SCIENTIFIC
Research and Community

Open Access

Utilization of Pain Relief in Labor and it's Associated Factors Among Midwives in Selected Hospitals in Oyo State, Nigeria

Adetunmise Oluseyi Olajide[1*], Bosede Nike Akinola[1], Oyeronke Olubunmi Bello[2], Yetunde Omolola Oyedeji[1], Ganiyat Odunola Adeniran[1], Godwin Samuel Atayi[3], Gbemisola Bolanle Ogbeye[4] and Deborah Tolulope Esan[8]

[1]Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria

[2]Department of Clinical Nursing, University College Hospital, Ibadan, Oyo State, Nigeria

[3]Department of Nursing Sciences, Federal University, Lokoja, Kogi State, Nigeria

[4]Department of Nursing Sciences, Federal University, Oye Ekiti, Ekiti, Nigeria

[5]Department of Nursing Sciences, Bowen University, Iwo, Osun State, Nigeria

ABSTRACT

Background: Pain during labor is a significant and unpleasant experience for women, making effective pain management essential in obstetric care. Midwives are instrumental in providing pain relief during labor.

Objective: This study aimed to determine the utilization of pain relief during labor by midwives in selected hospitals in Oyo State, Nigeria.

Methods: A descriptive cross-sectional design with purposive sampling was used for recruitment. Data were collected using a semi-structured questionnaire, with a 0.75 reliability index, and analyzed using SPSS version 22 at a 5% significance level.

Results: Most midwives (61%) had above-average knowledge regarding labor pain relief, while 64% showed a positive attitude towards its use. About 82.5% of midwives occasionally used pain relief during labor. Influencing factors included knowledge (80%), information availability (80%), lack of training (76.3%), inadequate equipment (85%), and affordability (66.3%). The use of pain relief was significantly related to the socio-demographic characteristics of midwives: age (0.76), education level (0.0082), and years of experience (0.73).

Conclusion: This study highlights the positive aspects of midwives' knowledge and attitudes concerning pain relief. However, the gap between knowledge and utilization suggests a need for interventions focused on developing skills, addressing resource limitations, and sharing information. These efforts can optimize pain management practices and empower midwives to provide more effective pain relief for laboring women.

*Corresponding author
Adetunmise Oluseyi Olajide, Faculty of Nursing Sciences, Ladoke Akintola University of Technology, Ogbomoso, Oyo State, Nigeria.

Introduction
Labor pain is a significant and distressing experience, quite often described as one of the most severe pains experienced by women. Effective labor pain management is of paramount importance to ensure the well-being of the mother and the quality of obstetric care. For the physical and psychological aspects of women, the intensity of labor pain affects them, which together elicits their experience during birth and postpartum recovery [1-3]. Pain management during labor contributes to the general quality of maternal care. Proper pain relief can cause better maternal outcomes, including less stress and anxiety, factors that can positively influence the labor process and neonatal outcomes. This was demonstrated to be associated with better labor pain management, a more positive experience of childbirth, increased maternal satisfaction, and a possible resultant better bonding between the mother and their infant [1,2,4].

Midwives play an essential role in the management of labor pain. Among other roles, they are expected to assess the pain levels in women in labor, provide or initiate the appropriate methods for pain relief, and emotionally and physically support women in labor. It is, therefore, the knowledge and attitude of the midwives that is critical in having pain managed effectively. Midwives who are well-informed and positive about approaches to pain relief are, therefore, likely to practice effective methods in providing quality care overall: Johnson et al., 2020; Lee et al., 2023; Williams et al., 2021 [5,6].

The practice of pain relief during labor varies from one country to another, even from developed to developing countries. A wide range of pain relief options, both pharmacological and non-

pharmacological, are available and actively utilized in developed nations. In the context of this, most developing nations encounter such bumps of poor access to means of relief and a lack of sufficient resources [7-9]. In Nigeria, the use of pain relief during labor involves many factors around availability, accessibility, and cultural perceptions. In Nigerian hospitals, some of the most common pain relief methods include epidurals, opioids, breathing exercises, massages, and other non-pharmacological techniques. However, resource constraints and inadequate training of health care providers usually make the utilization rates lower compared to developed countries.

The knowledge of midwives significantly influences the utilization of pain relief methods. Continuous education and training programs are essential to provide knowledge to midwives about pain management trends and best practices. Evidence has shown that those who are more knowledgeable and trained midwives practice effective pain relief during labor: Williams et al., 2021; Lee et al., 2023; Garcia et al., 2022 [3,6]—the attitude and perception of midwives toward pain relief matters. Positive attitudes and belief in lessening labor pain using choices of pain management can lead to frequent utilization and effective methods of reducing pain. On the contrary, negative attitudes or misconceptions can significantly reduce the utilization of pain diversion [3,4,7].

The existence of procedures for pain relief as well as equipment in the hospitals equally contributes to their use. The existence of pain relief methods within the reach of a patient, in terms of affordability, equally dictates their utilization processes. This is essential to the enhancement of utilization rates in women. Hence, all hospitals have to ascertain that their facilities are well-equipped and the methods of pain relief are within the affordable reach of all women, as asserted by Miller et al.; Adeniran et al. and Nguyen et al. [4,8,10]. Age and years of experience among midwives might influence their usage. This can pose a problem for the issues of perspective and practice in older and more experienced midwives relative to their younger colleagues. Additionally, it has been reported that experience in labor pain management, as well as familiarity with all methods of pain relief, may essentially affect midwives' confidence and willingness to use specific techniques [3,7,10].

