

# The Prenatal Primary Nursing Care Experience of Pregnant Women in Contexts of Vulnerability

## A Systematic Review With Thematic Synthesis

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The contexts of vulnerability are diversified and cover a wide range of situations where pregnant women are likely to experience threats or disparities. Nurses should consider the particular circumstances of women in contexts of vulnerability. We used a qualitative thematic synthesis to describe the experience of these women regarding their prenatal primary nursing care. We identified that the women's experience is shaped by the prenatal care. The fulfillment of their needs and expectations will guide their decision regarding the utilization of their prenatal care. We propose a theoretical model to guide nurses, promoting person-centered delivery of prenatal care. **Key words:** *contexts of vulnerability, experience, nursing, pregnant women, prenatal care, systematic review*

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**D**URING the prenatal period, women receive nursing care through primary care services.<sup>1</sup> Primary care is integrated, accessible, and accountable for addressing a large majority of personal health care needs, enabling the development of a sustained partnership with pregnant women.<sup>2</sup> Prenatal care may contribute to optimizing pregnancy and birth outcomes.<sup>3</sup> Nurses play a key role by improving women's access to prenatal care,<sup>3</sup> increasing the application of recommendations during pregnancy and the use of prenatal care.<sup>1</sup>

However, pregnant women in certain contexts may underuse such prenatal care.<sup>4,5</sup> It is the case for women living in rural areas,<sup>4,6</sup> who are younger than 19 years,<sup>4,7</sup> benefit from government financial support or have a low income,<sup>6,8</sup> are single parents,<sup>4,7</sup> are socially isolated,<sup>4</sup> have a low level of education,<sup>4,6,8</sup> or are immigrants.<sup>7</sup> These contexts put women at risk of adopting less healthy behaviors (ie, prenatal smoking, alcohol, and/or illicit drug use)<sup>4</sup> or experiencing pregnancy complications (ie, multiple birth, hypertensive disorders, antepartum hemorrhage, diabetes, and prenatal psychological distress).<sup>4</sup> All of these contexts combined with determinants of health engender vulnerability according to the World Health Organization (WHO) Commission of Social Determinants of Health (CSDH) conceptual framework.<sup>9</sup> Contexts of vulnerability put women at risk of inequities, such as low access to health care or discrimination.<sup>9,10</sup>

Contexts of vulnerability is an evolutive<sup>11,12</sup> and complex concept, given the multitude and variability of situations.<sup>11,13</sup> Scheele et al<sup>13</sup> provide a broader definition, stating that a woman in contexts of vulnerability is "a woman who is threatened by physical, psychological, cognitive and/or social risk factors in combination with lack of adequate support and/or adequate coping skills," putting her at risk of marginalization, exclusion, and inequity.<sup>14(p4)</sup>

The WHO<sup>15</sup> emphasizes the importance of a positive experience during pregnancy.

### Statements of Significance

#### **What is known or assumed to be true about this topic?**

During prenatal care, clinicians, including nurses, should adapt their interventions according to the clientele they are following. However, no guidelines and few studies have investigated the experience of pregnant women in contexts of vulnerability. Some literature reviews are available on the subject, but they are not specific to this population, to the prenatal period, or to pregnant women's perspectives.

#### **What this article adds:**

This article documents that the experience of pregnant women in contexts of vulnerability is shaped by the development of a quality nurse-woman relationship, the consideration of her vulnerability contexts, adequate information and support, and the accessibility, organization, and continuity of prenatal primary nursing care. By considering women's needs and expectations, nurses could positively influence the experience of care and, consequently, foster the utilization of prenatal care. The theoretical model will help nurses and nursing educators to understand the interaction between the nurse and the pregnant woman in contexts of vulnerability. This model contributes to the development of knowledge within the nursing discipline. Also, this model will guide nurses in identifying new research questions, such as the characteristics of a quality nurse-woman relationship or the experience of pregnant women's particular contexts.

However, contexts of vulnerability can affect women's experience.<sup>16</sup> Nurses' attitudes are among the various factors influencing women's prenatal care experience.<sup>17</sup> For instance, the nurses' respect of women's beliefs, the quality of support nurses provide,

whether or not they include the woman in her health care decisions will influence women's experience.<sup>18</sup> The relationship nurses develop with these women will also impact their experience of prenatal care.<sup>18,19</sup> Van den Berg et al<sup>20</sup> outlined the importance of "being treated as an individual person experiencing a significant life event rather than a common condition."<sup>(p113)</sup>

Although many studies have described the experience of women in different contexts of vulnerability, no currently available review synthesizes this experience to provide a global perspective. This would be helpful to nurses working with this clientele, who may be living with a wide range of vulnerability contexts.<sup>21</sup> To this end, we aimed to systematically review the literature to describe the prenatal primary nursing care (hereafter prenatal care) experience of pregnant women in contexts of vulnerability (hereafter women).

## METHODS

We conducted a systematic review with thematic synthesis of qualitative studies, following the Thomas and Harden method.<sup>22</sup> This article is presented according to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA).<sup>23</sup>

### Stage 1: Searching articles

We worked with 2 information specialists to develop search strategies in the Cumulative Index to Nursing and Allied Health Literature (CINAHL), EmCare, MEDLINE, and PsycINFO bibliographic databases. We limited our search to English or French articles published between 1995 and 2020. The strategies included terms related to "pregnancy," "nursing," and "experience" (see Supplement Digital Content 1, available at: <http://links.lww.com/ANS/A40>). Terms related to vulnerability were not included in the search strategies. To ensure that we covered all contexts of vulnerability, they were considered in the inclusion criteria. To be included, articles had to (1) document the primary care

registered nurses' role during prenatal care, including phone care, clinics, and community sites; (2) describe the prenatal nursing care experience of pregnant women in contexts of vulnerability; and (3) use qualitative or mixed methods.

We operationalized the vulnerability context inspired by the CSDH conceptual framework as one in which a woman is likely to experience threats or disparities, because of either individual or environmental contexts. Individual contexts include physical/biological/behavioral (eg, health condition, pregnancy complications, tobacco use), psychological (eg, mental illness), cognitive (eg, cognitive disease), and/or social (eg, low income or unemployment, cultural and linguistic barriers, sexual and gender orientation minority, low level of education or health literacy) factors.<sup>10,11,13,24</sup> Environmental contexts include the lack of access to primary care, geographic area (ie, living in rural area), air pollution, or unsafe streets.<sup>11,13,24</sup>

We excluded studies that were (1) exclusive to fecundation, delivery, or the postnatal period; (2) about miscarriage, abortion, or perinatal loss because these situations may influence women's experience of prenatal care<sup>25</sup>; (3) conducted in hospital settings; (4) unclear about nurses' follow-up in primary care; and (5) using only quantitative methods because this study used a thematic synthesis of qualitative results.

