

Experiences with Non-pharmacological Interventions for Labour Pain Relief Among Midwives' and Women in Tertiary Institutions, Nigeria

Daughter Sample¹, Halima Musa Abdul², Faith Diorgu¹

¹ Department of Nursing University of Port Harcourt, Africa Centre of Excellence for Public Health and Toxicological Research, Nigeria

² Department of Nursing Sciences, Ahmadu Bello University Zaria, Kaduna, Nigeria

Abstract:- Background: Non-pharmacological interventions for labour pain relief are non-invasive, cost-effective alternatives to pharmacological methods, yet their utilization in Nigerian federal hospitals remains underexplored. Understanding both midwives' and women experiences is crucial for optimizing positive childbirth experiences.

Methods: This convergent mixed-methods study was conducted across six federal hospitals representing Nigeria's six geopolitical zones. Quantitative data were collected from 160 postpartum mothers and 122 midwives using structured questionnaires, while qualitative data were obtained through semi-structured interviews with 15 midwives. Analysis employed descriptive statistics and Braun and Clarke's thematic analysis.

Results: Commonly used non-pharmacological methods included breathing techniques emotional support massage maternal positioning and warm compresses. Mothers expressed predominantly negative perceptions regarding effectiveness (grand mean=1.00), whereas midwives demonstrated positive perceptions (grand mean=2.50).

Conclusion: While midwives employ various non-pharmacological techniques, significant perceptual gaps exist between providers and recipients. Addressing barriers through targeted training, resource provision, and enhanced antenatal education is essential for optimising labour pain management in Nigerian federal hospitals.

Keywords: Labour pain, non-pharmacological interventions, midwives, maternal experience, Nigeria, mixed-methods.

1. Introduction

Globally, midwives are essential in providing midwifery services to safeguard the well-being of women and newborns. Midwives' expertise extends across various aspects of birth services, particularly in labour pain management, contributing to the safety of childbirth (Tolulope et al., 2023). National certification boards for midwifery uphold stringent training and practice standards, ensuring that midwives meet the necessary qualifications (Mayra et al., 2021). The education of midwives occurs in academic institutions, ranging from schools to universities, offering programs from diplomas to doctorates (Sattar et al., 2023). Certified nurse-midwives are commonly present at hospital births, while community midwives deliver care in homes and birth centers. Skilled birth providers attend approximately 80% of global births (Yang, 2023). Midwives assist around 10-12% of births in developed nations and 49-57% of births in Africa (Avery et al., 2023; Aziato et al., 2017; Mbogori & Muriuki, 2023).

Midwives bear the responsibility of managing labour pain, even in cases where analgesic medication may not be suitable, such as hypersensitivity syndrome (Bishaw et al., 2020). Therefore, midwives undergo training in non-pharmacological techniques to address labour pain during childbirth (Eyeberu et al., 2022). The exploration of midwives' experiences with pain management interventions in childbirth is crucial, given ongoing reports of inadequate pain relief during childbirth in Africa (Aziato et al., 2017; Mwakawanga et al., 2022; Wassihun et al., 2022).

Ideally, midwives undergo specialised training that enables them to incorporate non-pharmacological pain relief methods while providing physiologic birth (Stone et al., 2023). This aligns seamlessly with the objectives of Sustainable Development Goal 3 (SDG 3), emphasising good health and well-being for all, including ensuring comfort for both mothers and newborns (Rosa et al., 2019). Consequently, integrating non-pharmacological pain relief into midwives' practice contributes to advancing the SDG 3 targets and enhancing the quality of birthing care (Eyeberu et al., 2022). It is essential to have an in-depth understanding of the experiences of midwives and mothers regarding labour pain relief support or interventions and perspectives of the midwives involved. While a large proportion of previous related studies primarily focused on women's childbirth experiences, this may have inadvertently overlooked the equally critical aspect of understanding midwives' experiences with the various non-pharmacological strategies for labour pain relief (Wassihun et al., 2022). Midwives bring unique skills, knowledge, and perspectives to the birthing process and their experiences can significantly impact the quality of care provided. By examining midwives' experiences with labour pain management, researchers and practitioners can gain insights into the challenges, successes, and preferences. This information can inform evidence-based practices, contribute to tailored training programs, and enhance the overall quality of midwifery care.