Education of the midwife is significantly associated with effective utilization of pain relief. Midwives with higher educational qualifications likely possess a better capacity or competence in the management of labor pain, which may enhance utilization rates of relief methods during labor. These studies were conducted by Williams et al., 2021; Lee et al., 2023; Nguyen et al., 2021 [6,10]. Published works on the utilization of pain relief among midwives in Oyo State, Nigeria, are very deficient. Previous study findings are insufficient in establishing factors that influence practices regarding pain relief in this region, and thereby, some gaps require new investigations. Knowledge of midwives' practices and the factors regarding utilization of pain relief should be gained to improve maternal care. This is the gap that this study intends to fill, giving detailed insights into the utilization of pain relief during labor and factors associated with it among midwives in selected hospitals in Oyo State.

Methods
The current study utilized a descriptive research design to assess the utilization of pain relief during labor by midwives in selected hospitals in Oyo State, Nigeria.

Research Setting
This study was conducted in two centers: secondary healthcare facilities in Oyo State, which serve as referral health centers for primary healthcare facilities, private hospitals, and mission homes. It was, therefore, conducted to obtain an all-encompassing study concerning the use of analgesia in labor and the influencing factors used by midwives in secondary healthcare in Oyo State.

Populations of the Study
The population of the study was made up of midwives employed in State Hospital Ogbomoso and State Hospital Oyo, two secondary healthcare facilities in Oyo State, Nigeria. The study identified its target population to be 80 midwives. In this study, the researcher carried out total enumeration, meaning all 80 midwives in the population were used in the study as a sample.

Sampling Design
The study adopted purposive sampling for the study. This is a non-probability sampling technique that involves selecting study participants at the researcher's discretion based on his judgment and criteria, including specialist knowledge in the area concerning the research problem.

Instrumentation
Data were collected using a semi-structured, self-administered questionnaire with a few multiple-choice questions. The questionnaire was divided into five:

Section A: It covered the socio-demographic data of the respondents.
Section B: It assessed the knowledge of midwives on labor pain relief in the selected hospitals.
Section C: determined the utilization of labor pain relief among midwives in selected hospitals in Oyo State.
Section D: Investigated the attitudes of midwives toward the use of labor pain relief in the selected hospitals.
Section E: Investigated the factors associated with using labor pain relief among midwives in the selected hospitals.

Pilot Study
A pilot study was conducted with midwives from a secondary healthcare facility, distinct from the hospitals used in the main study. The pilot testing aimed to eliminate many irrelevant questions and to test the reliability of the questionnaire before the actual study. The purpose of the pilot study was to administer and analyze eight questionnaires to gather data that is informative to the study's objectives.

Psychometric Properties of the Instrument
Validity of the Instrument
The questionnaire was validated through the experts' reviewing and correcting it to attain face and content validity. All the relevant adjustments were done before printing and distributing them to the study respondents.

Reliability of the Instrument
The research tool was pre-tested in another hospital outside the study area to identify and adjust any ambiguities in the questionnaire. The reliability coefficient was computed, and the Cronbach's alpha score was 0.756. This showed that the instrument was reliable for the study.

Data Collection

Before administering the questionnaire, the researchers informed the respondents about the study's objectives and took their written informed consent. The questionnaires were given to the participants directly by the researchers and collected immediately upon completion. The process of data collection was done in one month by the researcher(s).

Data Analysis

Completed questionnaires were screened and cleaned by the researchers before inputting the data into Microsoft Excel. The data entered into the Statistical Package for Social Science (SPSS) version 22 is analyzed, and the research findings are presented. Summary statistics for each variable were computed in frequency distribution tables. Results Cross-tabulation and chi-square tests were used to examine statistically significant relationships between variables at a 0.05 level of significance.

Ethical Considerations

The researcher has sought ethical clearance from Oyo State Ministry of Health with reference numbers (AD 13/479/653B and NHREC/OYOSHRIEC/10/11/22). Respondents were well-informed about the nature and purpose of the study. Written informed consent was obtained to guarantee that the respondents participated voluntarily in the research. All the research documents were confidential, among them the questionnaires to be used in this study. This was so because the questionnaires did not collect detailed information, which could have exposed the identity of the participants. The participants were informed of their rights in the case of voluntary withdrawal from the study. Adequate information on the process of the research was also given.

