación Jerárquica Descendente y se los analizó a través de la interpretación de significados. **Resultados:** El procesamiento de los datos derivó en seis clases que, luego de interpretarse los significados, dieron origen a dos categorías: Percepciones con respecto a la atención prenatal durante la pandemia de COVID-19; y Experiencias, lecciones aprendidas y medidas de atención durante el embarazo frente a la pandemia. **Conclusión:** La imposición de medidas para controlar la transmisión del virus demostró generar dificultades en la adhesión al control prenatal, afectando así la calidad de la atención en cuestión. El distanciamiento social y la reducción en el tiempo de permanencia en las consultas afectaron la relación que se establece entre los profesionales y las mujeres embarazadas, por lo que la atención se vio perjudicada.

Descriptores: Embarazo. Atención Prenatal. COVID-19.

INTRODUCTION

Prenatal care was modified after the state of emergency in public health caused by the Acute Respiratory Syndrome Virus 2 (SARS-CoV-2), the etiological agent causing the Coronavirus Disease (COVID-19) infection.⁽¹⁾ Enacted by the World Health Organization (WHO) in 2020, the pandemic was seen as a threat to groups vulnerable to lung infections. Consequently, to prevent complications in the flu-like syndrome condition, these people were included in the risk groups. Among these individuals are pregnant women, as physiological changes during pregnancy can be indicative of disease deterioration and, when infected, women may present difficulty breathing, premature labor and fetal distress, among other complications.^(2,3)

Pregnancy is a life-changing event for women, as it is a phase signaled by physiological and psychosocial experiences and transformations. During pregnancy, prenatal care is recommended, which aims at promoting the health of mothers and newborns alike through educational and preventive actions, care promotion through detection of pathologies and identification and treatment of possible complications, being essential to ensure healthy pregnancies.⁽⁴⁾ When properly conducted, it can significantly reduce the occurrence of maternal and fetal deaths.⁽⁵⁾

With the emergence of the new coronavirus, a number of protection measures were adopted to reduce the contamination risks, with social distancing among them, which aims at: reducing agglomerations; wearing masks to reduce contagion; and social isolation for suspected and confirmed cases, in order to avoid transmission to healthy individuals. The objectives of these measures were to bar transmission of the virus that was spreading rapidly and to protect everyone's health.⁽⁶⁾

Addressing the risks to pregnant women, a number of studies confirm that, during pregnancy, respiratory conditions can be more serious, with chances of evolving into complications, which requires a new care perspective.^(2,7-9) In order to guarantee the health of women and newborns alike, through a technical note the Brazilian Ministry of Health recommended that prenatal care be maintained for asymptomatic pregnant women and for those with flu-like illness, to postpone routine procedures for 14 days.⁽¹⁰⁾

Due to the worldwide chaos imposed by the pandemic and the adaptations in the health services, pregnant women faced obstacles to access prenatal care. Fear of contagion was prevalent, in addition to the delays and cancellations of consultations, which changed the pregnancy monitoring scenario. These changes may have interfered in the pregnant women's perception regarding monitoring, which has not yet been fully evidenced.⁽¹¹⁻¹²⁾

It is noted that, although assistance during prenatal care was maintained, pregnant women were subjected to experiencing moments not yet known in the organization of health units.⁽¹¹⁾ During this period, pregnancy and prenatal care may have contributed to the development of symptoms not experienced by pregnant women, such as fear, stress

and anxiety due to the new organization and having to live with the virus, which requires understanding.⁽¹²⁻¹³⁾ With vaccination, COVID-19 underwent easing measures, even with the existence of severe cases and deaths.⁽¹³⁻¹⁴⁾ The pandemic imposed significant challenges to providing comprehensive and qualified assistance to pregnant women. The changes in prenatal care continuity may have affected the pregnant women's perception, including inadequate attendance to the consultations. Consequently, the objective of this study is to understand pregnant women's perception about prenatal monitoring during the COVID-19 pandemic.