The onset of childbirth involves painful labour contractions and rhythmic uterine muscle movements that gradually open the cervix (Thomson et al., 2019). The three stages of labour include the dilation of the cervix, the delivery of the baby, and the expulsion of the placenta (Thornton et al., 2020). Labour pain is a complex and subjective experience that concerns both expectant mothers and midwives. While it is a significant part of a woman's childbirth journey, the intensity of pain varies from person to person (Smith et al., 2020). Some women experience minimal discomfort, while others find the pain highly distressing and seek labour pain relief. Unrelieved labour pain can result in negative consequences for the expectant mother, her family, and the midwife (Omotayo et al., 2019).

The urgency of improving maternal care outcomes in Nigeria is underscored by persistently high maternal and neonatal mortality rates, which remain among the highest globally despite decades of policy efforts and technological advancements. While the introduction highlighted the need for effective labour pain management, the historical reliance on pharmacological solutions has inadvertently marginalized approaches that align with local resource constraints and sociocultural contexts. In the mid-20th century, the biomedical model of childbirth gained dominance, emphasizing medicalization and pharmacological interventions for pain relief. However, this model has often failed to account for the unique challenges faced by low- and middle-income countries, including shortages of skilled healthcare workers, inequitable access to medications, and cultural barriers to medicalized childbirth practices.

Early investigations into non-pharmacological interventions for labour pain relief primarily focused on their physiological mechanisms and anecdotal efficacy, laying the groundwork for later empirical studies. The gate control theory of pain, introduced by Melzack and Wall (1965), provided critical theoretical justification for techniques such as massage and hydrotherapy, which aim to modulate pain perception by stimulating non-painful sensory pathways. Building on this, mid-20th-century studies in high-resource settings highlighted relaxation techniques and breathing exercises as potentially effective adjuncts to pharmacological methods. However, more recent randomized clinical trials have expanded the scope of inquiry by exploring the psychological and emotional benefits of non-pharmacological strategies, emphasizing their ability to reduce anxiety and enhance maternal satisfaction during childbirth (Melzack and Wall (1965) in Smith et al., (2018)). Despite these advances, significant methodological gaps remain, particularly regarding the contextual adaptation of these interventions in under-resourced healthcare environments. The exploration of non-pharmacological interventions has increasingly focused on their applicability in low- and middle-income countries (LMICs), where systemic healthcare

constraints demand innovative, context-sensitive solutions. Studies have underscored the importance of adapting these techniques to local sociocultural norms, as cultural beliefs about pain, coping mechanisms, and childbirth practices heavily influence acceptance and effectiveness. For instance, breathing exercises and emotional support are often more readily embraced in settings where collective care and interpersonal interactions resonate with traditional caregiving values. However, the applicability of techniques such as hydrotherapy or advanced relaxation protocols may be limited in tertiary institutions in Nigeria due to infrastructure deficits and resource constraints *Smith et al., (2018)*. Moreover, while training programs for midwives on non-pharmacological interventions have demonstrated efficacy in improving maternal outcomes, their implementation remains inconsistent, hampered by limited institutional support and high patient loads *Boateng et al., (2019)*.

Despite the growing body of evidence supporting non-pharmacological interventions for labour pain relief, significant gaps persist in understanding the lived experiences of both midwives and women in LMIC settings, particularly within tertiary institutions in Nigeria. Women's perceptions of these interventions are deeply intertwined with cultural expectations, personal agency, and the nature of their interactions with healthcare providers. For example, continuous emotional support has been shown to improve maternal satisfaction, yet its effectiveness can be diminished by fragmented patient-provider relationships or insufficient advocacy for patient autonomy *Bohren et al., (2017)*. Simultaneously, midwives' adoption of non-pharmacological techniques is influenced by their professional training, workload, and institutional protocols, which often prioritize clinical procedures over supportive care *Boateng et al., (2019)*. These dual perspectives, rarely analyzed in tandem, represent a critical gap in the literature an opportunity to uncover how sociocultural, professional, and systemic factors collectively shape the implementation and outcomes of non-pharmacological labour pain relief interventions.