Findings

Table 1: Showing Demographic of The Respondents

Sociodemographic	Variables	Frequency	Percent %
Gender	Male	8	10
	Female	72	90
Age	21-30 Years	28	35
	31-40 Years	19	23.7
	41-50 Years	26	32.5
	50 and above	7	8.8
Religion	Christianity	56	70
	Muslim	22	27.5
	Traditional	2	2.5
Level of education	Diploma	21	26.3
	Bsc	47	58.8
	Msc	5	6.3
	Others	7	8.8
Professional qualifications	Single	14	17.5
	Nurse-Midwife	52	65
	RPHN	14	17.5
Marital status	Married	58	72.5
	Single	20	25
	Divorce	2	2.5
Clinical experience	Below 10 years	37	46.3
	20 years	31	38.8

	21 and above	12	15
Years of experience in labor ward	21 and above	12	15
	Less than 5 years	28	35
	5 - 10 years	30	37.5
	10 Years and above	22	27.5

The sample of midwives was predominantly female, with 72 (90%) identifying as such. The most common age group was 21-30 years, with 28 (35%) midwives falling into this category. Christianity was the most frequent religion, with 56 (70%) of midwives identifying as Christian. The most prevalent qualification was Nurse Midwife, held by 52 (65%) of the participants. Regarding marital status, the majority of midwives, 58 (72.5%), were married. In terms of work experience in the labor ward, most midwives, 37 (46.3%), had ten years or less of clinical experience, while 30 (37.5%) had between 5 and 10 years of experience.

Table 2: Showing Knowledge of Midwives on Labor Pain Relief

Category	Item	Yes (%)	No (%)
Pain Relief Necessity	Necessary for managing pregnant women in labor	91.2	8.8
Classification	Pain relief can be classified into two	98.8	1.2
Pharmacological Methods	Massaging	21.3	78.7
	Pentazocine	92.5	7.5
	Acupuncture	40.0	60.0
	Pethidine	83.8	16.2
	Hydrocortisone	50.0	50.0
	Hyoscine	67.5	32.5
	Diclofenac	83.8	16.2
	Paracetamol	77.5	22.5
	Diversional therapy	20.0	80.0
	Ambulation	17.5	82.5
	Music therapy	23.8	76.3
	Epidural analgesia	71.3	28.7
	Hypnosis	27.5	72.5
	Relaxation and breathing	26.3	73.8
	Inhalational analgesia	71.3	28.7
Non-Pharmacological Methods	Massaging	93.8	6.2
	Pentazocine	11.3	88.7
	Acupuncture	63.7	36.3
	Pethidine	11.3	88.7
	Hydrocortisone	15.0	85.0
	Hyoscine	12.5	87.5
	Diclofenac	10.0	90.0
	Paracetamol	8.8	91.2

	Diversional therapy	90.0	10.0
	Ambulation	91.2	8.8
	Music therapy	88.7	11.3
	Epidural analgesia	25.0	75.0
	Hypnosis	62.5	37.5
	Relaxation and breathing	73.8	26.2
	Inhalational analgesia	27.5	72.5
Impact on Maternal Anxiety	Adequate pain control reduces anxiety	96.3	3.7
Epidural Analgesia Effects	Interferes with maternal and child relationship	51.2	48.8
	Increases risk of difficulties during childbirth	48.8	51.2
Overall Knowledge	Below average (1-17)	8	-
	Average (18-26)	31	-
	Above average (27-35)	61	-

Table 2: Shows the knowledge of respondents on labor pain relief, 49(61%) of them had above average knowledge of pain relief in labor with a score that ranges between 21-35, 25(31%) had an average knowledge of 18-26 while 6(8%) had below-average knowledge of labor pain relief. It is concluded therefore that, the majority of midwives have above-average knowledge of labor pain relief.

Table 3: Showing the Level of Utilization of Labor Pain Relief among Midwives.

Category	Item	Never (%)	Sometimes (%)	Always (%)
Use of Pain Relief in Labor	I make use of pain relief in labor	82.5	6.3	11.3
Pharmacological Methods	Pentazocine	57.5	2.25	40
	Pethidine	23.7	3.7	72.5
	Diclofenac	45	3.7	51.2
	Paracetamol	56.3	12.5	31.3
	Epidural analgesia	20	3.7	76.3
	Inhalational analgesia	17.5	2.5	80
Non-Pharmacological Methods	Back Massaging	26.3	62.5	11.3
	Acupuncture	25	11.3	63.7
	Diversional therapy	40	47.5	12.5
	Ambulation	41.3	43.8	15
	Music therapy	43	30	16.3
	Hypnosis	38.8	15	46.3
	Relaxation and breathing	37	45.7	17.3
		Frequency	percentage	
Overall Utilization	Good	17	21	
	Moderate	33	41	
	Poor	30	38	

Table 3: Shows the respondents' view on Utilization of labor pain relief among Midwives. Among the pain relief identified, paracetamol is the major pharmacological method being utilized 10(12.5%) by midwives while back massaging is the major non-pharmacological method pain relief 50(62.5%) being utilized. In overall, 30(38%) of respondents have poor level of Utilization of labor pain relief, 33(41%) have a moderate level of Utilization while 17(21%) have a good level of Utilization of pain relief methods in labour.

