ORIGINAL ARTICLE

Coping Experiences of Nigerian Women during Pregnancy and Labour: A Qualitative Study

Deborah Tolulope Esan¹, PhD; Janet Efemena Adugbo¹, BNSC; Israel Opeyemi Fawole², BNSC; Oluwadamilare Akingbade^{2,3}, MS

¹Department of Nursing Science, Afe Babalola University, Ado-Ekiti, Ekiti State Nigeria; ²Institute of Nursing Research, Osogbo, Osun State, Nigeria; ³The Nethersole School of Nursing, Faculty of Medicine, Chinese University of Hong Kong, Hong Kong SAR, China

Corresponding Author:

Deborah Tolulope Esan, PhD; Department of Nursing Science, College of Medicine and Health Sciences, Afe Babalola University, P.M.B. 5454, Ado-Ekiti, Nigeria **Tel/Fax:** +234 80 62484864; **Email:** esandt@abuad.edu.ng

Received: 12 September 2022 Revised: 04 December 2022 Accepted: 05 December 2022

Abstract

Background: Pregnancy and labour are defining moments in the lives of women. While these are joyful moments for many, some physical and psychological issues have been reported during labour and pregnancy. This study was conducted to explore the coping experiences of Nigerian women during pregnancy and labour.

Methods: This is an exploratory qualitative study using the content analysis. The study was conducted from November 2021 to January 2022 in Ekiti State and Federal Capital Territory, Nigeria. In-depth interviews were conducted with 30 women selected using the purposive sampling technique. Data collection was stopped when we reached data saturation. Data were analyzed through content analysis using the NVIVO software version 12.

Results: Two themes emerged from the study including coping strategies during pregnancy and trying to endure labour pain. The theme, coping strategies utilized during pregnancy, included obtaining the relatives' experiences, seeking information, religious practices, and engaging in exercise. The theme, trying to endure labour pain, consisted of exercising for pain relief, relying on God, Positive imagination, giving psychological support, and behaving according to the accepted cultural beliefs.

Conclusion: Findings suggested that women utilized many non-pharmacological methods for coping. Interventions to support women during pregnancy and labour should consider these strategies during planning and implementation.

Keywords: Coping, Labor, Pregnancy, Women

Please cite this article as: Esan DT, Adugbo JE, Fawole IO, Akingbade O. Coping Experiences of Nigerian Women during Pregnancy and Labour: A Qualitative Study. IJCBNM. 2023;11(1):23-33. doi: 10.30476/ IJCBNM.2022.96739.2147.

Copyright: ©International Journal of Community Based Nursing and Midwifery. This is an open-access article distributed under the terms of the Creative Commons Attribution-Noncommercial-Share Alike 4.0 Unported, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Many women report that being pregnant is a joyful moment in their lives. From feeling the baby's first movements during pregnancy to carrying the baby to term and caring for the newborn, this period has been a defining moment in the lives of many women.¹ However, this change is accompanied by many unpleasant physical symptoms, including nausea, fatigue, heartburn, and musculoskeletal pain, which result in an array of psychological issues like stress and anxiety, especially among firsttime mothers.² Similarly, pregnancy requires adjustments in the physiological, familial, financial, occupational, and other realms, which may evoke emotional distress for women, especially women of low income with fewer resources.1

How women deal with pregnancy and the labour process is complicated and nuanced.³ Various challenges have been reported among women during pregnancy. Farias et al.⁴ observed that many women in low and middleincome countries experience do not receive adequate information and psychological care during pregnancy. A systematic review of health information needs of pregnant women revealed areas like the development of the foetus in the uterus, nutrition during pregnancy, care of the etus, and special tests during pregnancy.⁵ Similarly, another systematic review of the needs of incarcerated pregnant women revealed areas of need, including childbirth and parenting needs. substance abuse management, counselling services, and support from government and social workers.6