Pain management options during childbirth include pharmacological interventions such as epidurals prescribed by the obstetrician and non-pharmacological methods like breathing exercises and massage offered by midwives (Thomson et al., 2019). Pharmacological interventions such as opioids, non-opioids, and epidural analgesics are sometimes used in midwifery (Czech et al., 2018). In Africa, Pethidine is used due to its affordability, familiarity, and ease of administration (Aziato et al., 2017). However, the use of opioids can result in adverse effects on both the mother and the foetus, such as nausea, vomiting, sedation, and compromised respiratory function in the newborn (Ingram et al., 2022). Non-pharmacological methods of coping with labour pain are non-invasive, cost-effective, and simple to apply (Jha et al., 2023). The frequently used non-pharmacological strategies involve deep breathing exercises, changing positions during labour, providing comfort, and diverting attention away from the pain (Wassihun et al., 2022). Another impactful non-pharmacological method is massage, which has the potential to alleviate labour pain, decrease reliance on analgesics, and minimise anxiety (Mwakawanga et al., 2022). Midwives can further contribute to labour pain relief by providing support through encouraging words, therapeutic touch, updating women on the progress of labour, and the application of birthing balls (Aziato et al., 2017; Jha et al., 2023).

Mwakawanga et al. (2022) found that midwives express motivation to employ diverse non-pharmacological strategies for labour pain relief; however, apprehension and misconceptions about the effectiveness of non-pharmacological labour pain relief act as hindrances to their effective utilisation. Boateng et al. (2019) found that while doctors frequently prescribe analgesics for midwives to administer, midwives also often refrain from regularly administering non-pharmacological care based on effectiveness concerns. The majority of related past studies have been limited in scope, focusing primarily on women's experiences during labour rather than addressing midwives' experiences with labour pain management. The paucity of studies justifies the need for an inquiry to examine midwives' experiences concerning non-pharmacological methods for labour pain relief. Also, during a clinical placement in the labour ward of a federal hospital in Abuja (Nigeria), the researcher witnessed a midwife employing unique non-pharmacological methods to alleviate labour pain. The midwife skilfully guided the labouring woman through breathing exercises, adjusted her positioning between lateral, squat and all-fours, and administered massages on the "Rhomboid of Michaelis", leading to a noticeable improvement in the woman's demeanour. This first-hand experience sparked the researcher's interest in delving into the nuances of midwives' experiences with these non-invasive non-pharmacological interventions. In the face of potential detrimental

impact of pharmacological pain relief methods on the foetus and newborn, the current state of knowledge regarding non-pharmacological labour pain relief in Nigerian federal hospitals is limited. The existing literature indicates a gap in understanding the experiences of midwives and mothers concerning non-pharmacological interventions for labour pain relief in the Nigerian context. Moreover, there is a paucity of research focusing specifically on tertiary hospitals, which serve a substantial portion of the population and may have unique challenges and opportunities regarding childbirth practices.

Furthermore, childbirth experiences are influenced not only by physiological factors but also by psychosocial and environmental elements. Issues such as anxiety related to expected pain, cultural beliefs surrounding childbirth, and the quality of support during labour can significantly impact women's perceptions of pain and their overall childbirth experience. Inadequate attention to labour pain relief in view of these factors may contribute to negative childbirth experiences, affecting maternal well-being and potentially leading to adverse outcomes for both mother and newborn. Given the importance of providing optimal pain relief during childbirth and the potential benefits of non-pharmacological interventions for pain relief, there is a compelling need to explore the experiences and perception of women and midwives regarding these approaches in selected federal hospitals in Nigeria. The objectives of this paper are i) Uncover the non-pharmacological methods of labour pain intervention in the relief of labour pain used by midwives in selected federal hospitals in Nigeria, 2) examine the perception of women on the use of non-pharmacological intervention for labour pain relief, 3) determine the perception of midwives on the use of non-pharmacological labour pain relief in tertiary hospital, Nigeria.