Table 4: Midwives Attitude towards use of Labor Pain Relief

ITEM	SA	A	D	SD
1. Labor pain management is necessary to help mothers to cope with labor pain	33(41.3)	44(55)	1(1.2)	2(2.5)
2. Pain relief in labor is needed to prevent complications	19(23.8)	20(25%)	26(32.5)	15(18.8)
3. Adequate analgesia is needed in the management of pain in Labour	21(26.3)	38(47.5)	7(8.8)	14(17.5)
4. The use of non-pharmacological method of pain relief in labor is better than pharmacological pain relief in labor	46(57.5)	19(23.8)	12(15)	3(3.7)

5. Labor pain is a natural event that women need to endure	34(42.5)	24(30)	17(21.3)	5(6.3)
6. Utilizing pain relief in labor alligns with promoting a positive child birth experience for mother	23(28.7)	45(56.3)	12(15)	0(0)
7. The use of pain relief in labor can have a negative impact on the baby	18(22.5)	14(17.5)	33(41.3)	15(18.8)
Overall attitude	Frequency (f)		Percentage(%)	
Positive attitude	51		64%	
Negative attitude	29		36%	

Table 4: Shows that 51(64%) are having positive attitude while 29(36%) are having negative attitude towards Utilization of pain relief in labour.

Table 5: Factors Influencing the Utilization of Pain Relief in Labor

N=80 (100%) ITEM	YES		NO	
	Frequency	%	Frequency	%
1. My facility does not make provisions for labor pain management	42	52.5	38	47.5
2. Patient culture forbidding the use of pain relief in labor	33	41.3	47	58.8
3. Patients Religion forbidding the use of pain relief in Labour	30	37.5	50	62.5
4. Knowledge of Midwives about pain relief in Labour	64	80	16	20
5. Midwives attitude about Pain relief in Labour	61	76.3	19	23.8
6. Workload in labor ward	54	67.5	26	32.5
7. Lack of Training on use of pain relief in Labour	61	76.3	19	23.8
8. Inadequate equipment for pain relief in Labour	68	85	12	15
9. Unsupportive hospital policy for the use of pain relief in Labour	47	58.8	33	41.2
10. Fear of side effects of pain medication on child birth	65	81.3	15	18.8
11. Affordability of pain relief medication by patients	58	66.3	27	33.7
12. Availability of pain relief in labor ward	47	58.8	33	41.2
13. Acceptance of spouse on use of pain relief in Labour	36	44.4	44	55.6
14. Lack of awareness of pain relief in labor by pregnant women	45	56.3	35	43.8
15. Women's preference on natural birth without pain relief in Labour	55	68.8	25	31.3
16. Availability of information on pain relief in labor for pregnant women.	64	80	16	20

Table 5: Explores factors influencing pain relief use during labor. Midwives highlighted the importance of their own knowledge (64 respondents, 80%), positive attitude (61 respondents, 76.3%), and adequate training (61 respondents, 76.3%) for effective pain management. Equipment limitations emerged as a significant concern (68 respondents, 85%), along with fear of side effects on the newborn (65 respondents, 81.3%). Affordability (58 respondents, 66.3%) and some women's preference for natural birth (55 respondents, 68.8%) were also identified as factors influencing pain relief choices. Finally, access to information for pregnant women was seen as crucial by a majority of midwives (64 respondents, 80%).

Table 6: Showing the Relationship between the Sociodemographic Characteristics of the Midwives and their Utilization of Pain Relief in Labour.

Level of education	Utilization of pain relief			X2	df	P. Value at .05	Remark
	Good	Moderate	Poor				
Diploma	3(3.75%)	38(47.5%)	6(7.5%)				
Bsc	0	20(25%)	1(1.25%)	9.647	6	0.0082	**Significant**
Msc	0	4(5%)	1(1.25%)				
Others	2(2.5%)	4(5%)	1(1.25%)				
Age	**Utilization of pain relief**						

	Good	Moderate	Poor	7.949	6		0.758662	non significant
21-30	2(2.5%)	21(26.25%)	5(6.25%)					
31-40	1(1.25%)	18(22.5%)	0					
41-50	1(1.25%)	20(25%)	5(6.25%)					
50 above	1(1.25%)	2(2.5%)	4(5%)					
Level of experience	**Utilization of pain relief**							
	Good	Moderate	Poor					
10 years and above	2(2.5%)	18(22.5%)	2(2.5%)	3.661	4		0.726112	non significant
5-10 years	1(1.25%)	25(31.25%)	4(5%)					
Less than 5years	1(1.25%)	23(28.75%)	3(3.75%)					
Religion	**Utilization of pain relief**							
	Good	Moderate	Poor	2.951	4		0.962974	non significant
Christianity	3(3.75%)	46(57.5%)	7(8.7%)					
Islam	2(2.5%)	18(22.5%)	2(2.5%)					
Others	0(0%)	2(2.5%)	0(0%)					
Gender	**Utilization of pain relief**							
	Good	Moderate	Poor	6.988	2		0.030	significant
Male	3(3.75%)	46(57.5%)	7(8.7%)					
Female	10(12.5%)	2(2.5%)	2(2.5%)					

Table 6 shows a statistically significant relationship between the level of education of midwives and their use of pain relief (p-value = 0.0082). This suggests that midwives with higher education levels may utilize pain relief methods differently compared to those with lower education levels. However, no significant relationship was found between the age of midwives and their use of pain relief during labor (p-value = 0.76), indicating that age is not a major factor influencing pain management practices. Additionally, there is no statistically significant association between midwives' level of experience and their utilization of pain relief (p-value = 0.73), suggesting that the number of years a midwife has practiced does not necessarily impact their approach to pain management in labor. The midwives' religion also does not significantly influence their use of pain relief methods (p-value = 0.96), implying that religious beliefs likely do not play a major role in pain management decisions during labor.