METHODS

This is an analytical study with a qualitative approach, carried out in two Family Health Strategy (FHS) teams intentionally selected by the researcher, and located in the municipality of Colinas, Maranhão. The study script followed the Consolidated Criteria for Reporting Qualitative Research (COREQ), in order to maintain rigor in the methodological process.

Sampling was intentional and for convenience, thus selecting 11 pregnant women to participate in the study. The inclusion criteria were the following: pregnant women undergoing prenatal care in the FHS units selected, having attended at least one consultation, and aged at least 18 years old. Participants with medical diagnoses of mental disorders were excluded.

Data collection took place between March and May 2022. For data production, a semi-structured interview script created by the researchers was applied, which contained a socioeconomic questionnaire with objective questions addressing the following variables: age group, marital status, race, schooling and income. The second part addressed subjective questions about the pregnant women's life experiences during prenatal care during the pandemic period.

The pregnant women were approached in-person while they were waiting for their consultations and invited to participate in the research. After accepting, they were instructed regarding the study objectives and presented the Free and Informed Consent Form, and the interviews were initiated only after signing it. With their prior authorization, the participants' testimonies were recorded using an available app for smartphones.

After the interviews, the answers to the sociodemographic questions were typed into a spreadsheet in Microsoft Excel®, being analyzed using descriptive statistics and the data presented with percentage and absolute values. The subjective data were transcribed in full using Microsoft Word®, respecting the subjectivities present in the participants' testimonies. The set of texts from the interviews constituted the corpus.

After transcribing all the information collected, it was organized, coded and processed with the aid of the Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires (IRaMuTeQ) software by means of Descending Hierarchical Classification, dividing the text into

classes, a colorful corpus and Text Segments.(15,16,17)

Subsequently, the interpretive analysis of the meanings from the dendrogram classes was performed, with reading and interpretation of the testimonies found in the classes and relating them with each other Afterwards, other studies were also sought to reinforce the theoretical basis, complement the observations made and enrich the paper. Finally, all the information found was put into paper and contextualized.(18)

The research met the ethical aspects as recommended by Resolution No. 466 of the National Health Council of December 12th, 2012. The participants' anonymity was respected by only using the term "Pregnant woman" and an Arabic number for their identification (Pregnant woman 1, Pregnant woman 2...). The study was submitted for consideration to the Ethics and Research Committee of the State University of Maranhão and obtained a positive opinion on February 26th, 2022, as per opinion number 5,266,435 issued on the same date.

RESULTS

The pregnant women were in the age group of 23 years old, had complete High School (63.63%) and were in the third trimester of their pregnancies (45.45%). Most of them were living in stable unions (45.45%) and this was their first pregnancy (54.54%), as shown in Table 01.

Table 01. Characterization of the participants. Colinas, Maranhão, Brazil, 2022.

Variable	N	%
Schooling		
Complete High School	7	63.63
Incomplete High School	2	18.18
Education		
Complete Higher	2	18.18
Gestational age		
1 st trimester	2	18.18
2 nd trimester	4	36.36
3 rd trimester	5	45.45
Marital status		
Single	3	27.27
Married	3	27.27
Stable union	5	45.45
Number of children		
None	6	54.54
One	3	27.27
Two	2	18.18
Total	11	100

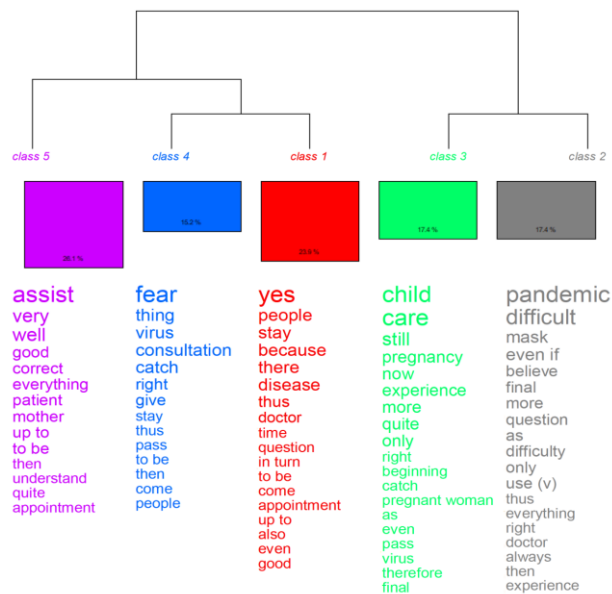
Source: authors (2022).