As the needs of women during pregnancy are diverse, so are their needs during labour. An exploratory qualitative study of the needs of women during labour and delivery reported seven categories of needs: physiological, social and relational, psychological, informational, security, esteem, and medical.⁷ Also, another study observed that women were under extreme stress, anxiety, and fear during labour.⁸ Furthermore, labour exposes women to one of the most severe forms of pain reported. Understanding labour pain is complicated, and several factors influence its perception; hence, women experience and deal with labour pain differently. In some Nigerian cultures, women are more concerned about delivering a healthy baby than the labour pain.³

Labour pain is caused by several physiological, psychosocial, and environmental factors. Induced or augmented labours are often associated with increased pain perception.³ Psychosocial factors such as culture, ethnicity, and education level have been suggested as significant mediating variables in women's experience of labour pain.9 Similarly, environmental factors like the type of care providers and the quality of support provided also affect labour pain. In addition, confidence and cognition affect how different women perceive pain. Other factors, such as maternal age, parity, and gestational age at delivery are also associated with labour pain.³ Furthermore, culture is another factor. A study conducted in Ghana revealed that cultural backgrounds of women influenced their degree of pain tolerance.9 Similarly, in some cultures, women are not permitted to express pain during labour freely.

A study conducted among women in Nigeria reported various forms of maltreatment by health providers during childbirth, including physical abuse, verbal abuse, and health system constraints.¹⁰ Evidence suggests that women's coping mechanisms during labour could be environmental, physical, mental, and emotional.¹¹ Environmental coping mechanisms include maintaining lower levels of light by using dimmers, closing the blinds, not being asked questions during a contraction, not being subjected to a conversation that is unimportant, and not being spoken to harshly. Similarly, some women find music relaxing, while others may be annoved by it. However, the woman needs to be able to choose the music.¹² For physical coping, massage is almost essential in labour because massaging certain areas of the body helps compete with pain messages in the brain for reception, thereby reducing the sensations of pain. The use of patterned breathing in labour, i.e. controlling the breathing to be slow and relaxed, positioning, and mobility which enables shifting of the pelvis and speeds up labour, also helps with the pain. Also, immersion in water is mostly effective after active labour has begun. Mental and emotional coping requires concentration on what will help the mothers through labor, avoidance of worries, and having support from people who care can be very comforting.¹³

Little is known about coping experiences of Nigerian women with pregnancy and labour, which prompted this qualitative study which aimed at exploring their coping experiences during pregnancy and labour.

MATERIALS AND METHODS

This qualitative study with conventional content analysis was conducted from November 2021 to January 2022 at Federal teaching hospital Ido Ekiti, Ekiti State and Kubwa General Hospital, Federal Capital Territory, Nigeria. The inclusion criteria included mothers on routine postnatal clinic visits and mothers admitted to the postnatal wards, and women who underwent cesarean section having passed through the labour process. Women who were unwilling to participate were excluded. This study used the purposive sampling technique to select women from various ethnic groups, levels of education, parity, and modes of child delivery. The sample size for this study with a qualitative approach was determined by the principle of data saturation.

Data were collected using a semi-structured interview guide developed by the research team. Some of the questions in the interview guide included "What were your experiences about coping with pregnancy?" and "What plans did you apply to handle labor pain?" Thirty women participated in the interviews. The second author, a registered nurse with a bachelor's degree in nursing trained in qualitative data collection, explained the research briefly to the participants, ensured that participants understood the questions being asked, and conducted the interview. Oral and written informed consents in the form of an information sheet with the research details were presented to the participants before the interview, after which their demographic features were collected. The interview was conducted in a quiet private room in the clinic and ward of the research settings. The interviews were audiotaped and lasted about 25 minutes. Data collection lasted for three months until data saturation was attained.