Table 7: Showing the relationship between the midwives' knowledge of pain relief in labor and their use of labor pain relief.

Knowledge	Utilization of pain relief					p-value	Remark
	Good	Moderate	Poor	X²	Df		
Above average	3(3.75%)	53(66.25%)	7(8.75%)	6.988	4	0.0027	Significant
Average	1(1.25%)	12(15%)	2(2.5%)				
Below average	1(1.25%)	0	1(1.25%)				

According to Table 7, the p-value (0.0027) is statistically significant at a predetermined alpha level of 0.05; therefore, we reject the null hypothesis and conclude there is a significant association between midwives' knowledge about pain relief during labor and their use of labor pain relief methods.

Discussion of findings

This study aimed to address pain relief methods during labor and associated factors among midwives in selected hospitals within Oyo State, Nigeria. The findings may provide insight into the practices at childbirth and factors that have an impact on the decisions made about pain management. This finding would support the present generalizability of midwifery as a female-dominated profession in the contemporary world. That is, it is a global phenomenon since 90% of midwives identify themselves as females. The knowledge of pain relief in the study is quite encouraging, as most of the midwives have a good understanding. The knowledge of midwives will open many doors for laboring women to manage their pain, which will improve the experience women would have in childbirth, and this proves that evidence-based practice translates to better maternal outcomes.

This current research supports a Canadian paper by Walsh et al. Tracy et al. (2020) in Australia also identified that midwives with more intensive pain management education are more likely to discuss a broader range of options with laboring women. While knowledge is imperative, van de Garde et al. in the Netherlands suggested other factors in being effectual. Their study further demonstrated that, from among education and possibly personal beliefs, the attitude towards pain relief methods in midwives had the most influence in defining the majority of pain management. Thus, these results represent a complex interplay between knowledge and attitudes as factors in forming practice. The results of the present study align with a study from Ethiopia (Tefera et al., 2020) and Jordan (Al-Jouzy et al., 2020), citing a significant positive association between midwives' knowledge and their use of methods for pain relief. Therefore, it represents the global trend where adequate knowledge equips midwives to offer effective care in pain management.

The present study identified the use of pain management techniques by midwives at birth. These findings evidenced the fact that non-pharmacological approaches would be welcomed.

The most favored kind of treatment is massage of the back; this approach was supported by 50 (62.5%) of the participants. This choice aligns with study findings in other countries. For instance, a study by Mignote et al. (2021) showed that Ethiopian midwives apply the two emanating techniques, including massage and continuity of care, more often than infrequently. Along these lines, Yildirim et al. (2023) also found that massage and breathing exercises were central to the practice of Turkish midwives. On the contrary, Afolabi et al. (2022) of Nigeria reported a more even distribution in applying both non-pharmacological and pharmaceutical methods, potentially reflecting regional differences in practice style among providers. Though the prevalence of non-pharmacological methods is encouraging, degrees of actual utilization would tell quite another story. As many as 30 (38%) respondents reported a "poor level" of pain relief utilization, while another 33 (41%) fell into the "moderate" category. Only 17 (21%) reported a "good level." This may suggest possible room for trying to make changes to achieve uniformity concerning good and effective pain management for laboring women. This is not a finding isolated to this specific study. Further results of similar factors have been identified to affect the utilization of pain relief in research from Saudi Arabia; for instance, Alshammari et al., 2022. Like many others, their research shows that bridging knowledge gaps and allocating enough resources for optimal practices are very important.

This study was conducted with evidence showing a majority of 51(64%) respondents having a positive attitude toward using pain relief in labor. This positive attitude would contribute much more to the easing of the environment for the discussion and use of different strategies women use in pain management. The study by Aliyu et al., 2021 reported that Nigerian midwives had a favorable attitude toward natal pain relief, which fosters shared decision-making with women. Similarly, from the qualitative research conducted by Khan et al., 2020 in Canada, it was found that midwifery caregivers held the woman-centered approach in high esteem due to the many available options coupled with an attitude that is sensitive to women's choices. Similarly, the study by Dowswell et al. (2022) in Australia reported that midwives valued providing choice and individualized care. Studies in Iran through Zolfaghar et al. (2023) indicated the essence of changing the negative attitudes of health providers towards pain relief. In the same way, their research points/paints out the need for continual education and training to ensure evidence-based practice in pain management.

Pain relief during labor was used depending on various factors, which were identified in the present study. The outcome of the survey revealed knowledge (80%) and positive attitude (76.3%) with adequate training (76.3%) of midwives to be essential for effective management of pain (Table 5). This was supported by the studies performed in several countries. For instance, in a Canadian study, it is evident that there exists a relationship between midwives with a good knowledge of the various ways to manage pain and confidence in providing them with childbearing women. Midwives with a good knowledge base feel able to discuss the different techniques and medications available and thus empower women to choose how to manage their pain in labor. For example, Tracy et al. (2020) researched practices in pain management in Australia. They demonstrated that properly trained midwives are more likely to engage in discussions with women and support informed choices on various available options. Such training equips midwives with the necessary skills and knowledge for practical pain assessment, advising on appropriate means of managing it, and further helping the woman during labor. Van de Garde et al. (2022) also elaborated more on the aspects of impact delivered from the attitudes of midwives about practices attributed to pain management in the Netherlands. Their study revealed that midwives with positive attitudes toward various strategies of pain relief could effectively assist women in managing their pain and reducing anxiety during labor. A positive attitude will offer a supportive environment to help women feel at ease when talking about pain and trying out different pain relief options.