2. Methods

Research Design

This study adopted a mixed-methods research design to explore the experiences of women and midwives regarding the use of non-pharmacological interventions for labour pain relief in selected federal hospitals in Nigeria. The mixed-methods design integrates both qualitative and quantitative approaches within a single study to provide a more complete understanding of a research problem (Creswell & Creswell, 2018). This approach is particularly appropriate for studies that seek to examine complex health phenomena from multiple perspectives, combining both numerical data and lived experiences.

The rationale for adopting a mixed-methods design in this study is based on the need to capture both the subjective experiences of midwives and the objective patterns of perception related to non-pharmacological labour pain relief methods. Labour pain and its management are multidimensional experiences influenced by physical, psychological, social, and cultural factors. Therefore, relying solely on either qualitative or quantitative methods would not provide sufficient depth or breadth to fully understand the phenomenon under investigation.

The qualitative component of the study employed a phenomenological approach to explore the lived experiences of midwives regarding non-pharmacological labour pain relief methods. This approach enabled the researcher to gain in-depth insights into midwives personal experiences with the use of these methods during labour.

Method of Data Collection and Analysis

Data for the qualitative component were collected through in-depth interviews, allowing participants to express their views freely and provide rich descriptions of their experiences. The qualitative data were analysed using thematic analysis, which facilitated the identification of key themes and patterns related to the use, benefits, challenges, and facilitators of non-pharmacological interventions.

The quantitative component of the study adopted a descriptive cross-sectional design to collect numerical data from a larger sample of respondents. This component focused on assessing the perceptions of mothers and midwives regarding their effectiveness. Data were collected using a structured questionnaire and analysed using descriptive statistics such as frequencies, percentages, and measures of central tendency. This allowed for the identification of trends and patterns across the study population.

Study Area

The study was conducted in six federal hospitals from each of the six geopolitical zones of Nigeria: Ahmadu Bello University Teaching Hospital, Zaria (Northwest Zone); University of Maiduguri Teaching Hospital, Maiduguri (Northeast Zone); National Hospital Abuja, Abuja (North Central Zone); Lagos University Teaching Hospital, Lagos (Southwest Zone); University of Nigeria Teaching Hospital, Enugu (Southeast Zone); and University of Port Harcourt Teaching Hospital, Port Harcourt (South-South Zone).

Sample Size

For the qualitative component of the study, a purposive sample of 15 Midwives were used. This sample size was achieved based on the principle of data saturation, where additional participants are unlikely to yield new information or insights, thus ensuring the depth and richness of the qualitative data collected.

For the quantitative component of the study, a sample size of 160 mothers and 122 midwives was determined using Cochran's formula for calculating the sample size for a finite population (Bolarinwa, 2020).

$$n = \frac{[N \times Z^2 \times P \times (1-P)]}{[(N-1) \times e^2 + Z^2 \times P \times (1-P)]}$$

Where:

n = desired sample size

N = population size (total number of postpartum women (n = 230) or midwives (n = 153) in the selected federal hospitals as applicable)

Z = Z-score corresponding to the desired level of confidence (e.g., for a 95% confidence level, Z = 1.96)

P = estimated proportion of postpartum women experiencing labour pain relief with non-pharmacological interventions (best guess = 0.5)

e = margin of error (desired precision, set at 0.05)

Substituting into the formula, 144 mothers and 110 midwives. The computed minimum sample sizes were increased by 10% to account for possible non-response using the non-response formula (Bolarinwa, 2020).

$$\text{Final sample size} = n \div (1 - 0.1)$$

The final calculated sample size was 160 mothers and 122 midwives.

In-depth Interview Guide: Semi-structured guides with 6 questions and 17 probes for midwives, designed to elicit rich narratives.

Questionnaire: Structured questionnaire with sections on socio-demographics, methods used, and perceived effectiveness.

Validity and Reliability

Content validity was established by a three-man expert panel with a Content Validity Index of 0.825. Reliability testing using Cronbach's alpha yielded a coefficient of 0.887, indicating high internal consistency.

Ethical Considerations

Ethical approval was obtained from the Institutional Review Board of the University of Port Harcourt. Written informed consent was obtained from all participants. Confidentiality was maintained through unique identifiers and secure data storage. The study adhered to the Declaration of Helsinki as revised in 2013. Prior to the commencement of data collection.

