

Herbal use and cultural influences in midwifery-led care: A scoping review

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ABSTRACT

This study explores the influence of herbal use and culture in midwifery-led care (MLC). The use of herbal medicine in the context of MLC is often influenced by cultural factors, making it crucial to understand the interaction between traditional and modern practices in maternal care. This research employs a scoping review method to examine articles from 2020 to 2024 that discuss the use of herbal medicine in the context of MLC. Data were gathered from various academic databases using keywords related to herbal use, culture, and MLC. Findings indicate that cultural factors significantly influence the preference for herbal medicine among pregnant women, especially in developing countries such as Indonesia, Ethiopia, and Malawi. Additionally, midwives' training on herbal use is crucial to ensure the safety and effectiveness of care. Many midwives show a strong interest in further learning about herbal use, but the lack of clear national guidelines and formal training hinders effective implementation. This study highlights the need for clear national guidelines and collaboration between traditional and modern healthcare providers to enhance the quality of maternal care. Comprehensive training for midwives on herbal use is essential to ensure safe and effective practices in MLC.

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INTRODUCTION

In a global context, the use of herbal and alternative medicine in maternity health care has received increasing attention from researchers and policy makers. Studies have shown that despite the important role of modern medicine in health systems, many women in different parts of the world still choose to use traditional and alternative methods to address health problems during pregnancy and childbirth. This study aims to explore how herbal use and cultural influences influence maternity care practices, with a focus on the interaction between traditional and modern care (Kahssay et al., 2022) (Mollart et al., 2021) (Ntoimo et al., 2022)

A study by Ntoimo et al. (2022) showed that in rural Nigeria, many women preferred

traditional birth attendants over skilled health workers. This choice was influenced by factors including perceived effectiveness of traditional medicine, personal relationships with the birth attendant, and affordability. These findings highlight the need for a more culturally sensitive approach in designing maternity health interventions. (Ntoimo et al., 2022)

In Ethiopia, Kahssay et al. (2022) reported a high prevalence of self-medication among pregnant women with modern and herbal medicines. Factors such as history of self-medication, education level, and lack of health insurance influenced this practice. These findings underscore the importance of educating pregnant women about the risks of self-medication and the need for closer medical supervision (Kahssay et al., 2022). Meanwhile, Mollart et al. (2021) assessed Australian midwives' knowledge of Complementary and Alternative Medicine (CAM) and found a high level of interest among midwives in learning CAM despite the need for clear national guidelines. (Liu et al., 2021) and (Zhang et al., 2024) emphasized the importance of integrating CAM with modern medicine, both in New Zealand and China, to improve the effectiveness of the overall health system. (Liu et al., 2021; Mollart et al., 2021; Zhang et al., 2024). In the UK, (Longden-Naufal et al., 2022) noted that herbal use is often associated with cultural heritage and femininity, although health professionals are often skeptical of its effectiveness. Studies by (Legesse & Babanto, 2023) and (Legesse & Babanto, 2023) suggest that factors such as biomedical side effects and affordability of traditional medicines play a role in herbal medicine preferences in Ethiopia. In Indonesia, (Busro et al., 2024) reported a natural integration of traditional and modern health practices during pregnancy and childbirth. (Busro, 2024; Legesse & Babanto, 2023; Longden-Naufal et al., 2022)

The use of traditional herbs in midwifery care is a strong practice and is rooted in many cultural communities. With increasing attention to culture-based approaches in health care, it is important to explore cultural perspectives related to herbal use. This study aims to understand how midwifery-led care can accommodate herbal use while understanding and respecting cultural beliefs. The findings from these studies provide valuable insights for designing more effective health policies that are sensitive to patients' cultural needs.

RESEARCH METHOD

This study applied the scoping review method, which involves systematic steps to collect, screen, and synthesize literature relevant to the research topic. The first step is to formulate a clear research question and determine inclusion and exclusion criteria to guide the literature search. The literature is then searched thoroughly through academic databases, journals, and other sources. After the literature is collected, selection is made based on the inclusion and exclusion criteria that have been set (Pollock et al., 2024). Data from the selected articles were extracted and analyzed using an interpretive approach, including identifying key themes, patterns, and relationships between concepts that emerge from the literature. This method allows for a thorough analysis and answers specific questions by collecting and summarizing various related research sources (Peters et al., 2020). In defining the research question, the author uses the mnemonic Population, Exposure, and Outcome (PEO), as shown in Table 1.

Table 1. PEO mnemonic selection

Population	Exposure	Outcome
Woman	Herbal use and cultural influences.	Quality and effectiveness of midwife-led maternity care (MLC).