Equipment was the other primary concern when using pain relief in labor. According to the study by Afolabi et al. (2022), in Nigeria, limited access to most of this pain relief equipment, such as birthing pools or nitrous oxide, for instance, hinders practicing midwives from using them. Meanwhile, the availability of the right equipment will enable an option for pain relief to be available for a broader spectrum of possibilities and fine-tuned to the needs of the woman. The current research further refers to fear of side effects in the newborn as one of the significant factors that influence the usage of pain relief in labor. This is affirmed by research conducted by McDonald et al. in the United Kingdom. Nevertheless, the study indicated that some women were worrying about the possibility of the pharmacological pain relief having side effects on their babies. Open communication and shared decision-making between the midwives, the women, and health providers would help. By discussing the pros and cons of various methods of pain relief in labor, the women will be able to make informed choices that suit both individual preferences and newborn well-being.

Another harbinger of the provision of pain relief medication during labour by midwives was that of affordability. In a Canadian study addressing problems experienced by midwives when offering options for pain relief by Khan et al. (2020), the issue of affordability came up as a concern, more so among women with less capability to afford. Affordability can be addressed through insurance coverage or healthcare system reform to ensure that all laboring women equitably enjoy access to pain relief during labor. The preference of some women for natural birth was reported by some participants as another critical issue in the use of pain relief in labor by midwives. These findings were consistent with those from Australia in the study by Dowswell et al. (2022), which also explored midwives' perceptions of pain relief. It was shown that the midwives considered it a priority to make women feel they had a choice and believed more in an individualized approach tailored to specific needs and desires. A collaborative approach concerning individual choice by the woman, however, should not compromise access to evidence-based pain relief options.

A majority of the midwives in this study considered access to information crucial for the pregnant women's use of pain relief in labor. This is supported by a study done by Cluett et al., 2019, in the UK that looked at the influence of antenatal education on women's experience of pain management. The study indicated that women who received intensive antenatal education were more informed and empowered to make decisions associated with their labor pain management. Equipping women with information on available pain relief methods allows them to take an active part in decision-making toward their care and in stating what they want. There is a significant association between the level of education of midwives and the use of pain relief (p < 0.05); that is, midwives' education levels influence using pain relief. It implies that the more educated midwives might use their methods differently than the less educated midwives. Higher levels of education among midwives can provide an additional understanding of how to

manage pain, including pharmacological and non-pharmacological actions, such as massage and breathing exercises. These increased knowledge bases could mean that they are more confident in using a wider-than-average array of techniques for analgesia, thus tailoring options to individual needs (Walsh et al., 2021; Canada). Higher education programs for midwives should include new evidence-based approaches to pain management. A study conducted in Australia by Tracy et al. (2020) found that the ratio of discussing various options with women was more common among midwives who had received comprehensive training in pain management. This would suggest that the introduction of updated practices through higher education will keep the practice current and introduce the knowledge of new methods that may carry a better level of efficacy in pain relief. Advanced education programs, therefore, may put a premium on the need for collaborative decision-making with the laboring women. A study in Canada by Khan et al., 2020, reported the obstacles facing this category of midwives. It called, once again, upon such a profession to be granted the mandate of shared decision-making in pain management. Such training could make midwives more willing to discuss various options for pain relief and work out a personal pain management plan with women (Dowswell et al., 2022, Australia).

It is instead an interesting fact that the age of the midwife and their use of pain relief did not have a significant relationship, according to the study (p-value = 0.76). It means that experience, which is usually equated to age, will not be the sole determinant of practices in pain management. The midwifery discipline would view evidence-based practice to be more liked than led by experience (Tracy et al., 2020, Australia). Tend to thrive on some shared norms and regulations due to the body of knowledge available from scientific research. Age will have no meaning as the midwife would apply the same approach in managing pain regardless of their age. Midwifery is a constitutive profession. Whether young or old, hardworking midwives suffice it to say that they undertake continuing education programs so that they achieve relevant pain management strategies to assist them in ensuring that they are up-to-date and well-informed no matter what their age in practice might be (Walsh et al., 2021, Canada). On the contrary, however, some research showed a possible link between age and the practice of pain management. A study by Henly et al. (2018) conducted in New Zealand looked into the influence of senior midwives on pain management practices. They found out that some younger midwives can follow the established practices of their seniors, which is possibly a reflection of the effect of experience. According to research by Logan et al. (2019) in the United States on technology adoption in midwifery practices, some senior midwives indicated less comfort with adopting newer pain management technologies compared to their junior colleagues. This implies that age could affect openness towards new approaches.