Data analysis was conducted using the NVIVO 12 software. Verbatim transcription of the audio files was done. After that, the transcripts were checked to ensure nothing was left out. Data were analyzed using content analysis.¹⁴ The first step was decontextualization, which entailed familiarization with the data, after which the identified meaning units were labelled with a code. The next stage was recontexualization where the original text was re-read while going through the final list of meaning units. The next stage was categorization where the themes and sub-themes were identified. The last stage was the compilation where the final themes and subthemes were compiled after a final check was done and the report was produced.14

Rigor was ensured in this study using various techniques. To ensure credibility, we reviewed each transcript for similarities and reflected on them. Also, to ensure dependability and transferability, we conducted an audit trail and provided a detailed report of the study processes. To ensure confirmability, the first and last authors reviewed the participants' quotes, themes, and sub-themes to validate the findings.^{15, 16}

We adhered to the consolidated criteria for reporting qualitative research guidelines (COREQ) in reporting the findings. Ethical approval was sought and obtained from the ethics and research committee of Kubwa General Hospital Abuja and Federal Teaching Hospital Ido Ekiti, Ekiti state (FETHI), with approval codes of FHREC/2021/01/121/20-10-21 and ERC/2021/11/01/700B, respectively. The unwillingness to participate in the study was respected without any change in participants' care process, and confidentiality was ensured. The ethical principles according to the Helsinki Declaration, alongside national and international research ethics guidelines, were adhered to in conducting this study.¹⁷

RESULTS

Thirty women with an age range of 24-41 years and an overall mean age of 33 years

 Table 1: Socio-demographic profile of the Participants

were interviewed. All were married, mostly Christians (97%), Yoruba (47%), and had a bachelor's degree (57%). About half of them (53%) delivered their last child through CS, while 47% had a spontaneous vaginal delivery. A larger percentage of the respondents (63%) used no pain medications during previous deliveries, while 37% did. Respondents from Kubwa General Hospital were mostly Igbo and Hausa as opposed to the other hospital (Table 1).

Two themes emerged, including coping strategies during pregnancy, and trying to endure labour pain. The themes are elaborated into various sub-themes (Table 2).

Participant	0		Religion	Ethnicity	Highest level			
No.	(year)	status			of education	pregnancies	live births	delivery
Kubwa General Hospital, Abuja								
1	35	Married	2	-	O level ^a	2	1	CS°
2	41	Married	Christianity	Igbo	Post graduate	2	2	CS
3	34	Married	Christianity	Others	BSC ^b	1	1	CS
4	26	Married	Islam	Hausa	BSC	1	1	$\mathrm{SVD}^{\mathrm{f}}$
5	36	Married	Christianity	Others	BSC	3	3	CS
6	28	Married	Islam	Others	NCE ^e	3	3	CS
7	35	Married	Christianity	Others	BSC	4	3	CS
8	35	Married	Christianity	Others	Diploma	3	2	CS
9	35	Married	Christianity	Hausa	BSC	2	2	CS
10	30	Married	Christianity	Igbo	Post Graduate	2	2	SVD
11	31	Married	Christianity	Yoruba	BSC	2	2	SVD
12	39	Married	Christianity	Others	BSC	2	2	SVD
13	41	Married	Christianity	Igbo	Secondary	5	5	CS
14	33	Married	Christianity	Igbo	Secondary school	5	5	SVD
15	30	Married	Christianity	Others	BSC	3	3	SVD
Federal Teaching Hospital Ido-Ekiti								
16	29	Married	Christianity		None	4	4	SVD
17	37	Married	Christianity		BSC	1	1	CS
18	34		Christianity		BSC	1	1	CS
19	31	Married	Christianity	Yoruba	BSC	3	2	CS
20	34		Christianity		BSC	2	2	SVD
21	30	Married	Christianity	Yoruba	Diploma	2	2	CS
22	36		Christianity			2	2	CS
23	28		Christianity		BSC	1	1	SVD
24	33		Christianity		MSc ^d	3	2	CS
25	33		Christianity			3	2	SVD
26	31		Christianity		BSC		2	SVD
27	38		Christianity				3	SVD
28	31		Christianity				4	SVD
29	24		Christianity				2	CS
30	34	Married	Christianity	Yoruba	BSC	3	3	SVD

^aPublic examination for secondary-school students; ^bBachelor of Science; ^cCaesarian section; ^dMaster of Science; ^eNigerian Certificate of Education; ^fSpontaneous Vagina Delivery