We also examined the reference lists of included articles for other relevant articles (hand searching). One author conducted the first screening using titles and abstracts of the retrieved records. Two authors independently screened the selected full-text articles. A third author helped resolve disagreements, as needed.

### Stage 2: Assessing quality

We used the *Standards for Reporting Qualitative Research* (SRQR),<sup>26</sup> a 21-item checklist including items regarding study rationale and context. Two authors independently evaluated each article, indicating

the presence (line and page number) or absence of each SRQR item and then met to compare their results and finalize their assessment of the studies' methodological quality. We considered articles lacking detail about the justification of qualitative approach/paradigms, contexts, sampling strategies, data collection methods, data analysis, and enhance trustworthiness to be of low quality. As recommended by Thomas and Harden,<sup>22</sup> we did not exclude low-quality studies but rather conducted a sensitivity analysis to examine their contribution to the thematic synthesis.

### Stage 3: Extracting data

We extracted the following information: authors, year of publication, study purpose and design, country, contexts of vulnerability, and sample size. We also extracted qualitative results to perform the thematic synthesis.

### Stage 4: Conducting a thematic synthesis

Two authors independently performed thematic line-by-line coding of the results of each article<sup>22</sup> following an iterative process.<sup>27</sup> The first author reviewed codes to formulate descriptive themes to describe the prenatal care experience. We grouped descriptive themes into analytical themes by authors, corresponding to our interpretation to "go beyond"<sup>22</sup> the findings. We used researcher triangulation and peer debriefing to ensure the dependability and credibility of results.<sup>27</sup>

## RESULTS

### Search results and study characteristics

We retrieved 1585 unique records, 14 of which met our inclusion criteria and were included in the synthesis, as shown in Figure 1. These 14 studies (Table 1), published between 1995 and 2019, used qualitative designs except one,<sup>28</sup> which used mixed methods. The studies were conducted in the United States (n = 5), Canada (n = 4),

Brazil (n = 3), Ghana (n = 1), and South Africa (n = 1). They addressed a variety of contexts of vulnerability, namely, physical/biological/behavioral (ie, transmitted diseases, deaf condition, pregnancy complications) (n = 6),<sup>29-34</sup> social (ie, low income) (n = 6),<sup>29,33-37</sup> cultural and linguistic barriers (n = 5),<sup>33,35,38-40</sup> sexual and gender orientation minority (n = 1),<sup>41</sup> low level of education or health literacy (n = 2),<sup>28,40</sup> weak social networks (n = 4),<sup>31-33,39</sup> and environmental contexts (ie, living in a rural area) (n = 3).<sup>28,40,41</sup> Sample size ranged from 4 to 27 participants.

### Prenatal primary nursing care experience of pregnant women in contexts of vulnerability

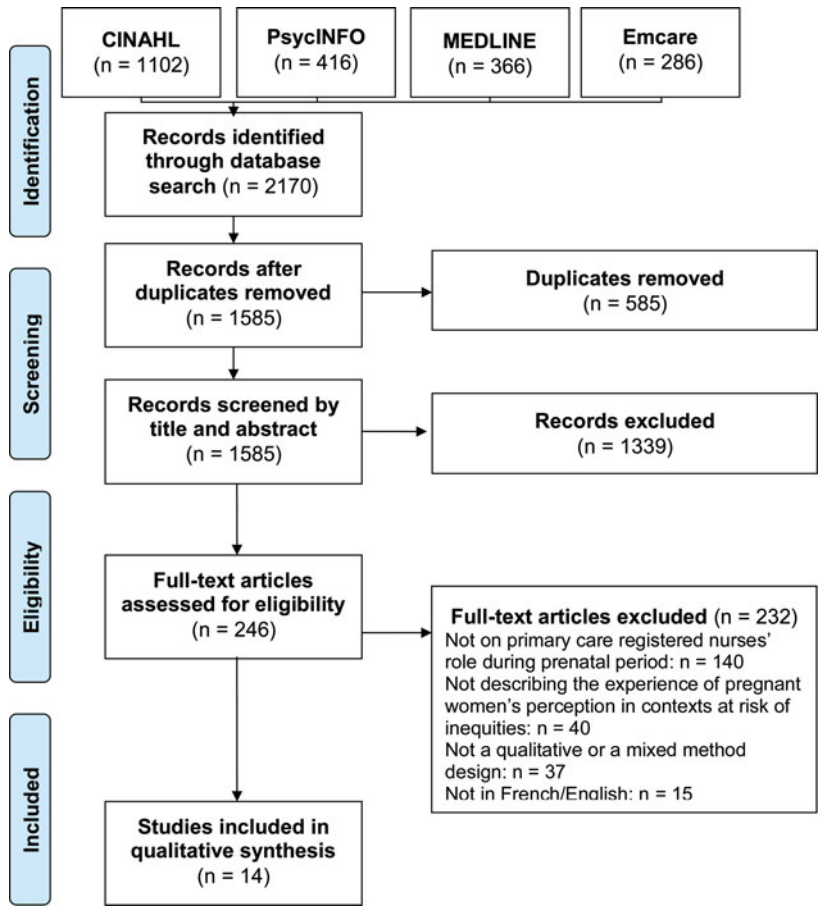
The experience of these women was shaped by the prenatal care provided (theme 1). Women had needs and expectations throughout their pregnancy, influencing their experience (theme 2). Their experience and the fulfillment of their needs and expectations modulated their decision regarding their prenatal care (theme 3). These 3 themes are described with examples of adequate and inadequate prenatal care.

#### *Women's experience is shaped by the prenatal care*

The experience of prenatal care was shaped by 4 subthemes: quality of the relationship with the nurse; consideration of their contexts; quality of the information and support; and accessibility, organization, and continuity of prenatal care. Detailed examples and quotes are provided in Table 2.

#### Quality of the nurse-woman relationship

Women described a quality relationship with their prenatal care nurse as one where the nurse respected, accepted and listened to them, and treated them with dignity and humanity and without judgment.<sup>29,33,35,36,38,40</sup> As described by one woman, if "the nurse will speak respectfully to you, [...] you will be happy."<sup>40(p2435)</sup>



**Figure 1.** PRISMA flowchart. CINAHL indicates Cumulative Index to Nursing and Allied Health Literature. This figure is available in color online ([www.advancesinnursingscience.com](http://www.advancesinnursingscience.com)).