Source: Author Discussion, 2024

The author limited the scope by setting inclusion and exclusion criteria for the literature to be analyzed (Table 2). The purpose of these criteria was to ensure that the included studies remained relevant and focused on the research topic. Keywords used included herbal use, culture,

Midwifery-Led Care (MLC), midwife training, maternity care.

Table 2. Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
Research articles 2020-2024	books, blogs
Articles in Indonesian and English	
Articles have full text	Paid full text access

The author screened the literature obtained from various article search engines with predetermined keywords. The total number of articles obtained was 7,438, with details from each search engine as follows: 972 articles from PubMed, 1,303 articles from Science Direct, 4,550 articles from Google Scholar, and 613 articles from crossreff. The author followed the PRISMA guidelines in compiling this scoping review. In addition, the author also attached a PRISMA diagram showing the number of literatures found, through the screening process, that met the criteria, and that were finally included in the overall review (Figure 1).

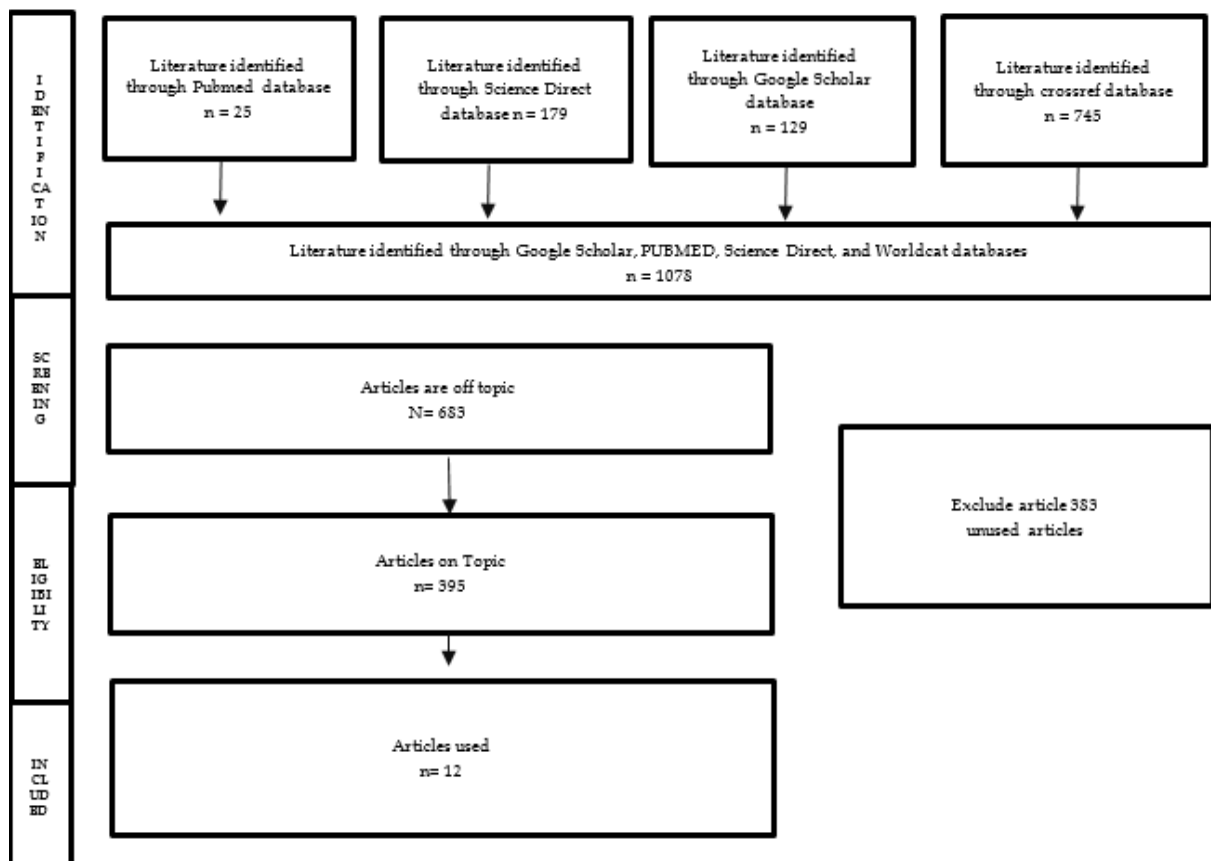


Figure 1. Prism

RESULTS AND DISCUSSIONS

Result

The data synthesis process in this study involved collecting and summarizing articles that met the inclusion criteria into a table. This table includes information such as title, findings, methodology, and results of the 12 synthesized articles.

