PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

Title (Provisional)

THE SOCIAL SUPPORT NETWORK OF BRAZILIAN AMAZONIAN WOMEN TO SUBSIDIZE THE DECISION-MAKING POWER OF PLANNED HOME BIRTH: A QUALITATIVE STUDY

Authors

Costa dos Reis, Laena Costa dos; Bevilaqua, Jannaina Campos; Alves, Valdecyr Herdy; Penna, Lucia Helena Garcia; DIAS DA SILVA, SÍLVIO ÉDER; Parente, Andressa Tavares; Vieira, Bianca Dargam Gomes Dargam Gomes; Pereira, Audrey Vidal; Carneiro, Marcia Simão; da Conceição, Natalia Tifanny; Calandrini, Tatiana do Socorro dos Santos Socorro dos Santos; Pereira, Rafaela Chagas; Almeida, Malena da Silva; RODRIGUES, Diego Pereira

VERSION 1 - REVIEW

Reviewer	**1**
Name	**Hcini, Najeh**
Affiliation	**West French Guiana Hospital Center**
Date	**24-Nov-2023**
COI	**No competing interests**

The objective of the article seems interesting to me, and there is limited literature available on the subject. I believe this article should focus on the motivations of pregnant women who choose home birth. For instance, in the abstract, in the results section, the authors present reflections instead of the expected primary motivations of women. To enhance the article's quality, it is indeed recommended to present the results in a more synthetic and categorical manner, rather than simply reporting direct quotations from patients. The discussion section should be revised to align with the study's results instead of reflecting the authors' opinions. It's important to note that home birth is associated with various risks that the authors did not advocate.

Reviewer	**2**
Name	**Suhaimi, Julia**
Affiliation	**University of Malaya, Primary Care Medicine**
Date	**11-Feb-2024**

COI **Nil**

THE SOCIAL SUPPORT NETWORK FOR BRAZILIAN AMAZONIAN WOMEN WHEN MAKING THE DECISION TO HAVE A PLANNED HOME BIRTH

Dear author,
Please find the comments for this study as follows:

Strength of the study (page 2)
"This is the first study of Amazonian women since most of the research has been carried out in other regions of Brazil". – What is unique about Amazonian women as compared to other parts of Brazil? Is it their ability to gain access to healthcare or any other cultural impact? A non-native reader may know not the importance of this study.

Limitations of the study (page 2)
"The results of this study were applied to a specific population, with no intention of generalizing the study data "– This is not a limitation, as It is known that the results from a qualitative study cannot be generalized to other populations.

Theoretical framework – was there any theoretical framework used to form the study and the semi-structured interview guide?

Is there any demographic summary of the 25 participants who agreed to be interviewed? It would be interesting to note their age during the planned home birth, their education level and level of parity as these may also influence their decision to home birthing.

Planned home birth (PHB) in your study -Is it planned and assisted (by medical personnel) home birthing? Or is it a planned unassisted home birth? One of the exclusion criteria is if delivery was assisted by a midwife or an obstetrician (page 5) so I am not clear of the terminology here.

"Since home birth is as safe as hospital birth, the specialized literature has already shown this in studies" (page 4) The "home birth" quoted in your literature review are planned assisted home birth, therefore please make it clear that it is planned assisted home birth and not unassisted.

"The safety of home birth shows that there are no differences between fetal and early neonatal death, risk of bleeding, maternal mortality in relation to the place of birth, and also shows that home birth has a lower risk of obstetric interventions, such as episiotomy, severe lacerations and caesarean section or instrumental delivery"–(page 4) ref 11 and 13 refers to studies among women with low obstetric risks only. Therefore, need to phrase your sentence with care.

"Women who had their home births performed by an obstetrician or midwife were excluded" (page 5) – Why were they excluded from this study?
Suggestion to the author to make it clear what are the themes that emerged from this study.

"Previous negative experiences of childbirth, with traumatic experiences for Amazonian women, encouraged the participants to tap into their social support network to make the decision to have a home birth. This is a way for them not to experience the same traumas and to change the way women view birth, especially unnecessary interventions in

*childbirth, disrespect and obstetric violence." (p*age 7) – These are all negative hospital birth experiences. Did any of the study participants encounter anyone with a negative home birthing (either planned or unplanned) experience? Because it seems that most (if not all) participants were adamant about the decision to home birth after listening to the success stories. So, if they had encountered another mother with a traumatic home birthing experience, would it deter their decision to home birth?