3. Results

Socio-demographic Characteristics

Qualitative Component: Among the 15 mothers, the majority had two children. Secondary education was most common (40%), followed by primary (33.3%) and tertiary (26.7%). All delivered vaginally. Among the 15 midwives, the majority had two or three children (60%). All had tertiary education, with experience ranging from 5-10 years.

Quantitative Component: Among 160 women, the majority (53.75%) were aged 28-37 years. Secondary education was most common (36.88%). Most (51.25%) had 1-2 children. Among 122 midwives, the majority (51.64%) were aged 28-37 years, with 50% having 11-15 years of experience. Diploma was the most common qualification (51.64%).

Research Question 1: What are the non-pharmacological methods of labour pain intervention in the relief of labour pain used by midwives in selected federal hospitals in Nigeria?

Theme 1: Various non-pharmacological pain relief methods

The theme “various non-pharmacological methods of labour pain relief” encompasses the range of safe, non-invasive, and supportive strategies used by midwives to help women cope with labour pain without medications. It reflects routine, practical approaches that promote comfort, reduce anxiety, and enhance women’s active participation and overall childbirth experience. The subthemes identified include breathing techniques, massage therapy, warm compress application, maternal positioning, and emotional support. These are further illustrated in the table below with selected data extracts from participants

Subtheme	Code	Description	Example Quotation
Breathing Techniques	Breathing exercises	Teaching mothers controlled breathing methods to manage pain and stay focused.	<i>"I teach the mothers how to breathe in and out slowly, especially during contractions." (MID 011)</i>
Massage Therapy	Massage	Gently rubbing the lower back or other areas to reduce pain and provide support.	<i>"Gently rubbing the lower back or other areas where the woman feels pain can really help." (MID 02)</i>
Warm Compress	Heat application	Using a warm towel on specific areas to ease pain during labour.	<i>"Using a warm towel on the back or lower abdomen can ease the pain." (MID 15)</i>
Maternal Positioning	Position changes	Encouraging mothers to change positions to reduce discomfort and enhance comfort.	<i>"Encouraging the woman to move around, squat, sit upright, or even lean forward can reduce discomfort." (MID 06)</i>
Emotional Support	Reassurance and presence	Providing encouragement, reassurance, and emotional support during labour.	<i>"Being there, talking to the mother, reassuring her, and encouraging her can make a big difference." (MID 01)</i>

Research Question 2: What are the perceptions of women on the use of non-pharmacological labour pain relief in the selected federal hospitals in Nigeria?

From the Quantitative Component

Table 2: Women perception on the use of non-pharmacological interventions for labour pain relief (n = 160)

ITEMS	SA	A	D	SD	Mean
Non-pharmacological interventions are effective for relieving labour pain	28	17	36	79	2.00
Non-pharmacological interventions are safe for both mother and baby."	64	39	30	27	3.00
Non-pharmacological interventions represent a more natural approach to labour pain relief	61	42	30	27	3.00
Non-pharmacological labour pain relief methods enable a woman in labour to stay active and in control.	24	1	14	121	1.00
Non-pharmacological labour pain relief methods are inexpensive and cost-effective.	15	25	16	104	1.00
Non-pharmacological labour pain relief methods have no serious side effects	35	21	11	93	1.00
Non-pharmacological labour pain relief methods may completely eliminate pain.	11	26	2	121	1.00
It is not difficult to focus on non-pharmacological interventions when experiencing intense pain."	42	42	47	29	3.00
These methods can help reduce fear and anxiety during labour.	50	31	47	32	3.00
Non-pharmacological methods are worth considering for future deliveries."	44	22	11	83	1.00
Natural methods are preferable to medications for managing labour pain."	31	5	33	91	1.00
Non-pharmacological methods are a viable alternative to medical pain relief during labour	29	35	10	86	1.00
Grand mean					1.00

SA = strongly agree (Score 4), A = agree (Score 3), D = disagree (Score 2), SD = strongly disagree (Score 1); Grand median < 2.50 = negative, > 2.5 = positive

Table 2. Revealed that most women expressed negative perceptions towards non-pharmacological interventions for labour pain relief (mean 1.00, Scale: 1-4). Many respondents disagreed that such interventions are effective for relieving labour pain.