After processing the data using the IRaMuTeQ software, all 11 texts allowed identifying 60 Elementary Context Units, classified into 46 text segments that represent 76.67% leverage of the material. There were 2,139 occurrences (words, forms or terms), with 500 different words and 273 words with only one occurrence. The leveraged segments were divided into five classes. Each class is described by means of the terms that presented greater association and more meanings. The most representative classes and words and the *corpus* percentage are illustrated in the dendrogram shown in Figure 01.

Pregnant women's perception about prenatal monitoring..

The classes were grouped into two thematic categories to assist in interpretation of the results. Thus, the following were listed: 1) Perceptions about prenatal care during the COVID-19 pandemic, comprised by classes 1, 4 and 5; and 2) Experiences, lessons learned and care measures in pregnancy during the pandemic, with classes 2 and 3.

Figure 01. Dendrogram with the definition of significant classes and words. Colinas, Maranhão, Brazil, 2022.



Source: authors from the software IRaMuTeQ (2022).

Perception about prenatal monitoring during the COVID-19 pandemic

This thematic category is comprised by classes 1, 4 and 5. In class 1, the participants pointed out difficulties concerning attending prenatal consultations during the pandemic, with fear of contracting the virus among them, according to the testimonies below:

I'm always afraid, right? At the beginning, then, of some complications due to the disease, right? (Pregnant woman 2)

Then it's a little more complicated, right? I'm afraid, right? Fear of contracting the virus and even complicating my pregnancy or losing my baby, right? The fact that it's a very serious disease now due to distancing, right? That you can't go touching people or things (Pregnant woman 4)

It was also noticed that some women failed to identify the existence of access barriers. They highlighted that, due to the reduction in the number of cases in the city, monitoring continued uneventfully; in other words, this decline conferred them a sensation of safety in relation to the pandemic.

Oh, when I came for the prenatal, it was almost at the end of the pandemic, so I was able to do the prenatal care well (Pregnant woman 8)

For me, it's been good. Thank God it's normal for now, because the pandemic has decreased now, reduced? Everything's really calm (Pregnant woman 9)

In class 4, the pregnant women associated the possibility of contamination by the virus and the one of complications for the newborn, thus reflecting on

fear, which was mentioned very frequently and attributed to some factors such as witnessing negative outcomes in close people affected by the disease, contracting the disease and affecting the child. However, this feeling did not lead to prenatal care discontinuation.

I have this hope that everything's going to be fine, right? Because after this disease, we I'm afraid of anything harming me, right? (Pregnant woman 2)

I missed an appointment once out of fear as soon as my aunt caught it. Then she died and that despair already really hits, right? [...] it's something nobody expects (Pregnant woman 5)

I came scared, but I came, it was the way (Pregnant woman 6)

A feeling of fear. I was afraid of catching the virus, right? Of affecting the baby, then I decided to use the protection mask everywhere. I'm anxious, right? Because so many things go through people's heads, then mentally there's no way not be affected (Pregnant woman 7)

In class 5, the pregnant women showed their perception regarding care during the pandemic. Part of them considered that it was of good quality and did not report any significant changes. For others, there were noticeable changes such as social distancing and mask use, where they recognize that prenatal care continuity was essential during the pandemic.