"The women's social support network, with the referral of the specialized team, which provides qualified support, based on scientific evidence". (Page 8) – When the participants met the nurses, was it just to gather information or did the nurses also provide antenatal care for these mothers?

"In this sense, this network is a milestone for empowerment in sexual and reproductive health decision-making". (Page 9) – Why is it a milestone? What was the existing way how Amazon women make decisions for their health? Were they always denied the autonomy to make decisions regarding their health?

Were the women in this study aware of each of their pregnancy risks before deciding on home birthing? Obstetric risks such as uterine atony due to multiparity or risks due to underlying medical conditions e.g. diabetes mellitus can affect both mother and fetus.

*"Social support is an important guideline for ensuring decision-making. In this network, the provision of information on the rates of interventions, transfers and perinatal outcomes of home births are important points for the empowerment of Amazonian women and for informed decision-making" (*Page 10) – In your study, it is illustrated that one of the ways the women gather information was to exchange stories of successful home birth, which is rather casual. Does the level of education of these women play a role in determining the extent of the search for information on home birthing that will determine decision-making?

One of the sources of knowledge most quoted by your study participants is the Internet – what are the possible ways to improve the safety and quality of knowledge obtained from the Internet regarding home birthing? Perhaps authors can search any literature for this.

VERSION 1 - AUTHOR RESPONSE

Reviewer's comment:

1. **Reviewer: 1**

- The objective of the article seems interesting to me, and there is limited literature available on the subject. I believe this article should focus on the motivations of pregnant women who choose home birth. For instance, in the abstract, in the results section, the authors present reflections instead of the expected primary motivations of women. To enhance the article's quality, it is indeed recommended to present the results

in a more synthetic and categorical manner, rather than simply reporting direct quotations from patients. The discussion section should be revised to align with the study's results instead of reflecting the authors' opinions. It's important to note that home birth is associated with various risks that the authors did not advocate.

R.: In response to reviewer 1, I would mention that the specialized literature on home birth was presented throughout the conceptual contribution and discussed in the introduction, delimiting the problem situation of the topic. We therefore disagree with the reviewer's comment. And we disagree with the point that the study focuses on women's motivations for home birth, because we understand that the study deals with social support for the decision-making power of home birth, of which the abstract presents how this support allows women to decide for home birth, with the support of women to enable successful experiences in their childbirth. Within qualitative research, the studies present the full testimonies in the light of the study's treatment and analysis process, which culminates in the presentation of the categories formulated in the synthesis of the analysis process. Thus, the text presented is within the focus established in the literature and also in line with the format of articles with a qualitative approach, which in the other presentations are carried out within the discussions in the light of the results. With regard to the discussions presented, the line of reasoning is based on the results of the social support network for women's decision-making in home birth, showing how support is provided and how these relationships are interconnected, for the woman's decision, in addition to showing the recommendations of international organizations and studies on the subject, especially that there is no increased risk compared to hospital birth, as the literature presents, with low-risk women. This shows, at this point, that home birth is just as safe as hospital birth for women at low obstetric risk.

2. Reviewer: 2

- Strength of the study (page 2) - "This is the first study of Amazonian women since most of the research has been carried out in other regions of Brazil". – What is unique about Amazonian women as compared to other parts of Brazil? Is it their ability to gain access to healthcare or any other cultural impact? A non-native reader may know not the importance of this study.

R.: At the end of the introductory part, the context and particularities of home birth in the Amazon region were presented. It showed that this reality belongs to the very culture of women, especially women from traditional peoples such as indigenous peoples, quilombolas and riverine communities through traditional midwives. Research is also needed with women in urban centers, with infrastructure, to identify the information and its repercussions on these women's decision-making power for home birth, especially in the Amazon region. Since, in most Brazilian studies, women have greater conditions and knowledge than those in urban centers. **Described in the penultimate paragraph of the introduction section.**

- **In the text:** The study of planned home births in the Amazon context is the first with this panorama, where there are different studies(6-7,13,15-17) that show different realities in the Brazilian context. Home births in the Amazon region are culturally based, especially in places with limited infrastructure, which often have a traditional midwife, whether in communities with traditional populations such as riverside dwellers, quilombolas or indigenous peoples. Culturally, childbirth is

provided with maternal care for these women, and the research, which took place in urban centers in the region with better health system services and infrastructure, constitutes an object of investigation for observing this type of birth and also how the relationship between information and the power of choice is provided for Amazonian women. Their social support network is made up of women, who are central figures in this sharing of childbirth. In this way, the relationship between Amazonian women and home birth is perennial, and is therefore established in their history and social context, with their network providing care and sharing knowledge.