Table 2: The sub-themes and theme	s generated from the interviews
-----------------------------------	---------------------------------

Sub-themes	Themes
Receiving relatives' experiences	Coping strategies during pregnancy
• Seeking information	
Religious practices	
• Engaging in exercise	
• Exercising for pain relief	Trying to endure labour pain
Relying on God	
Positive imagination	
Giving psychological support	
• Behaving according to accepted cultural beliefs	

1. Coping Strategies During Pregnancy

The participants reported various coping strategies, which were further elaborated under the following sub-themes:

1.a. Receiving Relatives' Experiences

Some women received support from their mothers, mothers-in-law, sisters, and other relatives and loved ones who assisted them in coping with pregnancy.

"I gained too much knowledge from both my mum, my sister, my mother-in-law, and my sisters-in-law; they shared their own experience with me, so it prepared my mind towards what I should be expecting before the labour" (P.19)

"My mum will say when you are having pain, when labour is coming and when the water is burst, and the baby starting coming out..." (P. 13)

1.b. Seeking Information

Many of the women coped through the information they received from nurses at the antenatal clinic.

"It's from antenatal. The day I registered, we attended a lecture; some of my friends that gave birth also shared their experiences with me" (P.6)

Some participants got health information from their mobile devices, which prepared them psychologically.

"I have an app on my phone- baby centrewhere they teach you how to just cope with various stages of pregnancy. There is also information about the techniques and positions in active labour. So, I followed the app till I delivered. I was not surprised about anything along the line (P. 7).

"I got most of my information from my Mum and Google..." (P.3).

1.c. Religious Practices

Some participants considered prayers and calling on Jesus as a way of coping for them during pregnancy as it gives strength and comforts them. They will call on Jesus' name whenever they do not feel fine.

"...I always have the name of Jesus in my mouth. I believe our comfort and strength comes from him..." (P. 13).

1.d. Engaging in Exercise

Some participants identified doing exercise as one way of coping with discomfort during pregnancy.

"From my first practical experience, the nurses told me I should be doing exercise, which I did. This helped me a great deal in relieving my discomfort during pregnancy" (P.25).

2. Trying to Endure Labour Pain

This theme reflects various strategies used by the participants to cope during labour. These coping strategies were captured under the following sub-themes:

2.a. Exercising for Pain Relief

Participants identified exercises such as walking around and doing household chores to relieve labour pain. Most of the participants had prepared their minds on how to endure whatever pains they experienced. "... I'll be walking, but I won't tell anybody because I don't want people to know what is happening until when they hear the baby shout and they ask, and I'll stand up and tell them to call the nurse for me. If pain bothers me, I'll be walking up and down; I won't shout. You know, it's part of the exercise.

"I also use breathing exercises. I will open my mouth, breath in and out and endure it, but immediately the pain becomes unbearable; I will walk around... (P.14).

2.b. Relying on God

Some others completely relied on God for the grace to see them through the labour process; this was done through prayers and calling the name of Jesus Christ throughout the process.

"I was just screaming Jesus, Jesus and looking for something to console myself; maybe some words of wisdom, Bible references songs" (P.10).

"Through prayers, I'll just be praying to ask God to take the pain away from me, so that I will be able to deliver." (P.8).

"Only be shouting 'Jesus'. I always have the name of Jesus in my mouth. I believe our comfort and strength come from him in the labour room. I was not shouting my husband's name in the labour room because he's not the one to save me" (P.13).

2.c. Positive Imagination

Some participants could cope by visualizing that the joy of having a baby is greater and better than the pain experienced during labour.

"...what kept me going was seeing the aftermath of the labour, how I will be looking at my baby, how people will be congratulating me, and how I will be dressing my baby, so I try to shift my mind away from the pain and look at the aftermath..." (P.30).

"I already had it in my head that I must be strong for my baby. That was the secret of my strength during labour. The fact that I'm going to see my child at the end of the day and carry my bundle of joy." (P.11).