Lack of humanistic care or disrespect could hamper the relationship.<sup>33,40</sup> Women perceived disrespect when nurses were not open to hearing what they had to say, provided depersonalized services, did not respect confidentiality, stigmatized them, treated them like a “child,” lost patience with them, or were verbally or physically abusive.<sup>29,30,32-35,40</sup>

**Consideration of women’s contexts**

Some nurses considered women’s vulnerability contexts and others did not. A woman mentioned that the nurse understood her financial constraints and showed consideration by giving her free vitamin samples.<sup>29</sup>

Other studies provided examples of how not accounting women’s contexts may generate a negative experience.<sup>30,41</sup> For instance, a queer woman expressed the difficulty navigating a system less inclusive, given a heteronormative approach:

I felt a little disempowered and had to struggle a little bit with that, and tell myself that it was okay to ask questions or to say no or to . . . You know, I felt a little bit at the mercy of the medical system.<sup>41(p3851)</sup>

**Quality of information and support**

According to women, information should be sufficient,<sup>29,30,34,39</sup> unbiased, and consistent<sup>32</sup> and should cover prenatal care,

Table 1. Study Characteristics

First Author (Publication Year)	Study Purpose	Study Design	Country	Contexts of Vulnerability	Sample Size, n
Berry (1999) <sup>38</sup>	Describe and explain the meanings, expressions, and experiences of generic and professional care during pregnancy of Mexican American women in their home and prenatal clinic contexts.	Exploratory descriptive	United States	Mexican American pregnant women	16
Blackford (2000) <sup>29</sup>	Describe how prenatal nurse educators are well prepared to meet the learning needs of mothers with disabilities.	Exploratory descriptive	Canada	Pregnant women with chronic conditions/ disabilities and low income	8
Burns (2019) <sup>39</sup>	Gain a more comprehensive understanding of Mi'kmaq women's experiences accessing prenatal care.	Feminist participatory action research	Canada	Mi'kmaq pregnant women socially isolated in rural context	4
Cricco-Lizza (2006) <sup>35</sup>	Describe low-income Black non-Hispanic women's perspectives about the promotion of infant feeding methods by nurses and physicians.	Ethnographic	United States	Black non-Hispanic pregnant women with low income	11
De Andrade Costa (2018) <sup>30</sup>	Identify the perceptions of deaf women regarding nursing care during pregnancy, childbirth, and postpartum.	Exploratory descriptive	Brazil	Deaf pregnant women	9
Fernandes Demarchi (2017) <sup>36</sup>	Investigate pregnant women's and primiparous mothers' perceptions of maternity.	Exploratory descriptive	Brazil	Primiparous pregnant women with low income	11
Hubbard (2018) <sup>31</sup>	Explore the experiences of deaf women receiving perinatal care and suggest implications for nursing practice within the QSEN framework.	Descriptive qualitative	United States	Deaf pregnant women	5

(continues)

Table 1. Study Characteristics (Continued)

First Author (Publication Year)	Study Purpose	Study Design	Country	Contexts of Vulnerability	Sample Size, n
Omar (1995) <sup>34</sup>	Describe pregnant women's perceptions regarding their expectations of and satisfaction with prenatal care.	Exploratory	United States	At-risk pregnant women with low income	22
Pretorius (2004) <sup>28</sup>	Explore and describe the perceptions of the pregnant women regarding ANHSU.	Mixed methods	South Africa	Pregnant women in rural context	14
Sanders (2008) <sup>32</sup>	Explore the meaning of pregnancy after diagnosis with HIV infection.	Phenomenological	United States	Pregnant women with HIV infection	9
Searle (2017) <sup>41</sup>	Examine structural marginalization within perinatal care relationships that provides insights into the impact of dominant models of care on queer birthing women.	Feminist interpretative phenomenological	Canada	Queer pregnant women in a rural context	13
Teixeira (2013) <sup>37</sup>	Examine the perceptions of primiparae on the guidance received in prenatal care regarding breastfeeding.	Descriptive qualitative	Brazil	Primiparous pregnant women with low income	10
Whitty-Rogers (2016) <sup>35</sup>	Explore and gain insight into the experiences of Mi'kmaq women with GDM in 2 First Nations communities and explore how these experiences have been shaped by a variety of SDOH and existing health policies.	Participatory action research	Canada	Mi'kmaq pregnant women with gestational diabetes and low income	9
Yakong (2010) <sup>40</sup>	Describe rural women's perspectives of their experiences seeking reproductive care from nurses.	Ethnographic	Ghana	Pregnant women in rural context with linguistic barriers	27

Abbreviations: ANHSU, antenatal health service utilization; GDM, gestational diabetes mellitus; HIV, human immunodeficiency virus; SDOH, social determinants of health; QSEN, quality of safety education for nurses; Queer, member of the lesbian, gay, bisexual, queer, pansexual and two spirit (LGBQP2S) communities.<sup>41</sup>

Table 2. Examples of Women's Experience Is Shaped by the Prenatal Primary Nursing Care