Table 3. Review article data synthesis

No	Title	Author	Sample	Methods	Country	Summary
1	Why women utilize traditional rather than skilled birth attendants for maternity care in rural Nigeria: Implications for policies and programs	Lorretta Favour Chizomam Ntoimo, Friday Ehbodaghe Okonofua, Chioma Ekwo, Tosin Ojulape Solanke, Brian Igboin, Wilson Imongan, Sanni Yaya	This study involved 183 participants (77 women and 106 men) who participated in 20 focus group discussions and 15 key informant interviews.	Qualitative	Nigeria	The study findings in the paper show that women in rural Nigeria tend to prefer using traditional birth attendants (TBAs) over skilled health workers (SBAs) for their prenatal and delivery care. The study revealed several key reasons behind this preference, including the perception that traditional medicine is more effective, stronger personal relationships and trust in TBAs, and higher availability and accessibility of TBAs compared to SBAs. In addition, more affordable service costs and cultural beliefs and practices also contributed to women's decision to choose TBAs. These findings highlight the need for a more holistic and culturally sensitive approach to designing maternity health interventions in rural Nigeria, as well as the importance of increasing collaboration between TBAs and SBAs to improve maternal and neonatal health outcomes. (Ntoimo et al., 2022)
2	Self-medication practice with modern and herbal medicines and associated factors among pregnant women attending antenatal care at Mizan-Tepi University Teaching Hospital, Southwest Ethiopia	Semere Welday Kahssay *, Getnet Tadege, Fewaz Muhammed	The research sample consisted of 264 pregnant women selected through a lottery method and interviewed using a structured questionnaire.	Quantitative (A cross-sectional study)	Ethiopia	This study examined the practice of self-medication with modern and herbal medicines among pregnant women attending antenatal care at Mizan-Tepi University Teaching Hospital, Southwestern Ethiopia. The results showed that 44.3% of pregnant women self-medicated with modern medicines, while 49.2% used herbal medicines. Factors influencing these practices included previous history of self-medication, lack of health insurance, education level, and number of pregnancies. Education and guidance for pregnant women during antenatal care is recommended to reduce the potential harms of self-medication. (Kahssay et al., 2022)
3	Midwives knowledge and education/training in complementary and alternative medicine (CAM): A national survey	Lyndall Mollart ^{a,b,*} , Virginia Stulz ^c , Maralyn Foureur	571 midwives	Descriptive study	Australia	This study examined midwives' education and training in Complementary and Alternative Medicine (CAM) in Australia, and is the first national study to focus on Australian midwives. Findings showed that many midwives had completed formal CAM training, such as a certificate or diploma, and workshops. There was a significant association between CAM training and midwives' confidence in discussing CAM with pregnant women. The study also highlights the need for national guidance on CAM, as existing state policies have been phased out. While this study does demonstrate midwives' interest in learning about CAM, it has limitations such as low response rates and potential bias. (Mollart et al., 2021)
4	Complementary and	Lizhou Liu ^{1,2*} , Yong	eleven studies	integrative	New Zeala	The results of this study show that across eleven studies involving 2060 health