So far, in my opinion, everything's OK, the number of patients is normal, I arrive and they see me right away, patient like that, reduced, you know? [...] it's not full, but it's not too empty either (Pregnant woman 5)

The number of patients, because in the BHU it's way too big, it has to be controlled and the delay to be seen is also too long [...] (Pregnant woman 1)

You can't be getting close and you need to have that whole distancing thing [...] (Pregnant woman 4)

Because I have that fear, right? But because you take all the precautions there and you ask God that everything works out (Pregnant woman 11)

Experiences, lessons learned and care measures in pregnancy during the pandemic

This category is comprised by classes 2 and 3. In class 2, the pregnant women stated that the care measures was increased due to the coronavirus and that, during the pandemic, care became difficult due to the fact that the bond with the professional was impaired, as shown in the following statements:

I just think the issue is worse, kind of, of freedom for me to breathe, to have that contact that in the past, in other times, I had with a nurse, with a doctor. I missed closer contact and everything today is all from a distance, right? (Pregnant woman 4)

"Yes, there was a reduction in patients soon because crowding isn't allowed. So, I did my prenatal there in the inland and, because I had no way to go there, I started doing it here [...] I thought it was, kind of, difficult, right? To keep coming like this every month because of the pandemic and the access restriction, so I think that it was kind of more difficult (Pregnant woman 7)

Pregnant women's perception about prenatal monitoring..

"It's a new experience like this and the use of masks, right? It was because you can't stop, even with the pandemic, right? [...] So, the difference, in fact, for me, as it was already like this, more towards the very end, right? It wasn't at the beginning that I really believe that everything was much more complicated for me [...] I take it because of my other pregnancy which practically the only thing different that changed was the issue of wearing the mask, you know?, but in the issue of care, well, as it was now at the very end of this pandemic, I no longer had as much difficulty as I had some time ago (Pregnant Woman 10)

In class 3, it was observed that prenatal care during the pandemic brought about more attention to the health issue for pregnant women, thus listing the lessons they learned from the experience, presented in the statements below:

However, I can somehow say that it's a new experience. It's different from any other thing because, in addition to depriving yourself even more over everything that's going on, but now with more care, more caution [...] then you have to double your care (Pregnant Woman 1)

As much as I think it's over, it's not over yet [...] I have to be very careful (Pregnant woman 8)

And be really careful, right? Pregnant women should be very careful, wear masks a lot, walk clean, there are many pregnant women who don't take precautions [...] because there was a case of this in my family, because my sister caught COVID and ended up losing her child. I had that experience (Pregnant woman 9)

I had a complication at the beginning, so if it weren't for the prenatal, I wouldn't have followed-up, as a pregnant woman I would've been very disconnected from the information I should have received (Pregnant Woman 11)

DISCUSSION

When analyzing the pregnant women's statements, it can be noticed that access to prenatal care during the pandemic was hampered. This fact was also verified in another research study, which showed the difficulty following prenatal care due to social and emotional issues, as well as postponement or cancellation of consultations, social isolation and frequent updating of case numbers by the media. This harmed pregnant women's mental health and contributed to an increased risk of mental disorders such as depression and anxiety.⁽¹²⁾

When analyzing the fear felt by women during this period, it was verified that it stems from insecurity and the consequences of possible contamination. Lack of information, the prevalence of fake news, concerns about the child in relation to vertical transmission and the economic losses caused by the pandemic are related factors.⁽¹⁹⁾

Another survey pointed out that, due to aspects such as lack of information and insecurity regarding severity of the disease, fear prevailed in most pregnant women and that it would be mainly related to the possibility of contamination and health problems that could affect the newborn.⁽²⁰⁾ This would become the women's major concern when returning home after the consultations. Thus, it is important that, during the consultations, pregnant women receive information not only about the

symptoms related to pregnancy, but also about the conditions that promote risks of developing complications.