Subthemes	Examples	Quotes
Quality nurse-woman relationship	Quality relationship  Nurse does not respect the confidentiality	"I talked to the nurse and she was honest with me . . . but nice about it and gave me some ideas." <sup>34(p136)</sup> "I really had a good relationship with our nurse." <sup>33(p194)</sup> "[Pregnant woman] found out that this nurse in office actually spread it, I [pregnant woman] probably could have gotten her in trouble, she [the nurse] spread it to everybody. Everybody was looking at [pregnant woman] so strange." <sup>32(p52)</sup>
	Nurse stigmatizes women	Pregnant women with HIV condition expressed: "I feel like I'm a piece of [expletive deleted]. [ . . . ] That hurts. Just the way they look at you. [ . . . ] They are professional people. You come to them for help. They should not tear you down like that." <sup>32(p51)</sup>
	Nurse infantilizes women	"[The nurse] said why is it that I did not come to the clinic till six months to tell her that I am pregnant. Was she the one who impregnated me?" <sup>40(p2435)</sup>
	Nurse loses patience with women	"The frustration related to extra time took to speak to pregnant women with deaf condition causes nurses to tend to be impatient and to use exaggerated facial expressions or lip movement." <sup>31(p132)</sup>
	Nurse is verbally or physically abusive with women	"They bully and mistreat us." <sup>28(p78)</sup> "Nurses yell at you." <sup>40(p2455)</sup>
Consideration of the women's contexts	Physical/biological/behavioral (living with a disease/condition) Cultural and linguistic barriers	"Priscilla, a mother with diabetes, and Coreen, who has systemic lupus erythematosus, reported that they were given no alternative suggestions for addressing these concerns such as increased exercise, hydration, nutrition or rest." <sup>29(p901)</sup> "When I call, they speak English. I ask for a Spanish person, and they say wait; then they hang up the telephone." <sup>38(p208)</sup>
	Low income	The women knew that when they received a diagnosis of gestational diabetes mellitus, they had to follow a healthy diet, but for some, it presented a challenge because they did not have easy access to grocery stores and/or because they did not have the financial resources to buy food, let alone healthy food. <sup>33(p191)</sup>
	Low level of education or health literacy	"Clinic walls were decorated with posters and pictures containing information about contraceptives and immunizations, these forms of information dissemination had little impact because the majority of women were not educated and had limited literacy." <sup>40(p2456)</sup>
	Weak social networks	A pregnant woman identified that inadequate communication with her partner is caused by a lack of education by nurses: "If he would have had the proper training or instructions he would have been able to [help], but he wasn't aware of what to look for." <sup>29(p902)</sup>
	Sexual and gender orientation minority	"I'm queer, I have a female body partner, and you told me not to have sex before the pap test. 'What do you mean by that? Why?' And they were like, 'Oh, no, it's just sperm.' And I was like, 'Well, then use a different word. Use different languages. Use different languages because my partner just wouldn't have sex with me." <sup>41(p3583)</sup>

(continues)



Table 2. Examples of Women's Experience Is Shaped by the Prenatal Primary Nursing Care (Continued)

Subthemes	Examples	Quotes
Quality of information and support	Adequate information	"At the clinic the nurse gave the lecture once a month." <sup>37(p181)</sup> "All the information I got is real good. . . . And you know she [the nurse] gave me pictures of how to do it and stuff like that." <sup>35(p176)</sup>
	Inadequate information	"I don't know . . . I didn't really get a gist of like . . . . What exactly was going on. Or what they were saying. [She] indicated that she was not properly educated during her prenatal check-up appointments." <sup>42(p151)</sup> "I have never been oriented in my prenatal, only when I came [to the hospital that] I knew I should breastfeed until six months." <sup>37(p182)</sup>
Adequate support	Adequate support	Anna mentioned that "the nurses here supported me to get prenatal care." She values the nurses at the Health Centre, as indicated by how the support made her feel [ . . . ] really good knowing that [she] wasn't alone trying to figure it all out on [her] own, cause when [she] first became a mother [she] was only 16." <sup>39(p150)</sup>
	Inadequate support	"During prenatal care I was not oriented, the nurse only said it was important, but here in the hospital someone gave a lecture and I learned its true importance." <sup>37(p182)</sup> "I see a nurse every time I have my prenatal visits." <sup>34(p136)</sup>
Accessibility, organization, and continuity of prenatal care	Accessibility of care	"She [the interpreter] knows my signing style so it's better to just have the same interpreter." <sup>31(p131)</sup>
	Same nurse or interpreter throughout the prenatal care	"It would be good if at least one team professional knew how to talk to us. Nurses stay longer, so they should be trained." <sup>30(p128)</sup>
Limited services	Limited services	"I have never had contact with the [Estratégia de Saúde da Família] nurse." <sup>30(p126)</sup>
	Long wait times	"It took a long time before they got me in, 4, 5, 6 weeks." <sup>34(p138)</sup>
Legal and bureaucratic constraints	Legal and bureaucratic constraints	For immigrant contexts by Mexican women having received care in the United States: "Here there is so much paperwork"; "I put the papers in the box, and they lost them"; and "something's wrong with the papers"; "One barrier to prenatal care in this study was the lack of understanding of the legal, political, and bureaucratic processes to access the health care system." <sup>38(p209)</sup>
	Limited privacy	"As for that place (reception area), everybody is sitting there and looking at each other. You cannot talk about all your concerns. The kind of sickness that brought you there, you cannot say it before other people. [ . . . ] You feel that they are listening." <sup>40(p2457)</sup>
Frequent change of health care providers	Frequent change of health care providers	Pregnant women expressed that "they had too many different providers, resulting in the providers not knowing them personally," so they have to "tell their story" with every health care providers. <sup>34(p137)</sup>
	Transportation	"It's hard to go to the appointments. I have to take a bus. I get dizzy, so I have to get off and wait. Then I take another bus, and I have to walk my girl to school. If my daughter is slow, I miss the bus. The next bus doesn't transfer, so I have to walk to the clinic. So then, it takes me an hour." <sup>38(p209)</sup>
Limited choice of care settings	Limited choice of care settings	Pregnant women in rural regions expressed that they want to "have more mobile clinics." For some pregnant woman, "The clinic is too far to walk, and they stay at home." <sup>28(p78)</sup>

Abbreviation: HIV, human immunodeficiency virus.

pregnancy, delivery, postpartum, parenthood, and breastfeeding. Yet, many women expressed that the information they received was insufficient,<sup>29,30,34-40</sup> redundant,<sup>36</sup> inconsistent,<sup>34,35</sup> or unclear.<sup>31</sup> With respect to support, women appreciated when nurses provided information or facilitated navigation through the health care system.<sup>32-34,36,39</sup>

#### **Accessibility, organization, and continuity of prenatal care**

Accessibility to health care varied from one study to another as well as among women in the same studies. It included accessibility to nursing follow-up,<sup>36</sup> to an interpreter for women with a hearing impairment or a different mother tongue,<sup>30,31,38</sup> and to early prenatal care.<sup>38</sup> Some organizational factors such as long wait times,<sup>28,34,40</sup> rigid schedules,<sup>34</sup> legal and bureaucratic constraints, especially for immigrants,<sup>38</sup> and limited privacy<sup>40</sup> influenced women's experience negatively. Women also identified transportation constraints<sup>40</sup> and limited choice of care settings.<sup>33</sup> Having the same nurse<sup>40</sup> or the same interpreter<sup>31</sup> throughout the prenatal care helped improve continuity of services according to women and contributed to a positive experience (Table 2).

#### ***Fulfillment of women's needs and expectations guides their decision regarding prenatal care***

Several factors influenced the needs and expectations of women at the beginning of their prenatal nursing care, previous experience being one of them. For example, when referring to the accessibility of healthcare, one woman said: "I expected to be seen sooner than that."<sup>34(p138)</sup> The women's context of vulnerability such as living with a deaf condition or having a particular situation<sup>36</sup> also influenced their needs and expectations.