2.d. Giving Psychological Support

Participants considered support from their health professionals, husband, and family as enabling them to cope with the labor pain. Their support came in different forms, ranging from physical and emotional support from their husbands to words of encouragement from health professionals and pieces of advice from family members.

"That day, when the doctors and nurses were petting me suggesting that I should not shout too much; otherwise, when I need to push the baby, I won't have energy. Sometimes, the nurses help me rub my back, and the pain will relieve me, but the stomach pain won't relieve me because the baby is trying to come outside, but still, the pain didn't stop; it just relieved me" (P.17)....my husband was just so supportive; he held my hand and placed my hand on his shoulders while I moved because sometimes I felt dizzy. (P.4).

2.e. Behaving According to Accepted Cultural Beliefs

Some participants reported that they were not taught anything culturally, so as not to scare them away from childbirth. However, for some, it is cultural for a woman to go through labour pain as a form of womanhood. Some were advised to learn how to hold the pain when it comes as it will also disappear. For some participants, their culture did not teach them anything about labour pain; instead, individuals were left to handle their situation individually.

"I don't know much about my culture; I don't know if they have a way of expressing or handling pain." (P.3)

"What I know little about is that in our culture, no woman can deliver a baby without passing through pain. Even some that go to herbalist do not find it easy; even CS is not easy." (P.28)

Some opined that it is not right to cry during labour.

"They said we should not cry, because it's not good for women to be crying during labour. It's not good, they said; if you start with crying, then that's how the rest of your labour will be. No matter what, we should bear the pain" (P.8).

"In the African culture, no one will want her child to go through CS. Of course, we know that labour is painful, but the aftermath that we want is that no matter the pain, the baby should be delivered without CS." (P.15).

Some also mentioned that their culture forbids shouting during labour.

"Although I am Yoruba, I have some friends who are Hausa, and they tell me that they are not permitted to shout in the labour room. I don't know if it's the religion or culture, but I know they don't shout even in extreme pain, they have a way of holding it in; maybe, they had been trained that way since they were growing up. But for us, nothing is like that. We are free to shout." (P.28)

DISCUSSION

This content analysis explored the experiences of Nigerian women regarding coping during pregnancy and labor. The results showed that Nigerian women had a wide range of coping mechanisms during pregnancy and labor, which were highly influenced by culture, religion, and family. As reported in a previous study, childbirth experience is a significant concept in planning for giving birth and is a helpful measure of mothers' convictions in their capacity to oversee pregnancy and labor. Satisfactory readiness and coping strategies can have numerous positive results, such as decreased labor pain and pregnancy complications.¹⁸The current study highlighted various coping strategies used by participants during pregnancy, including seeking information, receiving relatives' experiences, performing religious practices, engaging in exercise, and behaving according to accepted cultural beliefs. These coping strategies were also identified by another study,¹⁹ where factor analysis of the revised prenatal coping inventory (NuPCI) identified distinctly, conceptually interpretable types of coping: prayer/spirituality, receiving social support, planning, and positive appraisal. Some of these strategies were the same for pregnancy and labor, indicating that they work for those who used them in pregnancy and labor.

Participants used education from antenatal care to cope during pregnancy and labor. These findings suggest that early booking and attending the antenatal clinic, as they were given adequate antenatal education and support from health professionals, helped the participants cope with pregnancy. This result was not in line with that of a study on the perspective of pregnant women regarding antenatal preparation, which concluded that participants reported they would like to participate in antenatal education groups to receive guidance on non-pharmacological techniques to use during labor and childbirth as they were not encouraged by healthcare professionals, and knowledge about antenatal education was acquired in conversations with other women and from lay media, with a lack of guidance during antenatal consultation.²⁰

Receiving relatives' experiences was another coping strategy used during pregnancy. Women in this study received support from their mothers-in-law and relatives both in knowledge and in helping to prepare them for labor psychologically. This is a widespread phenomenon in Nigeria but is inconsistent with a study done in Pakistan which concluded that verbal criticism from or arguments with a mother-in-law were the most common forms of negative non-spousal interactions mentioned; the study further found mixed support from mothers-in-law, while the majority of women described their mothers-in-law as contributing to their anxiety through poor treatment or lack of support, many gave additional or alternative accounts of mothers-in-law as still being crucial pillars of support during pregnancy, mainly through providing health advice and accompanying women to prenatal appointments.²¹