It is noted that, even in the face of fear, the pregnant women tried not to abandon prenatal care. A number of studies have shown that this feeling is related to concerns about proper evolution of their pregnancies, in which preventive care avoids unexpected conditions.^(12,21-24) When analyzing the women's perception of the consultations, a study showed that pregnant women assimilated the relevance of care in terms of welcoming and also the techniques and measures used to maintain a healthy pregnancy, as these were the main focus of the professionals.⁽²⁵⁻²⁶⁾

Aspects of inequality and difficulty of access were intensified with the pandemic and reflected in prenatal care. This study showed that lack of resources in the health services directly affected sexual and reproductive health care and contributed to prenatal care discontinuity. In addition to that, some unnecessary restrictions and interventions without due scientific evidence, such as increase in the number of cesarean sections, removal of companions during prenatal care and labor, were adopted to prevent transmission, although they infringed women's sexual and reproductive rights.⁽²⁷⁾

The changes perceived by users during the COVID-19 pandemic were as follows: mask use, increased hand hygiene and distancing. According to a number of reports, this caused loss of the freedom to breathe, reduction of closer contacts with the professionals during the appointments, minimizing the bond, which made it difficult to go to the consultations. Some of the women highlighted that, at the beginning of their pregnancies, there was also spacing at the patients' entrance to the office and stated that, before the pandemic, they considered it better that there were no such restrictions, corroborating other research studies with the strategies used to follow-up on the appointments.⁽²⁸⁻²⁹⁾

Due to the changes caused by the epidemiological scenario, the pregnant women acquired a number of experiences. This research showed that pregnant women found it difficult to use masks due to the issue of freedom to breathe. However, it should be noted that, as it is an effective way to prevent transmission through contact with droplets expelled through the mouth or nose, it is necessary to continue this safety measure.⁽²⁾

Access difficulties have increased due to the restrictions imposed by the pandemic. This caused a reduction in the quality of prenatal care.⁽³⁰⁾ The pandemic exerted an impact on the care quality for pregnant women due to overload in the health services and difficulty following recommendations for resorting to Telehealth, due to scarcity of resources.⁽³¹⁾ In line with these authors, another study highlighted that this assistance was affected by the focus on the pandemic and the fear of contamination, which was reflected in the decrease in the rate of prenatal procedures and medical consultations.⁽¹²⁾

Good and bad experiences were found in the research. In other research studies, the authors have

Pregnant women's perception about prenatal monitoring.. shown that some of the pregnant women were able to have a positive view of the pandemic after some time, when they received information about the virus.⁽³²⁾ In line with this thought, another study considered that, despite all the ills faced by pregnant women, they attributed some positive points to social isolation, such as having more time for the family and organizing themselves in relation to arrival of the newborn.⁽³³⁾

This study has limitations, considering that the interviews were not returned to the participants; however, they were overcome with data processing and analysis using software and an understanding methodology, with scientific validity for qualitative research studies. The pregnant women's approach in this study contributes to the practice as a possibility of expanding the health professionals' perspective in the face of the reports presented. With this, it is possible to relate the barriers developed with the emergency period and the quality of prenatal care, which will contribute to the future of the care practice and to health care quality.

CONCLUSION

With the COVID-19 pandemic, prenatal care underwent significant repercussions. The imposition of measures to control transmission of the virus proved to create difficulties in adherence to prenatal care, affecting quality of the assistance provided. Social distancing and reduction in the length of the consultations affected the relationship established between the professionals and the pregnant women, therefore impairing care.

Pregnancy in the pandemic was permeated by fear, mainly evidenced by concern about the possibility of contamination, vertical transmission and complications as a result. These factors were explained due to the negative impact of some cases of the new coronavirus and to lack of clear information about the complications of the infection during pregnancy. However, even with the existence of these barriers, follow-up continuity prevailed.

Due to its small sample, this study has limitations in terms of knowing prevalent aspects on a large scale. However, with this paper it was possible to identify difficulties encountered by pregnant women in terms of care in the pandemic context, regarding the bond between professionals and users, which will contribute to improving prenatal care. Studies are suggested that seek a deeper view of the deficits found in prenatal care during the pandemic, in order to enable adequate and comprehensive access through effective strategies.