- Limitations of the study (page 2) - "The results of this study were applied to a specific population, with no intention of generalizing the study data "– This is not a limitation, as It is known that the results from a qualitative study cannot be generalized to other populations.

R.: After the summary of the study, in the topic Strengths and limitations of this study, the limitations of the study were presented and corrected.

- **In the text:** - There is a limit to the diversity of care in the country and the lack of a health policy and guidelines for home births. - The study is also limited by the impossibility of using other data collection strategies and observing women's medical records with the team of professionals.

- Theoretical framework – was there any theoretical framework used to form the study and the semi-structured interview guide?

R.: From a theoretical point of view, no theoretical contribution was applied to discuss the data, but only by articulating the conceptual dimension on the social support network and the specialized literature on home birth, as well as public policies for home birth in Brazil and international recommendations. **Described in the last paragraph of the materials and methods section.**
- While the semi-structured interview guide applied in the study was constructed by the researchers and structured to be used only in the study. No questions were taken from previous studies on the subject or in similar contexts.

- **In the text:** From a theoretical point of view, the study did not apply any theoretical contribution to the discussion of the data, but only articulated the conceptual dimension of the support network and social support network to underpin the discussion of the results, in addition to studies of planned home births and public policies in Brazil and international recommendations.
- The participants who gave feedback were scheduled for data collection. The instrument used was an individual, face-to-face semi-structured interview which took place in a location of the woman's choice, in most cases her home or work environment. This instrument was developed by the researchers themselves for use in this study.
- The interviews took place only in the presence of the interviewee and the participants, without the presence of third parties, guaranteeing privacy at all times. Prior to data collection, the participants were asked to sign an Informed Consent Form (ICF), which guarantees their right to anonymity, using an alphanumeric code, P (Participant), followed by a numeral, according to the order in which the interviews were carried out (P1, P2, P3, ..., P20).
- The interviews involved talking to the woman about: Tell us about the support you received in making the decision to have a home birth. Each interview lasted an average of 120 minutes and took

place between August 2021 and February 2022. This process used Mp3 recording, which was authorized by the participants, which was submitted to full transcription and later data processing.

- Is there any demographic summary of the 25 participants who agreed to be interviewed? It would be interesting to note their age during the planned home birth, their education level and level of parity as these may also influence their decision to home birthing.

R.: Yes, there is information on the characterization of the study participants, which was structured and mentioned at the beginning of the results section.

- **In the text:** Regarding the characterization of the twenty Amazonian women, there was a predominance of participants aged between thirty and forty, married or in a stable union. They were of brown ethnicity, had completed higher education, had a family income of between four and ten Brazilian minimum wages (R$1,412.00), and owned their own home, making them middle and upper-middle class in the country. As for the number of births, there was a predominance of primiparous women, with planned and desired pregnancies. Most of the participants' births took place in hospital, and were normal deliveries. The births of the participants' mothers took place at home. There were no transfers to hospital for their births.

- Planned home birth (PHB) in your study -Is it planned and assisted (by medical personnel) home birthing? Or is it a planned unassisted home birth? One of the exclusion criteria is if delivery was assisted by a midwife or an obstetrician (page 5) so I am not clear of the terminology here.

R.: Planned home birth is a term used to describe a birth that takes place at home. Nowadays, it can be assisted by technical professionals such as obstetricians, obstetric nurses or traditional birth attendants (those without technical knowledge). In the study, the women were assisted at the time of their births by a team specializing in home births, made up of obstetric nurses. They are legally and professionally qualified to act.

- **In the text:** As a result, these women's home births were assisted by technical professionals, trained obstetric nurses and specialists in planned home births.

- "Since home birth is as safe as hospital birth, the specialized literature has already shown this in studies" (page 4) The "home birth" quoted in your literature review are planned assisted home birth, therefore please make it clear that it is planned assisted home birth and not unassisted.