Fulfillment of their needs and expectations positively impacted their prenatal care experience. For example, a woman said she liked her prenatal care because the nurse "asks [her] how [she is] doing and if [she has]

any questions, is there anything [she wants] to know."<sup>34(p136)</sup> Another reported feeling less anxious after receiving the support she needed.<sup>32</sup> In contrast, unfulfilled needs and expectations may generate negative feelings. For instance, a primiparous woman said, she "[...] was frustrated enough, [she] expected more [...]" information.<sup>36(p2670)</sup>

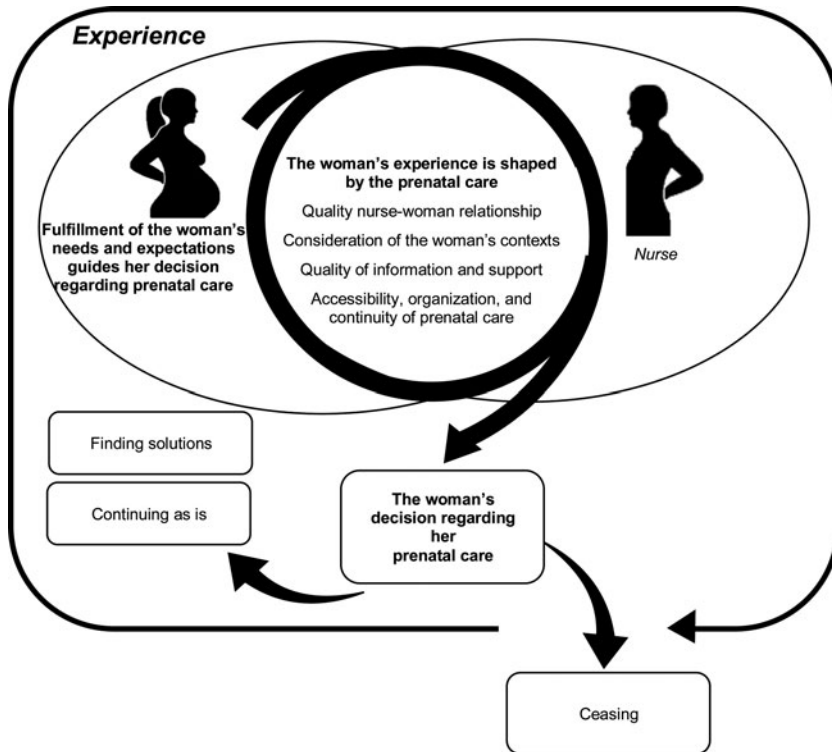
#### ***Women's decision regarding their prenatal care***

In situations where women felt their needs and expectations not being met, they made one of 3 decisions. They may choose to continue the prenatal care, as illustrated by a woman living with chronic conditions who preferred not to express her worries, in order to continue prenatal group sessions.<sup>29</sup> They may choose to find alternatives to prenatal care, such as requesting a different prenatal care nurse,<sup>38,40</sup> changing clinics,<sup>32,40</sup> or finding solutions to compensate for their unmet needs and expectations.<sup>31,33</sup> Finally, some women may choose to cease their prenatal care.<sup>28,32,33</sup> The reasons for a modification or a cessation of prenatal care highlighted in all articles were often related to the quality of the relationship with the nurse.<sup>33</sup>

#### **Thematic synthesis**

Together, the themes and subthemes represent the prenatal care experience of women in contexts of vulnerability. All results are presented as a theoretical model in Figure 2.

Their experience is influenced by the quality of the relationship with nurses, consideration of their context and situation, adequate information and support, and accessibility, organization, and continuity of prenatal care. Women express needs or expectations through their prenatal care. The fulfillment, or not, of their needs and expectations influences their decision about further use of prenatal care. Some women experience disappointing prenatal care, so they find solutions to fulfill their needs and expectations. Others cease prenatal care and "[leave]



**Figure 2.** Prenatal primary nursing care experience of pregnant women in contexts of vulnerability. The arrows indicate the interaction between themes.

the system,” which compromised continuity of prenatal care. This quote summarizes the entire situation: “For two years I moved from place to place. If I trust you, I will stay with you.”<sup>32(p53)</sup>

**Quality assessment and sensitivity analysis**

The results of the quality assessment of each study are presented in Table 3. The SRQR criteria regarding research paradigm (n = 9), ways to enhance trustworthiness (n = 8), conflicts of interest (n = 11), and researcher characteristics (n = 8) were frequently missing in the included studies. In one study,<sup>37</sup> several criteria were either insufficiently described or not described at all. This study brought only one theme (Table 4) to the synthesis. In contrast, studies assessed as high quality according to the

SRQR<sup>32,33,38,40</sup> identified 3 themes and 7 subthemes. All themes and subthemes were present in more than one study.

**DISCUSSION**

The quality of the nurse-woman relationship is an important focal point of the prenatal care experience. A positive experience of relationships reinforces the desire to continue follow-up, whereas a negative experience of the relationship appears to incite women to consult other resources.<sup>17,19</sup> Another study<sup>42</sup> found that nurses’ negative attitudes were an important cause of nonutilization of health care services.

The quality of the relationship with nurses and the consideration of their own context of vulnerability are key aspects of person-centered care. Person-centered nursing care,