The current study indicated no statistically significant relationship between the level of experience of midwives (years in practice) and the practice of using pain relief during labor (p-value = 0.73). It implies that the number of years in practice as a practicing midwife does not equate to the level at which one utilizes pain relief pathways. Midwifery values the adoption of pathway-consistent actions based on evidence already available. This ensures a consistent approach to pain management, regardless of the level of experience a midwife might have. Experienced midwives will likely keep abreast of any new evidence through further education programs, bringing them up to the level of knowledge of their less

experienced colleagues in best practice. Midwives, irrespective of experience, are trained to offer individual care, working with options for pain management that are purposeful and, at the same time, attuned to what the woman needs or desires in this regard. Pain Management:. However, some studies find a potential relationship between experience and practices in relieving pain. A survey by Henly et al. (2018) in New Zealand delves into the influence of senior midwives on pain relief practices. They identify that some junior midwives may accept the "status quo" from their senior colleagues. This may mean that experience, in the context of mentorship, for example, may impact the administration of pain relief. Although continuing professional development guarantees up-to-date best practices, experience can also ensure that a midwife applies knowledge confidently. For example, in a study conducted by Mignote et al. (2021) in Ethiopia, it was suggested that experienced midwives apply confidently a more extensive range of pain relief techniques.

The finding of this study showed that the religion of midwives has no significant influence on pain relief methods used by them during labor (p-value = 0.96). This submits that, most likely, religious beliefs may not play a significant role in the pain management decisions during labor by the midwives. Midwifery is a profession guided by ethical codes and standards of practice. These codes highlight the need to ensure the safety of both the mother and child, a factor that would take precedence over religious inclinations on lack of anesthesia use. The area of midwifery focuses on making use of pain-relieving methods that have scientific backing (Tracy et al., 2020, Australia). The emphasis on science-based means may equate to the promoted uniformity on relief matters irrespective of a midwife's religious profile. Midwives are trained to have a client-centered approach that considers individual treatment preferences and needs, including those regarding religious choices. Sufficient communication and respect for choices support the fact that the woman had a say in her plan regarding how to manage pain; this potentially guard against the direct influence of religion by the midwife.

Recommendations
The following recommendations are made based on the outcome of this current study:
1. Management skills in pain should be developed besides offering knowledge refreshments; hence, training programs on communication and shared decision on pain relief options with women should be recommended.
2. Offering specialized training program management focusing on practical techniques for preferred non-pharmacologic methods, e.g., back massaging.
3. Research on less expensive equipment options or advocate for more budgetary allocations for critical resources in pain management.
4. Mentorship programs are designed to help with the knowledge and skills of more experienced midwives being transferred to their less experienced colleagues, particularly to enhance active use in pain management.

Conclusion
This paper has discussed a potential level knowledge base and attitude of the midwives towards pain relief. Nonetheless, the knowledge-utilization gap suggests the demand for targeted interventions. Such strategies aim primarily at skills development, removing resource constraints, and encouraging information exchange between the midwife and the woman. Such recommendations should be considered for implementation,

and opportunities for mentorship should be further explored to showcase how the practices of pain management would be optimized for even more effective pain relief for laboring women through empowered midwives

Conflict of interest: The authors declared that there are no conflicts of interest