R.: It was mentioned in the text that the home birth planned in the study was a home birth with the presence of trained health professionals and not a home birth without professional assistance.

-**In the Text**: Home births assisted by trained professionals for women at low obstetric risk are as safe as hospital births, and this has already been demonstrated in specialized literature(11-15).

- "The safety of home birth shows that there are no differences between fetal and early neonatal death, risk of bleeding, maternal mortality in relation to the place of birth, and also shows that home birth has a lower risk of obstetric interventions, such as episiotomy, severe lacerations and

caesarean section or instrumental delivery"–(page 4) ref 11 and 13 refers to studies among women with low obstetric risks only. Therefore, need to phrase your sentence with care.

R.: According to the evaluator, the writing of the text was aimed at low obstetric risk, in accordance with the references used and also what is consistent with the literature on the safety of home births assisted by health professionals.

In the text: The safety of home births(10-15) and the support of professional and non-governmental organizations, as well as the World Health Organization (WHO), express the real need for support for women(10), in order to guarantee informed decision-making about the PDP. Home births for women at low obstetric risk are as safe as hospital births, and the specialized literature has already shown this in studies(11-15). The safety of home births shows that there are no differences between fetal and early neonatal death, risk of hemorrhage, maternal mortality in relation to the place of birth, and also shows that home births have a lower risk of obstetric interventions, such as episiotomy, severe lacerations and caesarean section or instrumental delivery(7-15). Thus, the social support network is a foundation for women to consciously and safely establish their decision-making power, when they are provided with support for this decision with home births assisted by trained professionals for women at low obstetric risk.

- "Women who had their home births performed by an obstetrician or midwife were excluded" (page 5) – Why were they excluded from this study? Suggestion to the author to make it clear what are the themes that emerged from this study.

R.: The reason for excluding obstetricians and midwives from the exclusion criteria was that these professionals do not provide care in the locality of the study, so they were excluded, with only obstetric nurses providing home birth care.

In the text: Women who had their home births carried out by an obstetrician or midwife were excluded, as the state had no professionals working in home birth care. In addition, the aim of the study was to understand this process for women who were assisted by obstetric nurses.

- "Previous negative experiences of childbirth, with traumatic experiences for Amazonian women, encouraged the participants to tap into their social support network to make the decision to have a home birth. This is a way for them not to experience the same traumas and to change the way women view birth, especially unnecessary interventions in childbirth, disrespect and obstetric violence." (page 7) – These are all negative hospital birth experiences. Did any of the study participants encounter anyone with a negative home birthing (either planned or unplanned) experience? Because it seems that most (if not all) participants were adamant about the decision to home birth after listening to the success stories. So, if they had encountered another mother with a traumatic home birthing experience, would it deter their decision to home birth?

R.: In the study, all the participants had positive experiences of giving birth at home, with only previous traumatic experiences of hospital birth. Therefore, in relation to the evaluator's comment, I will mention this issue.

- “The women's social support network, with the referral of the specialized team, which provides qualified support, based on scientific evidence”. (Page 8) – When the participants met the nurses, was it just to gather information or did the nurses also provide antenatal care for these mothers?

R.: I would mention that the support provided by the nurse took place during prenatal care, which is the basis of social support for these women.

In the text: The women's social support network, with the referral of the specialized team, which provides qualified support throughout the prenatal process, based on scientific evidence. This constitutes a valuable support network for Amazonian women when it comes to making decisions and experiencing a planned home birth. This support from nurses throughout prenatal care represents an important step for women as a way of guaranteeing their rights to home birth, which were accessed by seeking out teams for the home birth process.

- “In this sense, this network is a milestone for empowerment in sexual and reproductive health decision-making”. (Page 9) – Why is it a milestone? What was the existing way how Amazon women make decisions for their health? Were they always denied the autonomy to make decisions regarding their health?

R.: In the comment to the evaluator, it was mentioned that the framework is for this reality, which allows autonomy in childbirth and the right to choose for women, especially Brazilian women, whose rights and autonomy are curtailed by society and health professionals, among other social actors.

In the text: In this sense, this network is a milestone in the empowerment of Amazonian women to make decisions about their sexual and reproductive health, since the Brazilian historical context has always been one of curtailment of women's autonomy and rights, and this social support allows these women to make decisions.