**Table 3.** Quality Assessment of Included Studies Using the SRQR<sup>a</sup>

SRQR Items	First Author (Publication Year)													
	Berry (1999) <sup>38</sup>	Blackford (2000) <sup>29</sup>	Burns (2019) <sup>39</sup>	Critico-Lizza (2006) <sup>35</sup>	De Andrade Costa (2018) <sup>30</sup>	Fernandes Demarchi (2017) <sup>36</sup>	Hubbard (2018) <sup>31</sup>	Omar (1995) <sup>34</sup>	Pretorius (2004) <sup>28</sup>	Sanders (2008) <sup>32</sup>	Searle (2017) <sup>41</sup>	Teixeira (2013) <sup>37</sup>	Whitty-Rogers (2016) <sup>33</sup>	Yakong (2010) <sup>40</sup>
1. Title	X		X	X	X	X	X		X			X	X	X
2. Abstract	X	X	X	X	X	X	X	X	X		X	X	X	X
3. Problem formulation	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4. Purpose/research question	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5. Qualitative approach/research paradigm <sup>b</sup>	X	X	X		X				X		X		X	X
6. Researcher characteristics	X		X	X		X		X			X		X	X
7. Context <sup>b</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8. Sampling strategy <sup>b</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9. Ethical issues	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10. Data collection methods <sup>b</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11. Data collection instruments	X	X	X		X		X	X	X		X			X
12. Units of study	X	X	X	X	X	X	X	X	X	X	X	X	X	X
13. Data processing	X	X	X	X	X	X	X	X	X	X	X	X	X	X
14. Data analysis <sup>b</sup>	X	X	X	X	X	X	X	X	X	X	X	X	X	X
15. Enhance trustworthiness <sup>b</sup>	X		X	X	X	X	X	X	X	X	X	X	X	X
16. Synthesis and interpretation	X	X	X	X	X	X	X	X	X	X	X	X	X	X
17. Links to empirical data	X	X	X	X	X	X	X	X	X	X	X	X	X	X
18. Prior work/implications/transferrability/contributions	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19. Limitations	X		X	X	X	X	X	X	X				X	X
20. Conflicts of interest													X	X
21. Funding	X	X		X			X		X	X			X	X

Abbreviation: SRQR, Standards for Reporting Qualitative Research.

<sup>a</sup>The letter "X" indicates presence of SRQR item. The blank space indicates that SRQR items are not present in the article.

<sup>b</sup>Elements related to study rationale or justification of methodological decisions.

**Table 4.** Sensitivity Analysis<sup>a</sup>

Themes and Subthemes About Prenatal Primary Nursing Care	First Author (Publication Year)												
	Berry (1999) <sup>38</sup>	Blackford (2000) <sup>29</sup>	Burns (2019) <sup>39</sup>	Cricco- Lizza (2006) <sup>35</sup>	De Andrade Costa (2018) <sup>30</sup>	Fernandes Demarchi Hubbard (2017) <sup>36</sup>	Omar (1995) <sup>34</sup>	Pretorius (2004) <sup>28</sup>	Sanders (2008) <sup>32</sup>	Searle (2017) <sup>41</sup>	Teixeira (2013) <sup>37</sup>	Whitty- Rogers (2016) <sup>33</sup>	Yakong (2010) <sup>40</sup>
Experiences of Pregnant Women in Contexts of Vulnerability	X	X	X	X	X	X	X	X	X	X	X	X	X
Women's experience is shaped by the prenatal care	X	X	X	X	X	X	X	X	X	X	X	X	X
Quality of the nurse-woman relationship	X	X	X	X	X	X	X	X	X	X	X	X	X
Respectful humanistic care	X	X	X	X	X	X	X	X	X	X	X	X	X
Consideration of the women's contexts	X	X	X	X	X	X	X	X	X	X	X	X	X
Physical/biological Cultural and linguistic barriers	X	X	X	X	X	X	X	X	X	X	X	X	X
Low income	X	X	X	X	X	X	X	X	X	X	X	X	X
Low level of education/health literacy	X	X	X	X	X	X	X	X	X	X	X	X	X
Weak social networks	X	X	X	X	X	X	X	X	X	X	X	X	X
Sexual and gender orientation minority	X	X	X	X	X	X	X	X	X	X	X	X	X
Quality of information and support	X	X	X	X	X	X	X	X	X	X	X	X	X
Enough information	X	X	X	X	X	X	X	X	X	X	X	X	X
Consistent, reliable information	X	X	X	X	X	X	X	X	X	X	X	X	X
Redundant information	X	X	X	X	X	X	X	X	X	X	X	X	X
Clear information	X	X	X	X	X	X	X	X	X	X	X	X	X
Nurses' adequate support	X	X	X	X	X	X	X	X	X	X	X	X	X

(continues)

**Table 4.** Sensitivity Analysis<sup>a</sup> (Continued)

Themes and Subthemes	First Author (Publication Year)													
	Berry (1999) <sup>38</sup>	Blackford (2000) <sup>29</sup>	Burns (2019) <sup>39</sup>	Cricco-Lizza (2006) <sup>35</sup>	De Andrade Costa (2018) <sup>30</sup>	Demarchi (2017) <sup>36</sup>	Hubbard (2018) <sup>31</sup>	Omar (1995) <sup>34</sup>	Pretorius (2004) <sup>28</sup>	Sanders (2008) <sup>32</sup>	Searle (2017) <sup>41</sup>	Teixeira (2013) <sup>37</sup>	Whitty-Rogers (2016) <sup>33</sup>	Yakong (2010) <sup>40</sup>
About Prenatal Primary Nursing Care														
Experiences of Pregnant Women in Contexts of Vulnerability	X		X		X	X	X	X					X	X
Accessibility, organization, and continuity of prenatal care					X	X	X		X					X
Organizational factor	X		X		X	X	X	X					X	X
Transportation constraints	X		X					X					X	X
Fulfillment of the women's needs and expectations guides their decision regarding prenatal care	X	X	X	X					X	X	X			
Women's decision regarding their prenatal care					X		X	X					X	X
Continuing as is		X			X		X							X
Finding solutions	X				X	X			X	X			X	X
Ceasing								X	X	X			X	X

<sup>a</sup>The letter "X" indicates that themes and subthemes are present in the article. The blank space indicates that they are not present.

in opposition to task-oriented care,<sup>43</sup> encourages interactions and helps develop trust. In addition, person-centered care focuses on needs and expectations.<sup>44</sup> As women's needs and expectations evolve over time, they have to be reassessed regularly.

The studies included in this review reported mainly negative experiences. Another systematic review specific to Muslim women<sup>45</sup> highlighted similar results regarding women having experienced poor maternity care during the prenatal to postnatal periods. Indeed, it can be more challenging for nurses to provide care to women in some contexts of vulnerability.<sup>46</sup>

### **Clinical implications**

It is essential that nurses take a woman's context into account when providing prenatal care. As documented by our work and by Briscoe et al,<sup>11</sup> nurses make an important contribution to a positive experience. Providing woman-centered prenatal care based on her contexts of vulnerability is a way to ensure equity and social justice, which are foundations of nursing practice.<sup>10</sup>

Prenatal nursing care also needs to be based on women's needs and expectations. To this end, nurses should give women the opportunity to express their concerns, needs, and expectations and to pose questions. With regard to the quality of nurse-woman relationships, nurses should provide person-centered care with respect and without judgment. In addition, nurses could offer support by accompanying women or by integrating family members in their prenatal care.