REFERENCES

1. Rios AFM, Lira LSSP, Reis IM, Silva GA. Primary health care in front of COVID-19: experience report from a health center. *Enferm em foco*. 2020;11(1. ESP). doi: <https://doi.org/10.21675/2357-707X.2020.v11.n1.ESP.3666>
2. Misquita MS, da Silva PG, de Abreu Braz G, Sousa AB de AG, Melo DFC, de Paula Melo FN. Care of pregnant women in primary health care by nursing during the SARS-COV-2 pandemic. *Nursing*.

3. Souza HCC, de Matos MMR, Costa RA, Lima MAC, Cardoso AS, Bezerra MM. COVID-19 and pregnancy: clinical manifestations, laboratorial alterations and maternal endpoints, a systematic review of the literature. *Brazilian Journal of Health Review*. 2020;3(6):15901-18. Doi: <https://doi.org/10.34119/bjhrv3n6-023>

4. Gonçalves MF, Teixeira ÉMB, Silva MA dos S, Corsi NM, Ferrari RAP, Pelloso SM, et al. Prenatal care: preparation for childbirth in primary healthcare in the south of Brazil. *Rev. gaúch. enferm.* 2018;38. doi: <https://doi.org/10.1590/1983-1447.2017.03.2016-0063>

5. Fontana AP, de Andrade Medanha AB, Inácio MX, de Paula Gusmão P. Pré-natal: a visão das gestantes e puérperas usuárias do serviço de saúde pública. *Revista Educação em Saúde*. 2017;5(2):72-8. doi: <https://doi.org/10.29237/2358-9868.2017v5i2.p72-78>

6. Almeida M de O, Portugal TM, Assis TJCF de. Pregnant women and COVID-19: isolation as a physical and psychic impact factor. *Rev. bras. saúde mater. infant.* 2020;20:599-602. doi: <https://doi.org/10.1590/1806-93042020000200015>

7. Cardoso PC, Sousa TM de, Rocha D da S, Menezes LRD de, Santos LC dos. Maternal and child health in the context of COVID-19 pandemic: evidence, recommendations and challenges. *Rev. bras. saúde mater. infant.* 2021;21:213-20. doi: <https://doi.org/10.1590/1806-9304202100S100011>

8. Ramiro NCMP, de Souza Pereira M, de Souza RS, Aver LA. Fetal repercussions and possible complications of COVID-19 during pregnancy. *Saúde Coletiva (Barueri)*. 2020;10(54):2679-90. doi: <https://doi.org/10.36489/saudecoletiva.2020v10i54p2679-2690>

9. Fagundes MCM, Alves VH, Bonazzi VCAM, de Fátima Borges M do R, de Sousa E de LC, Rodrigues DP, et al. Pregnant nursing professionals' concerns in the face of the COVID-19 pandemic: experience report. *Enfermagem em Foco*. 2020;11. doi: <https://doi.org/10.21675/2357-707X.2020.v11.n2.ESP.3999>

10. Brasil. Ministério da Saúde. Nota Técnica n° 7/2020-COSMU/CGCIVI/DAPES/SAPS/ MS. Atenção às gestantes no contexto da pandemia do novo coronavírus SARS-COV-2. Disponível em: <https://portaldeboaspraticas.iff.fiocruz.br/bibliotec/a/gestantes-nota-tecnica-no-6-2020-cosmu-cgcivi-dapes-saps-ms/>

11. Lima MM, de Andrade Leal C, Costa R, Motta Zampieri M de F, Frello Roque AT, Custódio ZA. Pregnancy in pandemic times: perception of women. *Revista Científica de Enfermagem-RECIEN*. 2021;11(33). doi: <https://doi.org/10.24276/rrecien2021.11.33.107-116>

12. Silva LT, Meurer NC, Rodrigues DAC, Rahal YA, Souza IA, Caran LL et al. Gestação e pandemia da COVID-19: impactos no binômio materno-fetal. *Research, Society and Development*. 2021;10(7):e23510716416. doi: <http://dx.doi.org/10.33448/rsd-v10i7.16416>

Pregnant women's perception about prenatal monitoring..