- Were the women in this study aware of each of their pregnancy risks before deciding on home birthing? Obstetric risks such as uterine atony due to multiparity or risks due to underlying medical conditions e.g. diabetes mellitus can affect both mother and fetus.

R.: All the women were informed of possible obstetric risks, such as the risk of a hospital birth, and as these women are at low obstetric risk, there is no increased risk due to their choice. This is also proven by the specialized literature.

- “Social support is an important guideline for ensuring decision-making. In this network, the provision of information on the rates of interventions, transfers and perinatal outcomes of home births are important points for the empowerment of Amazonian women and for informed decision-making” (Page 10) – In your study, it is illustrated that one of the ways the women gather information was to exchange stories of successful home birth, which is rather casual. Does the level of education of these women play a role in determining the extent of the search for information on home birthing that will determine decision-making?

R.: Women's high level of education, with a predominance of complete higher education, contributes satisfactorily to their decision-making. Thus, the information passed on by the nurses allows them to understand and make decisions.

In the text: The Health Care and Clinical Excellence guideline stresses the importance of women receiving the information they need when deciding where to have their baby, so that they can make a fully informed decision, i.e. social support is an important guideline for guaranteeing decision-making. In this network, the provision of information on the rates of interventions, transfer and perinatal outcomes of home birth and possible risks, which are important points for the empowerment of Amazonian women and for informed decision-making. This fact contributes, especially given the high level of schooling of these women, as seen in other studies, which allows for this understanding of decision-making(8-9,13,16). What can be observed is that there is a gap in the social support network for women's decision-making regarding the place of delivery(22). In addition to this social support, the search for professional information should be based on scientific recommendations and care data, in order to support women's decision-making, as determined by the scientific literature(21-23).

- One of the sources of knowledge most quoted by your study participants is the Internet –what are the possible ways to improve the safety and quality of knowledge obtained from the Internet regarding home birthing? Perhaps authors can search any literature for this.

R.: She mentions the Internet as an important means of information, which nurses should be responsible for refining, as well as the countless pieces of information that women are looking for. The role of the Internet in the choice of birth needs to be studied in greater depth in other studies, either through studies or reviews.

In the text: Despite the advances in the field of labor and birth, which include the contribution of scientific knowledge, the topic of planned home birth needs greater dissemination of knowledge. There is a gap in scientific production on home birth and the social support network in the decision-making field. Home births need guidelines/regulations within the Brazilian health system, especially regarding the confrontation between professional classes in search of a field of activity and a market(8). In the search for knowledge about the PDP, there is an association with the woman's own initiative, as observed in studies(21-22,24-26), since women have the attitude of seeking the necessary knowledge to support their own decision-making, through various forms of knowledge, such as scientific events, articles, books, the internet, films and with health professionals. This social support is extremely important for ensuring an informed decision. This means of information needs to be explored in greater depth in terms of how its content enables women to make decisions, compared to the information passed on via the internet. However, the provision of scientific channels by nurses contributes positively to women's decision-making.

VERSION 2 - REVIEW

Reviewer	**2**
Name	**Suhaimi, Julia**
Affiliation	**University of Malaya, Primary Care Medicine**
Date	**07-May-2024**

COI **No competing interest**

Dear authors,

Thank you for revising the manuscript and for the point-by-point reply to reviewers comments.

However, there are still some areas that may need some clarification/elaboration.

Page 26, lines 3-9

"Women who had their home births performed by an obstetrician or midwife were excluded, since there were no professionals in the state who provided home birth care. In addition, the aim of the study was to understand this process for women who were assisted by obstetric nurses."

Is there a difference between midwives and obstetric nurses in your country? If so, how does the births attended by midwife and obstetric nurse differ? I am still trying to understand why home births attended by obstetrician or midwives were excluded but not those by obstetric nurses.

Page 27, line 56-58

"Most of the participants' births took place in hospital and were natural deliveries. The births of the participants' mothers took place at home."

The above sentence is confusing. How did the participants' mothers come into the context? All the participants had a planned and assisted birth, isn't it so?

Page 27

"Reflexivity

From a theoretical point of view, the discussion of the data used the conceptual dimension of the support network and social support network to underpin the discussion of the results, as well as studies of planned home births and public policies in Brazil and international recommendations."

In reflexivity, the authors should also include how their prior experiences and motivations may impact the interpretation of the study data.