Research Question 3: What are the perceptions of midwives on the use of non-pharmacological labour pain relief in selected federal hospitals in Nigeria?

Table 3: Midwives' perception on the use of non-pharmacological interventions for labour pain relief (n = 122)

ITEMS	SA	A	D	SD	Mean
Non-pharmacological methods are easy to implement in clinical practice.	42	32	9	39	3.00
Non-pharmacological methods is suitable for all women	44	10	26	42	2.00
Midwives do not need more training on non-pharmacological pain relief methods."	5	49	25	43	2.00

ITEMS	SA	A	D	SD	Mean
Time constraints and workload do not make it difficult to implement non-pharmacological methods.	17	28	12	65	1.00
The use of non-pharmacological pain relief aligns with patient-centred care.	17	46	9	50	3.00
Midwives play a critical role in promoting non-pharmacological pain relief options.	38	29	21	34	3.00
Midwives should encourage the use of non-pharmacological methods for labour pain relief	46	24	7	45	3.00
Pregnant woman should be educated about non-pharmacological pain relief in labour during antenatal visit	80	7	8	27	4.00
Non-pharmacological methods should be the first line of pain relief offered to women in labour	41	32	6	43	3.00
Non-pharmacological methods do not require more time and attention from midwives than pharmacological methods.	21	11	12	78	1.00
The lack of resources does not limit the use of non-pharmacological methods in some settings	36	1	11	74	1.00
Cultural beliefs and patient preferences do not influence the use of non-pharmacological methods.	29	4	8	81	1.00
Grand mean					2.50

Table 3: Revealed a positive perception (mean 2.50, Scale 1-4) among midwives regarding non-pharmacological methods for labour pain relief. Many midwives agreed that the methods are easy to implement in clinical practice. However, fewer believed they are suitable for all women in labour. Majority acknowledged that midwives needed more training is needed for effective use of such methods. Most midwives agreed that time constraints and workload hinder implementation, suggesting workload challenges are significant. Many participants agreed that non-pharmacological methods align with patient-centred care principles. A large proportion believed that midwives play a vital role in promoting these options. Several midwives felt they should actively encourage non-pharmacological methods use during labour. There was strong agreement that pregnant women should be educated about non-pharmacological pain relief during antenatal visits. Many believed these methods should be considered as the first line of pain relief in labour. However, most disagreed that such methods require less time and attention than pharmacological options. Participants generally agreed that lack of resources does limit the use of non-pharmacological of pain relief in some settings. Many also agreed that cultural beliefs and patient preferences do influence implementation.

4. Discussion

Various Non-pharmacological Methods Used by Midwives

This study revealed that midwives commonly use breathing techniques, massage therapy, warm compresses, maternal positioning, and emotional support for labour pain relief. These findings align with Konlan et al. (2021), who found that antenatal instruction on breathing techniques helped women manage labour pain effectively in Ghana. The convergence may stem from both studies being conducted in sub-Saharan African hospital settings where antenatal education and in-labour reinforcement are part of routine midwifery care.

The reported use of massage therapy corresponds with Mwakawanga et al. (2022), where Tanzanian midwives commonly massaged women's backs to relieve labour discomfort. This similarity reflects a shared recognition of tactile interventions as both physically beneficial and emotionally supportive. The finding on warm compresses aligns with Türkmen and Oran (2021), who found sacral heat application significantly lowered pain scores. Maternal positioning findings corroborate Bolanthakodi et al. (2018), who reported that prenatal yoga, involving

varied postures, reduced the need for analgesics. The role of emotional support resonates with Buerengen et al. (2022), who found that one-to-one midwifery care increased massage use and reduced reliance on pharmacological pain relief.

Women Perceptions of Non- pharmacological Pain Relief Method

Mothers held negative perceptions overall (grand mean=1.00), viewing methods as providing partial rather than complete pain relief. This finding aligns with Esan et al. (2023), where women reported breathing as helpful but insufficient alone. Similarly, Boateng et al. (2019) reported that massage provided comfort yet did not replace analgesics from mothers' perspectives. In contrast, Baljon et al. (2022) observed more positive perceptions when multiple methods were combined, suggesting that multimodal use may influence satisfaction.