13. Ximenes RA de A, Albuquerque M de FPM de, Martelli CMT, Araújo TVB de, Miranda Filho D de B, Souza WV de, et al. Covid-19 in the Northeast of Brazil: from lockdown to the relaxation of social distancing measures. *Ciência & Saúde Coletiva*. 2021;26:1441-56. doi: <https://doi.org/10.1590/1413-81232021264.39422020>

14. Maciel E, Fernandez M, Calife K, Garrett D, Domingues C, Kerr L, et al. The SARS-CoV-2 vaccination campaign in Brazil and the invisibility of science evidences. *Ciência & Saúde Coletiva*. 2022;27:951-6. doi: <https://doi.org/10.1590/1413-81232022273.21822021>

15. Sousa YSO. O Uso do Software Iramuteq: Fundamentos de Lexicometria para Pesquisas Qualitativas. *Estudos e Pesquisas em Psicologia*. 2021;21(4):1541-60. doi: <https://doi.org/10.12957/epp.2021.64034>

16. Camargo BV, Justo AM. Tutorial para uso do software de análise textual IRAMUTEQ. Florianópolis: Universidade Federal de Santa Catarina. 2013. Disponível em: <http://iramuteq.org/documentation/fichiers/tutoriel-portugais-22-11-2018>

17. Salvador PTCO, Gomes ATL, Rodrigues CCFM, Chiavone FBT, Alves KYA, dos Santos Bezerril M, et al. Uso do software IRAMUTEQ nas pesquisas brasileiras da área da saúde: uma scoping review. *Rev. bras. promoç. saúde*. 2018;31. doi: <https://doi.org/10.5020/18061230.2018.8645>

18. Minayo MCS. Pesquisa social: teoria, métodos e criatividade. Petrópolis (RJ): Vozes; 2016.

19. Carias AR, Ribeiro LJ, Bonfatti SC, Mozardo M, Alves R, Visintin C, et al. Suffering of women in vulnerability situation during COVID-19 pandemic. *Rev Bras Psicoterapia*. 2021;23(1):211-24. doi: <https://doi.org/10.5935/2318-0404.20210015>

20. Dirce DSB, Stochero HM, Antunes CS, Smeha LN, Silva SC, Backes MTS. Percepções de gestantes e puérperas no contexto de pandemia da Covid-19. *Avances en Enfermería*. 2022;40(1supl). doi: <https://doi.org/10.1590/S0103-73312020300215>

21. Lebel C, MacKinnon A, Bagshawe M, Tomfohr-Madsen L, Giesbrecht G. Elevated depression and anxiety symptoms among pregnant individuals during the COVID-19 pandemic. *Journal of affective disorders*. 2020;277:5-13. doi: <https://doi.org/10.1016/j.jad.2020.07.126>

22. Paixão GP do N, Campos LM, Carneiro JB, Fraga CD de S. Maternal solitude before the new guidelines in SARS-COV-2 times: a Brazilian cutting. *Rev. gaúch. enferm*. 2021;42. doi: <https://doi.org/10.1590/1983-1447.2021.20200165>

23. Sousa SCL, Dias AP, Cunha KRF, Bezerra KRS, de Oliveira Lima A, do Nascimento SMC, et al. A pandemia da Covid-19 e o adoecimento mental da gestante. *Research, Society and Development*. 2021;10(15):e329101522656-e329101522656. doi: <http://dx.doi.org/10.33448/rsd-v10i15.22656>

24. Boeck GA, Carvalho BLR, Back IR, de Lima Santos A. Saúde mental e COVID-19: sentimentos vivenciados por gestantes em tempos de pandemia. *Concilium*. 2022;22(3):665-83. doi: <https://doi.org/10.53660/CLM-257-258>

ISSN: 2238-7234

Brito CC *et al.*

25. Campos ML, Veleda AA, Coelho DF, Telo SV. Percepção das gestantes sobre as consultas de pré-natal realizadas pelo enfermeiro na atenção básica. *Journal of Nursing and Health*. 2016;6(3):379-90.