Additionally, mHealth, which can be found in coping strategies for pregnancy, but not labor, played a very vital role in helping women cope with pregnancy as it provided space for women to get health information from their mobile devices, which prepared them psychologically; women had apps on their phones that prepare them for labor, and others just used Google to expand their knowledge during pregnancy. This finding is supported by a study done in Ile-Ife, Nigeria, in 2018, indicating that most women possessed a mobile phone and rural women had a positive perception of using mobile health technology to obtain maternal health information.²² The beneficial effects of mHealth have also been seen among women undergoing breast cancer treatment,²³ and Nigerian women believed that mHealth was useful for psychoeducational support.²⁴

On the other hand, the current study also highlighted various coping strategies used by participants during labor which included coping through exercising for pain relief, relying on God, being psychologically supported by health workers and family members, and coping through positive imagination. These coping mechanisms all consisted of non-pharmacological pain relief methods. In other west African countries like Ghana, some cultural groups label women as emotionally weak when they are not able to bear labor pain through non-pharmacological coping mechanisms.9 This could be the result of poor knowledge and use of pharmacological pain relief methods as a larger percentage of the respondents (63%) had no pain medications during previous deliveries; this is supported by a similar study carried out in the southeastern region of Nigeria in 2018 which revealed low awareness of labor analgesia among mothers; only 39.5% of them were aware of it.

A coping strategy shown to be prominent in the current study for both pregnancy and labor was coping through spirituality and prayer, which was used by the mothers. Participants said they "screamed Jesus," which brought comfort and strength to forge ahead. Some participants said they prayed silently for "God to take the pain away" during labor, which health workers and family members encouraged it through psychological support. Religion is essential in daily living and plays a very critical role in health and well-being, especially regarding maternal health and beliefs surrounding childbirth in Nigeria; in another study, it was revealed that despite the move to scientific-oriented maternity care, birth practitioners in southern Nigeria relied on God as the ultimate care provider; in the eastern parts of Nigeria, during illness, the Igbo religious medicine man was consulted for counselling and healing.25 Women using religion to cope with pregnancy and labor can only be seen as the norm as even health care workers sometimes encourage them to pray for strength and endurance. This coping strategy is extremely popular and supported by another study, which revealed that professional midwives considered their work of caring for women to be a divine call.26

Coping through positive imagination was a unique strategy women used during labor in the current study. They thought that the joy of having a baby was greater than the pain during labor. These women looked forward to dressing and caring for the baby as a way to divert their minds from labor pain. This is supported by a qualitative study which concluded that realistic expectations led to a positive attitude toward childbirth.²⁷

In this study, psychological support from health workers and family members came in different forms, from the husband's physical and emotional support to doctors and nurses petting the participants. Both health workers and family members helped the women cope with labor in different ways. Another study revealed that the emotional support of the midwives to women in labor was inadequate compared to the professional care at birth; women perceived the inclusion of a familiar person for support as beneficial and expressed positive disposition to the introduction of persons from their social network for labor support, with a higher preference for their husbands and mothers as labor support persons.28

A coping strategy used by participants for pregnancy and labor was coping through exercises and endurance. This coping strategy caused the women to participate in exercise as a way of coping with discomfort during pregnancy, exercise in the form of walking and do some household chores to relieve labor pain, and get prepared mentally to endure whatever pains come with labor .This is not in line with the result of another study which reported that most pregnant women in Africa did not participate in physical activities during pregnancy, mainly due to a lack of knowledge of the types of physical activities and exercise recommended for pregnancy and a lack of knowledge regarding the benefits of physical activities during pregnancy.²⁹ Another study suggests that those who interpret labor pain as fruitful and purposeful are more likely to feel they can cope and endure the pain that comes with labour.30