Midwives' Perceptions

Midwives demonstrated positive perceptions (grand mean=2.50), recognizing methods as complementary rather than substitutes for pharmacological interventions. This corresponds with Konlan et al. (2021) and Boateng et al. (2019), which reported midwives' recognition of breathing and massage as supportive coping strategies. The strong agreement among midwives that pregnant women should be educated about these methods during antenatal visits (median=4.00) indicates recognition that preparation is key to successful implementation.

5. Conclusions and Recommendations

1. **Attend antenatal classes** to learn and practice non-pharmacological methods before delivery. Mothers who understand these techniques cope better with labour discomfort.
2. **Practice breathing techniques regularly** during pregnancy to enhance muscle memory and make application easier during labour.
3. **Communicate preferences clearly** to midwives regarding pain relief options, enabling tailored interventions.
4. **Involve birth partners in preparation** to provide physical relief and emotional reassurance during labour.
5. **Maintain realistic expectations** that non-pharmacological methods provide coping strategies rather than complete pain elimination.

Conflict of Interest: No Conflict of Interest Declared

Funding: This Research Received no Specific Grant from any Funding Agency

Ethical Approval: Obtained from the Institutional Review Board of the University of Port Harcourt.

References

- [1] Aziato, L., Kyei, A. A., & Deku, G. (2017). Experiences of midwives on pharmacological and non-pharmacological labour pain management in Ghana. *Reproductive Health*, 14(1), 128.
- [2] Boateng, E. A., Kumi, L. O., & Diji, A. K. (2019). Nurses and midwives' experiences of using non-pharmacological interventions for labour pain management: a qualitative study in Ghana. *BMC Pregnancy Childbirth*, 19(1), 168.
- [3] Buerengen, T., Bernitz, S., Øian, P., & Dalbye, R. (2022). Association between one-to-one midwifery care in the active phase of labour and use of pain relief and birth outcomes: A cohort of nulliparous women. *Midwifery*, 110, 103341.
- [4] Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* Sage publications.
- [5] Esan, D. T., Adugbo, J. E., Fawole, I. O., & Akingbade, O. (2023). Coping Experiences of Nigerian Women during Pregnancy and Labour: A Qualitative Study. *International Journal of Community Based Nursing and Midwifery*, 11(1), 23
- [6] Eyeberu, A., Debelo, A., Getachew, T., Dheresa, M., Alemu, A., & Dessie, Y. (2022). Obstetrics care providers' attitude and utilization of non-pharmacological labour pain management in Harari regional state health facilities, Ethiopia. *BMC Pregnancy Childbirth*, 22(1), 389.