### **Research implications**

Future studies should investigate how nurses operationalize their role to promote positive prenatal care experiences for women in contexts of vulnerability. One strategy could be to better understand the nurse-woman relationship and its influence on the utilization of prenatal care. The gender of the

nurse was scarcely explored in included articles. It would be interesting to look at its influence on the relationship. It would also be valuable to investigate specific contexts of vulnerability, including pregnant women with chronic conditions or pregnant women of lesbian, gay, bisexual, queer, pansexual, and two Spirit (LGBQP2S) community.

### **Limitations**

Other health care providers contribute to prenatal care. This study focused on nursing care, but studies could include other professionals, such as physicians, midwives, and gynecologists.<sup>18,19,47,48</sup> The low number of articles included and the limited diversity of vulnerability contexts found in these articles support the need to validate the generated theoretical model through subsequent research. Other contexts (ie, cognitive or psychological) and situations (ie, domestic violence, victims of sexual assault, or legal problems) may deserve further attention, and some settings, such as prenatal classes, have scarcely been addressed. We do not purport our results to be transferable to other contexts of care, such as hospital and postnatal care settings.

### **CONCLUSION**

This article proposes a theoretical model to be used by nurses to describe the experience of pregnant women in contexts of vulnerability. To promote a positive experience of prenatal care, nurses should fulfill pregnant women's needs and expectations and favor a quality relationship, accounting for their contexts when providing care, providing quality information and support, and ensuring the accessibility, organization, and continuity of prenatal care. In so doing, nurses can help ensure that women in contexts of vulnerability foster utilization of prenatal care and reap its benefits.

## REFERENCES

1. World Health Organization. Sexual and reproductive health: new guidelines on antenatal care for a positive pregnancy experience. Accessed August 27, 2021. <https://www.who.int/reproductivehealth/news/antenatal-care/en>
2. Institute of Medicine; Donaldson M, Yordy K, Vanselow N. Part 3: The new definition and an explanation of terms. In: *Defining Primary Care: An Interim Report*. National Academies Press; 1994:15-32.
3. Dawson AJ, Nkowane AM, Whelan A. Approaches to improving the contribution of the nursing and midwifery workforce to increasing universal access to primary health care for vulnerable populations: a systematic review. *Hum Resour Health*. 2015;13:97. doi:10.1186/s12960-015-0096-1
4. Heaman MI, Martens PJ, Brownell MD, et al. Inequities in utilization of prenatal care: a population-based study in the Canadian province of Manitoba. *BMC Pregnancy Childbirth*. 2018;18:430. doi:10.1186/s12884-018-2061-1
5. Bhatt J, Bathija P. Ensuring access to quality health care in vulnerable communities. *Acad Med*. 2018;93(9):1271-1275. doi:10.1097/ACM.0000000000002254
6. Titaley CR, Dibley MJ, Roberts CL. Factors associated with underutilization of antenatal care services in Indonesia: results of Indonesia Demographic and Health Survey 2002/2003 and 2007. *BMC Public Health*. 2010;10:485. doi:10.1186/1471-2458-10-485
7. Blakeney EL, Herting JR, Bekemeier B, Zierler BK. Social determinants of health and disparities in prenatal care utilization during the Great Recession period 2005-2010. *BMC Pregnancy Childbirth*. 2019;19(1):390. doi:10.1186/s12884-019-2486-1
8. Khanal V, da Cruz JLNB, Mishra SR, Karkee R, Lee AH. Under-utilization of antenatal care services in Timor-Leste: results from Demographic and Health Survey 2009-2010. *BMC Pregnancy Childbirth*. 2015;15:211. doi:10.1186/s12884-015-0646-5
9. World Health Organization. A conceptual framework for action on the social determinants of health. Accessed January 13, 2022. <https://apps.who.int/iris/bitstream/handle/10665/44489/?sequence=1>
10. Wakefield M, Williams DR, Le Menestrel S. *The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity*. National Academy of Medicine; 2021.
11. Briscoe L, Lavender T, McGowan L. A concept analysis of women's vulnerability during pregnancy, birth and the postnatal period. *J Adv Nurs*. 2016;72(10):2330-2345. doi:10.1111/jan.13017
12. Colciago E, Merazzi B, Panzeri M, Fumagalli S, Nespoli A. Women's vulnerability within the child-bearing continuum: a scoping review. *Eur J Midwifery*. 2020;4:18. doi:10.18332/ejm/120003
13. Scheele J, van der Vliet-Torij HH, Wingelaar-Loomans E, Goumans M. Defining vulnerability in European pregnant women, a Delphi study. *Midwifery*. 2020;86:102708. doi:10.1016/j.midw.2020.102708
14. Kröner SM, Beedholm K. How discourses of social vulnerability can influence nurse-patient interactions: a Foucauldian analysis. *Nurs Inq*. 2019;26(4):e12309. doi:10.1111/nin.12309
15. World Health Organization. Nurses and midwives: a vital resource for health. Accessed August 27, 2021. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0004/287356/Nurses-midwives-Vital-Resource-Health-Compendium.pdf?ua=1](https://www.euro.who.int/__data/assets/pdf_file/0004/287356/Nurses-midwives-Vital-Resource-Health-Compendium.pdf?ua=1)
16. Sochas L. Women who break the rules: social exclusion and inequities in pregnancy and childbirth experiences in Zambia. *Soc Sci Med*. 2019;232:278-288. doi:10.1016/j.socscimed.2019.05.013
17. Alnuaimi K, Oweis A, Habtoosh H. Exploring woman-nurse interaction in a Jordanian antenatal clinic: a qualitative study. *Midwifery*. 2019;72:1-6. doi:10.1016/j.midw.2019.01.008
18. Downe S, Finlayson K, Tunçalp Ö, Gülmezoglu AM. Provision and uptake of routine antenatal services: a qualitative evidence synthesis. *Cochrane Database Syst Rev*. 2019;6(6):CD012392. doi:10.1002/14651858.CD012392.pub2
19. Novick G. Women's experience of prenatal care: an integrative review. *J Midwifery Womens Health*. 2009;54(3):226-237. doi:10.1016/j.jmwh.2009.02.003
20. Van den Berg MMJ, Dancet EAF, Erlikh T, Van der Veen F, Goddijn M, Hajenius PJ. Patient-centered early pregnancy care: a systematic review of quantitative and qualitative studies on the perspectives of women and their partners. *Hum Reprod Update*. 2017;24(1):106-118. doi:10.1093/humupd/dmx030
21. Sossauer L, Schindler M, Hurst S. Vulnerability identified in clinical practice: a qualitative analysis. *BMC Med Ethics*. 2019;20:1-10.
22. Thomas J, Harden A. Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Med Res Methodol*. 2008;8:45. doi:10.1186/1471-2288-8-45
23. Moher D, Liberati A, Tetzlaff J, Altman D; The PRISMA Group. Preferred Reporting Items for Systematic reviews and MetaAnalyses: the PRISMA statement. *PLoS Med*. 2009;6(7):e1000097. doi:10.1371/journal.pmed.1000097
24. Grabovschi C, Loignon C, Fortin M. Mapping the concept of vulnerability related to health care disparities: a scoping review. *BMC Health Serv Res*. 2013;13:94. doi:10.1186/1472-6963-13-94
25. World Health Organization. Why we need to talk about losing a baby. Accessed December 10, 2021. <https://www.who.int/news-room/spotlight/why-we-need-to-talk-about-losing-a-baby>



26. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med.* 2014;89(9):1245-1251. doi:10.1097/ACM.0000000000000388
27. Nowell LS, Norris JM, White DE, Moules NJ. Thematic analysis: striving to meet the trustworthiness criteria. *Int J Qual Methods.* 2017;16(1):1-13. doi:10.1177/1609406917733847
28. Pretorius CF, Greeff M. Health-service utilization by pregnant women in the greater Mafikeng-Mmabatho district. *Curationis.* 2004;27(1):72-81. doi:10.4102/curationis.v27i1.959
29. Blackford KA, Richardson H, Grieve S. Prenatal education for mothers with disabilities. *J Adv Nurs.* 2000;32(4):898-904.
30. De Andrade Costa A, Vogt SE, Gomes Ruas EdF, Ferreira Holzmann AP, Nogueira da Silva PL. Welcome and listen to the silence: nursing care from the perspective of deaf woman during pregnancy, childbirth and postpartum. *Rev Pesqui Cuid Fundam.* 2018;10:123-129. doi:10.9789/2175-5361.2018.v10i1.123-129
31. Hubbard LJ, D'Andrea E, Carman LA. Promoting best practice for perinatal care of deaf women. *Nurs Womens Health.* 2018;22(2):126-136. doi:10.1016/j.nwh.2018.02.002
32. Sanders LB. Women's voices: the lived experience of pregnancy and motherhood after diagnosis with HIV. *J Assoc Nurses AIDS Care.* 2008;19(1):47-57. doi:10.1016/j.jana.2007.10.002
33. Whitty-Rogers J, Caine V, Cameron B. Aboriginal women's experiences with gestational diabetes mellitus. *ANS Adv Nurs Sci.* 2016;39(2):181-198. doi:10.1097/ANS.0000000000000115
34. Omar MA, Schiffman RF. Pregnant women's perceptions of prenatal care. *Matern Child Nurs J.* 1995; 23(4):132-142.
35. Crizzo-Lizza R. Black non-Hispanic mothers' perceptions about the promotion of infant-feeding methods by nurses and physicians. *J Obstet Gynecol Neonatal Nurs.* 2006;35(2):173-180. doi:10.1111/j.1552-6909.2006.00033.x
36. Fernandes Demarchi R, Ferreira do Nascimento V, Pereira Borges A, Pereira Terças AC, Duarte Grein TA, Baggio É. Perception of pregnant women and primiparous puerperas on maternity. *J Nurs UFPE.* 2017;11:2663-2673. doi:10.5205/reuol.10939-97553-1-RV.1107201703
37. Teixeira MM, Vasconcelos VM, Silva DMAd, Martins EMdCS, Martins MC, Frota MA. Primiparae perception on guidance in prenatal care regarding breastfeeding. *Rev Rene.* 2013;14:179-186. doi:10.15253/2175-6783.2013000100020
38. Berry AB. Mexican American women's expressions of the meaning of culturally congruent prenatal care. *J Transcult Nurs.* 1999;10(3):203-212. doi:10.1177/104365969901000311
39. Burns L, Whitty-Rogers J, MacDonald C. Understanding Mi'kmaq women's experiences accessing prenatal care in rural Nova Scotia. *ANS Adv Nurs Sci.* 2019;42(2):139-155. doi:10.1097/ANS.0000000000000248
40. Yakong VN, Rush KL, Bassett-Smith J, Botorff JL, Robinson C. Women's experiences of seeking reproductive health care in rural Ghana: challenges for maternal health service utilization. *J Adv Nurs.* 2010;66(11):2431-2441. doi:10.1111/j.1365-2648.2010.05404.x
41. Searle J, Goldberg L, Aston M, Burrow S. Accessing new understandings of trauma-informed care with queer birthing women in a rural context. *J Clin Nurs.* 2017;26(21/22):3576-3587. doi:10.1111/jocn.13727
42. Nachinab GT-e, Adjei CA, Ziba FA, Asamoah R, Attafua PA. Exploring the determinants of antenatal care services uptake: a qualitative study among women in a rural community in northern Ghana. *J Pregnancy.* 2019;2019(9):1-6. doi:10.1155/2019/3532749
43. McCabe C. Nurse-patient communication: an exploration of patients' experiences. *J Clin Nurs.* 2004;13(1):41-49. doi:10.1111/j.1365-2702.2004.00817.x
44. Morgan S, Yoder LH. A concept analysis of person-centered care. *J Holist Nurs.* 2012;30(1):6-15. doi:10.1177/0898010111412189
45. Firdous T, Darwin Z, Hassan SM. Muslim women's experiences of maternity services in the UK: qualitative systematic review and thematic synthesis. *BMC Pregnancy Childbirth.* 2020;20(1):1-10. doi:10.1186/s12884-020-2811-8
46. Prodan-Bhalla N, Browne AJ. Exploring women's health care experiences through an equity lens: findings from a community clinic serving marginalised women. *J Clin Nurs.* 2019;28(19/20):3459-3469. doi:10.1111/jocn.14937
47. van Dijk MG, Wilson KS, Silva M, Contreras X, Fukuda HD, García SG. Health care experiences of HIV-infected women with fertility desires in Mexico: a qualitative study. *J Assoc Nurses AIDS Care.* 2014; 25(3):224-232. doi:10.1016/j.jana.2013.04.006
48. O'Brien B, Chalmers B, Fell D, Heaman M, Darling EK, Herbert P. The experience of pregnancy and birth with midwives: results from the Canadian maternity experiences survey. *Birth.* 2011;38(3):207-215. doi:10.1111/j.1523-536X.2011.00482.x