Culture plays a crucial role in how women cope with pain in Africa. Nigerian cultural practices are well established and influence decisions in all parts of life positively and negatively.³¹Although some women did not know what their culture had to say about coping with labor, others were sure that culturally, shouting or crying during labor is forbidden or that's how the rest of labor will be. Evidence suggests that at the point when a lady cries or groans when in pain, particularly during labor and childbirth, they will stay the same all through the entirety of their delivery.⁹ According to this current study, culturally, bearing the pain is best as passing through the pain that comes with labor was considered a norm. These cultural myths are supported by another study which revealed that culture was a factor that influenced why women coped better with non-pharmacological pain relief and preferred to use other coping strategies that were culturally accepted when it came to dealing with pregnancy and labour.³¹

Through this study, the gap in knowledge regarding coping strategies of women in Ekiti State and the Federal Capital Territory has been addressed. However, due to the small sample size indicative of a qualitative study, these findings might not reflect the experiences of all Nigerian women. This limitation should be considered when interpreting the findings.

CONCLUSION

In this study, we conclude that women's experiences vary from woman to woman with a point of convergence where some coping strategies were used during pregnancy and labor. These coping strategies were nonpharmacological and hugely influenced by factors like culture, religion, family members, health workers, and women's education/ knowledge from the antenatal clinic. Healthcare providers need to show greater sensitivity to the factors mentioned above that influence women's coping during pregnancy and labor and the coping strategies used to render a holistic childbirth experience to every woman in Nigeria.

Conflict of Interest: None declared.

References

- Ceprnja D, Chipchase L, Liamputtong P, Gupta A. "This is hard to cope with": the lived experience and coping strategies adopted amongst Australian women with pelvic girdle pain in pregnancy. BMC Pregnancy and Childbirth. 2022;22:96.
- 2 Tola YO, Akingbade O, Akinwaare MO, et al. Psychoeducation for psychological issues and birth preparedness in low- and middle-income countries: a systematic review. AJOG Global Reports. 2022;2:100072.
- 3 Akadri AA, Odelola OI. Labour pain perception: experiences of Nigerian mothers. The Pan African Medical Journal. 2018;30:288.
- 4 Farias DR, Pereira Pinto TdJ, Teofilo MMA, et al. Prevalence of psychiatric disorders in the first trimester of pregnancy and factors associated with current suicide risk. Psychiatry Research. 2013;210:962-8.
- 5 Kamali S, Ahmadian L, Khajouei R, Bahaadinbeigy K. Health information needs of pregnant women: information

sources, motives and barriers. Health Information and Libraries Journal. 2018;35:24-37.

- 6 Alirezaei S, Latifnejad Roudsari R. The Needs of Incarcerated Pregnant Women: A Systematic Review of Literature. International Journal of Community Based Nursing and Midwifery. 2022;10:2-17.
- 7 Iravani M, Zarean E, Janghorbani M, Bahrami M. Women's needs and expectations during normal labor and delivery. Journal of Education and Health Promotion. 2015;4:6.
- 8 Younes RE, Mohamad Eid S, Shalaby NS, Heeba MF. Supportive care provided by companion during childbirth and it's effect on labor progress and maternal satisfaction. Port Said Scientific Journal of Nursing. 2020;7:218-43.
- 9 Aziato L, Acheampong AK, Umoar KL. Labour pain experiences and perceptions: a qualitative study among post-partum women in Ghana. BMC Pregnancy and Childbirth. 2017;17:73.
- 10 Bohren MA, Vogel JP, Tunçalp Ö, et al. Mistreatment of women during childbirth in Abuja, Nigeria: a qualitative study on perceptions and experiences of women and healthcare providers. Reproductive Health. 2017;14:9.
- 11 Guardino CM, Schetter CD. Coping during pregnancy: a systematic review and recommendations. Health Psychology Review. 2014;8:70-94.
- 12 Tola YO, Iloba NG, Chow KM. Perception of music and its cultural elements on acute post-mastectomy pain management among Nigerian women: an exploratory qualitative study. Supportive Care in Cancer. 2022;30:2527-35.
- 13 Chilee OA, Olukemi Eme A, Eunice UP. Postnatal Women's labour pain experiences in Niger delta region of Nigeria: a qualitative study. African Journal of Health, Nursing and Midwifery. 2020;3:103-12.
- 14 Bengtsson M. How to plan and perform a qualitative study using content analysis.