Disponível em:

<https://periodicos.ufpel.edu.br/ojs2/index.php/enfermagem/article/view/7949>

26. Mendes LMC, Sudré GA, Oliveira JV, Barbosa NG, dos Santos Monteiro JC, Gomes-Sponholz FA. Adesão tardia e as representações sociais relacionadas à assistência pré-natal. *Rev. bras. promoç. saúde*. 2021;34:7-7. doi:

<https://doi.org/10.5020/18061230.2021.13431>

27. Paes LB de O, Salim NR, Stofel NS, Fabbro MRC. Women and COVID-19: reflections for a sexual and reproductive rights-based obstetric care. *Revista Brasileira de Enfermagem*. 2021;74. doi:

<https://doi.org/10.1590/0034-7167-2020-1164>

28. Estrela F, Silva KKA, Cruz MAD, Gomes NP. Gestantes no contexto da pandemia da Covid-19: reflexões e desafios. *Physis: Revista de Saúde Coletiva*. 2020;30:e300215. doi:

<https://doi.org/10.1590/S0103-73312020300215>

29. Urasaki MBM, de Albuquerque RS, Venâncio KCMP. Assistance to pregnant women, parturient and puerperal women in times of pandemic: what has

Pregnant women's perception about prenatal monitoring.. changed? *Revista Enfermagem Atual In Derme*. 2020;94(32). doi: <https://doi.org/10.31011/reaid-2020-v.94-n.32-art.821>

30. Santana GCS, Amor MCMS, Pérez BAG. Atenção ao pré-natal: principais estratégias utilizadas durante a pandemia do COVID-19. *Revista Eletrônica Acervo Saúde*. 2021;13(10):e8919-e8919. doi: <https://doi.org/10.25248/reas.e8919.2021>

31. Oliveira AC de J, Gonçalves ECS, Oliveira GA de, Marcolino G de J, Paulino LS, Campos FA de O. Saúde reprodutiva feminino Brasil durante a pandemia da Covid-19: fecundidade, contracepção e pré-natal: uma revisão narrativa. *Rev Eletrônica Acervo Saúde*. 2022;1-7. doi: <https://doi.org/10.25248/reas.e9684.2022>

32. Lima JN de, Cruz Neto J, Nicolau AIO, Oliveira CJ de, Damasceno SS, Cruz R de SBLC, et al. COVID-19 and the repercussions on pregnant women's mental health: integrative review. *Acta Paulista de Enfermagem*. 2022;35. doi: <https://doi.org/10.37689/acta-ape/2022AR014066>

33. Rossetto M, Souza JB, Fonsêca GS, Kerkhoff VV, Moura JRA. Flowers and thorns in pregnancy: experiences during the COVID-19 pandemic. *Rev. gaúch. enferm*. 2021;42. doi: <https://doi.org/10.1590/1983-1447.2021.20200468>

Financing source: No

Conflicts of interest: No

Date of submission: 2022/14/10

Accepted: 2022/13/11

Publication: 2023/04/03

Corresponding author:

Antonio Werbert Silva da Costa

E-mail: werbert39@hotmail.com

How to cite this article:

Brito CC, Costa AWS, Sousa Ribeiro SEFS, Fontes FLL, Borges JWP. Pregnant women's perception about prenatal monitoring during the COVID-19 pandemic. *Rev Enferm UFPI* [internet]. 2022 [Cited: ano mês abreviado dia]; 11: e3153. Available from: DOI: 10.26694/reufpi.v11i1.3153