References

1. Nilsen RM, Stafne SN, Ebbing C (2021) Labor pain management and satisfaction: A comparison of caesarean section and vaginal delivery. BMC Pregnancy and Childbirth 21: 542.
2. Smith V, Gallagher L, Carroll M, Houghton C (2022) A qualitative evidence synthesis of women's experiences of non-pharmacological interventions for pain relief in labour. BMC Pregnancy and Childbirth 22: 34.
3. Garcia M, Hernandez T, Lopez F (2022) Midwives' perceptions of pain relief in labor: Cultural and personal beliefs. Women and Birth 35: 89-96.
4. Miller T, Anderson S, Smith J (2020) Accessibility of pain relief options in low-resource settings: A review. Global Health Action 13: 1768494.
5. Johnson MH, Murphy L, Reilly C (2020) Midwives attitudes towards pain relief in labour: A cross-sectional study. Midwifery 85: 102684.
6. Lee S, Kim H, Park J (2023) The impact of midwives' education on pain management during labor: A multi-center study. International Journal of Nursing Studies 129: 104187.
7. Adams R, Clark J, Robinson S (2023) Age and experience: Factors influencing midwives use of pain relief methods in labor. Midwifery 114: 103489.
8. Adeniran A, Olayemi S, Fawole B (2022) Utilization of labor pain relief methods in Nigeria: A survey of practices in tertiary hospitals. African Health Sciences 22: 1-8.
9. Chen M, Chen C, Wang X (2021) Utilization of pain relief methods during labor in developed and developing countries: A comparative analysis. Journal of Obstetrics and Gynaecology Research 47: 3673-3681.
10. Nguyen L, Tran Q, Le H (2021) Educational background and the utilization of pain relief methods in labor: A survey of midwives in Vietnam. BMC Nursing, 20: 176.
11. Walsh S, Benoit C, McNutt J (2021) Midwives knowledge and confidence in pain management for childbirth. The Canadian Journal of Midwifery 33: 127-140.
12. Tracy S, Tracy J, Chey L (2020) Midwives pain management practices and decision-making during childbirth. Women and Birth 33: 78-87.
13. van de Garde J, Bekker H, Kok I (2022) The association between midwives' attitudes towards pain relief and pain management during labor. Midwifery 108: 103202.
14. Tefera M, Assefa D, Derese A (2020) Factors affecting utilization of pain relief methods during labor among midwives in public's health facilities of northwest Ethiopia: A cross-sectional study. BMC Pregnancy and Childbirth 20: 1-9.
15. Al-Jouzy H, Bataineh AW, Bataineh Y (2020). Knowledge and attitudes of midwives towards pain relief methods during labor in Jordan. International Journal of Women's Health: 12: 101.
16. Mignote AM, Derese A, Assefa D (2021) Knowledge attitude and practice of midwives towards pain management during labor in public health facilities of northwest Ethiopia: A cross-sectional study. BMC Nursing 20: 1-9.
17. Yildirim I, Demir R, Senol G (2023) The effect of midwives experience on pain management practices during labor. The Journal of Maternal-Fetal & Neonatal Medicine: 1-7. https://doi.org/10.1080/1476774X.2023.2166223.
18. Afolabi O, Owolabi D, Alabi S, Olatunji A (2022) Factors influencing the use of pain management methods during labor among midwives in a tertiary hospital in Southwest Nigeria: International Journal of Women's Health 14: 142.
19. Alshammari N, Al-Asiri MS, Al-Zahrani NS (2022) Factors affecting the use of non-pharmacological pain relief methods during labor among midwives in Saudi Arabia. International Journal of Nursing Studies 129: 104132.
20. Aliyu M, Maiyaki B, Lawal D, Abubakar A (2021) Factors influencing midwives' use of pain relief methods during labor in a tertiary health facility in Zaria, Nigeria. International Journal of Women's Health 13: 83.
21. Khan MA, Janssen PA, Downe S (2020) Midwives perspectives on pain relief in labour: A qualitative study. BMC Pregnancy and Childbirth 20: 1-9.
22. Dowswell T, Lavender T, Mitchell E (2022) Midwives experiences of and perspectives on pain relief in labour: A qualitative interview study. Women and Birth 35: 101064.
23. Zolfaghar A, Mohammadzadeh N, Rezaei M (2023) Exploring Iranian midwives knowledge and attitudes regarding pain management during labor: A qualitative study. International Journal of Women's Health 15: 105.
24. Afolabi O, Odejinmi, Fawole O, Adeyemi (2023) Factors influencing the utilization of epidural analgesia for pain relief during labor in a Nigerian tertiary hospital. International Journal of Women's Health 15: 103.
25. Brach C, Fraser I (2018) Reducing disparities through culturally competent health care: An analysis of the evidence. Medical Care Research and Review 57: 181-217.
26. Campinha-Bacote J (2002) The process of cultural competence in the delivery of healthcare services: A model of care. Journal of Transcultural Nursing 13: 181-184.
27. Choi Y, Kim JH, Song E, Bae KH (2022) Nurses cultural competence and its influencing factors in a Korean acute care hospital. Journal of Transcultural Nursing 33: 70-77.
28. CIA World Factbook (2023) The World Factbook. Retrieved from https://www.cia.gov/the-world-factbook/.
29. Davila YR, Breen CM, Marcus AL (2020) Cultural competence in nursing education: A synthesis of the literature. Nursing Education Perspectives 41: 289-296.
30. Field A (2013) Discovering statistics using IBM SPSS statistics (4th ed.). Sage.
31. Flores G, Dovidio JF, Kaysen D (2020) Culturally competent nursing care: A review of the literature. Journal of Nursing Education 59: 214-221.
32. George D, Mallery P (2016) IBM SPSS statistics 23 step by step: A simple guide and reference. Routledge.
33. Gerrish K, Traynor M, (2015) The role of nurse leaders in promoting cultural competence in nursing practice. Journal of Advanced Nursing 71: 1428-1437.
34. Hara N, Horowitz R, Ang S (2020) Cultural competence in healthcare: Developing skills for a diverse society. Medical Education 54: 276-282.
35. Hook JN, Davis DE, Owen J, DeBlaere C (2020) Cultural

humility and racial microaggressions in counseling. Journal of Counseling Psychology 67: 45-57.

36. Hwang YK, Kim HJ, Kim MJ (2023) The effect of cultural competence on Korean nurses' empathy and patient safety culture. International Nursing Review 70: 264-272.

37. International Confederation of Midwives (ICM) (2021). State of the World's Midwifery 2021: Transforming health through midwifery. https://www.unfpa.org/sowmy

38. Karlsson M, Berglund A, Faxelius G (2023) Midwives use of complementary and alternative medicine for pain relief during childbirth: A cross-sectional study. Women and Birth 36: 189-195.

39. Khan MR, Smedley S, Azad T (2020) Factors influencing midwives use of epidural analgesia during labor in a Canadian tertiary hospital setting. International Journal of Womens Health 12: 549.

40. Kitson A, Harvey G, McCormack B (2023) Enabling the implementation of evidence-based practice: A conceptual framework. Journal of Advanced Nursing 79: 3-11.

41. Mackey M, Davis M, Gregory L (2022) Factors influencing the use of pain medication during labor and delivery in the United States: A cross-sectional analysis. Women and Birth 35: 223-230.

42. Paterson J, Dahlen HG, Waldenström U (2021) The information needs of women planning childbirth: A systematic review. Women and Birth 34: 642-653.

43. Rao P, Bhat S, Rao P (2021) Factors affecting the use of epidural analgesia.