Nursing Plus Open. 2016;2:8-14.

- 15 CypressBS.RigororReliabilityandValidity in Qualitative Research: Perspectives, Strategies, Reconceptualization, and Recommendations. Dimensions of Critical Care Nursing. 2017;36:253-63.
- 16 Shenton, AK. Strategies for ensuring trustworthiness in qualitative research projects. Education for Information. 2004;22:63-75.
- 17 World Medical Association. World Medical Association Declaration of Helsinki: ethical principles for medical research involving human subjects. JAMA. 2013;310:2191-4.
- 18 Howarth AM, Swain NR. Skills-based childbirth preparation increases childbirth self-efficacy for first time mothers. Midwifery. 2019;70:100-5.
- 19 Ibrahim SM, Nicoloro-SantaBarbara J, Auerbach MV, et al. Pregnancy-specific coping and changes in emotional distress from mid-to late pregnancy. Journal of Reproductive and Infant Psychology. 2019;37:397-412.
- 20 Heim MA, Miquelutti MA, Makuch MY. Perspective of pregnant women regarding antenatal preparation: A qualitative study. Women and Birth. 2019;32:558-63.
- 21 Rowther AA, Kazi AK, Nazir H, et al. "A Woman Is a Puppet." Women's Disempowerment and Prenatal Anxiety in Pakistan: A Qualitative Study of Sources, Mitigators, and Coping Strategies for Anxiety in Pregnancy. International Journal of Environmental Research and Public Health. 2020;17:4926.
- 22 Odetola TD, Ayamolowo LB, Ayamolowo SJ. Childbearing women's perception about the use of mhealth for maternal health information in rural communities, Ile-Ife, Nigeria. Journal of the International Society for Telemedicine and EHealth. 2018;6:1-6.
- 23 Akingbade O, Nguyen KT, Chow KM. Effect of mHealth interventions on psychological issues experienced by women undergoing chemotherapy for

breast cancer: A systematic review and meta-analysis. Journal of Clinical Nursing. 2022. [Online]. doi: 10.1111/ jocn.16533

- 24 Akingbade O, Adediran V, Somoye IE, et al. Perceived feasibility and usefulness of mHealth interventions for psychoeducational support among Nigerian women receiving chemotherapy for breast cancer: a focus group study. Supportive Care in Cancer. 2022;30:9723-34
- 25 Ohaja M, Murphy-Lawless J, Dunlea M. Religion and Spirituality in Pregnancy and Birth: The Views of Birth Practitioners in Southeast Nigeria. Religions. 2019;10:82
- 26 Okeke CO, Ibenwa CN, Okeke GT. Conflicts Between African Traditional Religion and Christianity in Eastern Nigeria: The Igbo Example. Sage Open. 2017;7(2).
- 27 Hosseini TM, Keramat A, Kolahdozan

S, et al. Positive childbirth experience: A qualitative study. Nursing Open. 2020;7:1233-8.

- 28 Ibitoye OF, Phetlhu DR. Women and Continuous Labour Support in Public Health Facilities in Nigeria. Africa Journal of Nursing and Midwifery. 2018;20:15.
- 29 Okafor UB, Goon DT. Physical activity and exercise during pregnancy in Africa: a review of the literature. BMC Pregnancy and Childbirth. 2020;20:732.
- 30 Whitburn LY, Jones LE, Davey MA, Small R. The meaning of labour pain: how the social environment and other contextual factors shape women's experiences. BMC Pregnancy and Childbirth. 2017;17:157.
- 31 Esan DT, Muhammad F, Ihueze AT, et al. Cultural myths on the use of analgesia in labor: A cross-sectional study in Nigerian women. Enfermería Clínica. 2022;32:326-33.