- [7] for labour pain management: A systematic review and Bayesian network meta-analysis. *Journal of clinicalnursing*, 30(23-24),3398-3414.
- [8] Henry, H., & Wells, C. (2021). Identification and management of dysfunctional breathing in primary care. *Practice Nursing*, 32(12), 474-479.
- [9] Hmwe, N. T. T., Browne, G., Mollart, L., Allanson, V., & Chan, S. W. C. (2020). Older people's perspectives on use of complementary and alternative medicine and acupuncture: a qualitative study. *Complementary Therapies in Clinical Practice*, 39(1), e101163.
- [10] Hofmeyr, G. J., & Singata-Madliki, M. (2020). The second stage of labour. *Best Practice & Research Clinical Obstetrics & Gynaecology*, 67(1), 53-64.
- [11] Hosseini T. M., Keramat, A., Kolahdozan, S., Shahhosseini, Z., Moosazadeh, M., & Motaghi, Z. (2020). Positive childbirth experience: A qualitative study. *Nursing Open*, 7(4), 1233-1238.\
- [12] Hu, Y., Lu, H., Huang, J., & Zang, Y. (2021). Efficacy and safety of non-pharmacological interventions
- [13] Ibrahim, H. A. F., Alshahrani, M. S., Al-Qinnah, A. J., & Elgzar, W. T. (2024). Nonpharmacological pain relief for labour pain: knowledge, attitude, and barriers among obstetric care providers. *Peer Journal*, 12(1), e16862.
- [14] Ingram, M. A., Brady, S., & Peacock, A. S. (2022). The barriers to offering non-pharmacological pain management as an initial option for labouring women: A review of the literature. *European Journal of Midwifery*, 6(1), 37. <https://doi.org/10.18332/ejm/149244>.
- [15] Issac, A., Nayak, S., Priyadarshini, T., Balakrishnan, D., Halemani, K., Mishra, P., & Stephen, S. (2023). Effectiveness of breathing exercise on the duration of labour: A systematic review and meta-analysis. *Journal of Global Health*, 13(1), e1.
- [16] Ivan, U., Wang, J. K., Yancey, K., Mohammad, M., Jung, J. W., Berger, A. A., ... & Viswanath, O. (2021). Acupuncture for the management of low back pain. *Current Pain and Headache Reports*, 25(1).
- [17] Jameei-Moghaddam, M., Goljaryan, S., Mohammad Alizadeh Charandabi, S., Taghavi, S., & Mirghafourvand, M. (2021). Effect of plantar reflexology on labour pain and childbirth experience: A randomized controlled clinical trial. *Journal of Obstetrics and Gynaecology Research*, 47(6), 2082-2092. <https://doi.org/10.1111/jog.14755>
- [18] Jha, S., Vyas, H., Nebhinani, M., Singh, P., & T D. (2023). The Effect of Birthing Ball Exercises on Labour Pain and Labour Outcome Among Primigravidae Parturient Mothers at a TertiaryCareHospital. *Cureus*, 15(3), e36088.
- [19] Konlan, K. D., Afaya, A., Mensah, E., Suuk, A. N., & Kombat, D. I. (2021). Non-pharmacological interventions of pain management used during labour; an exploratory descriptive qualitative study of puerperal women in Adidome Government Hospital of the Volta Region, Ghana. *Reproductive Health*, 18(1), 1-11.
- [20] Mueller, S., & Grunwald, M. (2021). Effects, side effects and contraindications of relaxation massage during pregnancy: a systematic review of randomized controlled trials. *Journal of Clinical Medicine*, 10(16), 3485.
- [21] Mwakawanga, D. L., Mselle, L. T., Chikwala, V. Z., & Sirili, N. (2022). Use of non-pharmacological methods in managing labour pain: Experiences of nurse-midwives in two selected district hospitals in eastern Tanzania. *BMC Pregnancy Childbirth*, 22(1), e376. <https://doi.org/10.1186/s12884-022-04707-x>.
- [22] Mwakawanga, D. L., Mselle, L. T., Chikwala, V. Z., & Sirili, N. (2022). Use of non-pharmacological methods in managing labour pain: Experiences of nurse-midwives in two selected district hospitals in eastern Tanzania. *BMC Pregnancy Childbirth*, 22(1), e376.
- [23] Polit, D. F., & Beck, C. T. (2020). *Nursing research: Generating and assessing evidence for nursingpractice*. LippincottWilliams&Wilkins.
- [24] Rosa, W. E., Kurth, A. E., Sullivan-Marx, E., et al. (2019). Nursing and midwifery advocacy to lead the United Nations Sustainable Development Agenda. *Nursing Outlook*, 67(6), 628-641.
- [25] Tolulope, E. D., Efemena Adugbo, J., Opeyemi Fawole, I., & Akingbade, O. (2023). Coping Experiences of Nigerian Women during Pregnancy and Labour: A Qualitative Study. *International Journal of Community Based Nursing and Midwifery*, 11(1), 23-33.
- [26] Türkmen, H., & Oran, N. T. (2021). Massage and heat application on labour pain and comfort: A quasi-randomized controlled experimental study. *Explore (NY)*, 17(5), 438-445.
- [27] Wassihun, B., Alemayehu, Y., Gultie, T., Tekabe, B., & Gebeyehu, B. (2022). Non-pharmacological labour pain management practice and associated factors among skilled attendants working in public health facilities in Gamo and Gofa zone, Southern Ethiopia: A cross-sectional study. *PLoS One*, 17(4), e0266322.