No	Title	Author	Sample	Methods	Country	Summary
	alternative medicine - practice, attitudes, and knowledge among healthcare professionals in New Zealand: an integrative review	Tang ^{3,4,5} , G. David Baxter ^{1,2} , Haiyan Yin ^{3,4,5} and Steve Tumilty ^{1,2}	involving a total of 2060 health professionals	review	nd	professionals in New Zealand, the majority had positive attitudes towards Complementary and Alternative Medicine (CAM), although they had concerns about the scientific evidence, regulation, safety and costs of CAM. Approximately 25% of general practitioners practiced CAM, and 82.3% referred patients to CAM practitioners. Physiotherapists and midwives also used or recommended CAM in the care of pregnant women. This study highlights the need for better CAM education and stricter regulation in New Zealand, and supports the integration of CAM into the medical curriculum. This review provides a basis for the development of more effective CAM policies in the future. (Liu et al., 2021)
5	Narratives of Herbal Medicine Utilisation in the United Kingdom: Scoping Literature Review	Celine Longden-Naufal ¹ , Vivien Rolfe ² and Marion Mackonochie ²	relevant literature regarding HM use in the UK, including the views of ethnic groups and women and health professionals' perceptions of HM.	Scoping Review	Inggris.	This study found that ethnic groups in the UK were the main users of herbal medicines (HM), with cultural heritage and ritualistic reasons being important reasons for HM use. For women, HM use was often associated with concepts of femininity and self-healing. A recurring theme was the negative assessment of HM use by health professionals, despite many supporting the use of HM when standard treatments have failed and there is anecdotal evidence of the effectiveness of herbs. (Longden-Naufal et al., 2022)
6	Factors Associated With the Use of Traditional Medicine in Wolaita Zone, Southern Ethiopia	Fitsum Meseret Legesse ¹ and Akalework Mengesha Babanto	45 in-depth interviews with traditional practitioners, patients and caregivers in the Wolaita Zone	qualitative with thematic analysis	Ethiopia	This study found that the use of traditional medicine in Wolaita Zone, Ethiopia, was influenced by five main factors: the inability of biomedicine to cure some diseases, the perceived ineffectiveness of biomedicine, testimonials about the effectiveness of traditional medicine, the affordability of traditional medicine, and the shame of disclosing medical conditions to biomedical practitioners. Traditional medicine is widely accepted and is expected to continue to be used even as modern health services develop. This study emphasizes the importance of understanding the role and use of traditional medicine as a medical alternative and optimizing its contribution to local health systems. (Legesse & Babanto, 2023)
7	The habit of consuming herbal medicine reviewed from the level of knowledge and culture in pregnant women in Tunge Village, Wates Sub-District	Anggrawati Wulandari ¹ , Ririn Sulistyowati ² , Retno Palupi Yonni Siwi ³	38 respondents were selected using total sampling technique	cross-sectional	Indonesia	This study shows that there is a relationship between the level of knowledge and culture with the habit of consuming herbal medicine among pregnant women. Most respondents with a good level of knowledge (48%) did not consume herbal medicine during pregnancy. In cultural factors, the majority of respondents with moderate culture (34.5%) also did not consume herbal medicine. The results of the Spearman's Rho test showed a probability value of 0.007, which indicated a significant relationship

No	Title	Author	Sample	Methods	Country	Summary
8	MIDWIVES AND HERBAL REMEDIES: THE SUSTAINABLE ETHNOSCIENCE	Kartini Aboo Talib @ Khalid1* and Nurshuhada Mohamed2	midwives on the west coast of Malaysia, who were interviewed and intensively observed to gain insights into the use of ethnoscience knowledge in women's health practices.	ethnography	MALAYSIA	between the level of knowledge and culture with the habit of consuming herbal medicine. Good knowledge tends to influence good behavior, while weak culture tends to make mothers not consume herbal medicine (Wulandari et al., 2024). This study found that traditional practices of prenatal and postnatal care, including the use of herbal medicine for diet, bathing, and massage, are still maintained in modern society. This study identified similar patterns of responses from midwives in the west coast of Malaysia, indicating that ethnoscience knowledge about women's health, especially the benefits of herbal medicine, is still relevant and integrated with modern medicine. These methods, which were originally part of cultural heritage, are now also appearing in commercial forms that support women's recovery after childbirth (Khalid & Mohamed, 2020).
9	Integration of traditional, complementary, and alternative medicine with modern biomedicine: the scientization, evidence, and challenges for integration of traditional Chinese medicine	Zihao Zhang1, Raorao Li2, Yu Chen3, Hui Yang4, Martin Fitzgerald5, Qiaochu Wang1, Ziwen Xu1, Nanxi Huang1, Dajun Lu1, Lu Luo1,2,*	existing studies on the topic.	Literature review	China	This study provides a comprehensive review of how traditional medicine can be integrated into modern healthcare systems through a process called "scientization." The primary focus is on advances in understanding the efficacy, effectiveness, and underlying mechanisms of herbal medicine. It also examines the shift from experience-based to evidence-based medicine in acupuncture, the development of universal safety and quality control standards, and the international trade market for Chinese medical products. The integration of traditional medicine with modern biomedicine is expected to improve human health holistically, providing more comprehensive health solutions for the global population. (Zhang et al., 2024)
10	Magnitude and Determinant Factors of Herbal Medicine Utilization Among Mothers Attending Their Antenatal Care at Public Health Institutions in Debre Berhan Town, Ethiopia		422 pregnant women were selected using a systematic random sampling method.	cross-sectional	Ethiopia	This study found that 65.6% of the 422 pregnant women examined used herbal medicines during their pregnancy. Factors influencing the use of herbal medicines included education level up to primary school, monthly family income of less than 2,800 ETB, and lack of awareness regarding the complications of using herbal medicines. Most pregnant women did not disclose their use of herbal medicines to their health care providers. This study recommends the integration of traditional medicine with conventional medicine and encourages open discussions between midwives, obstetricians, and pregnant women regarding the benefits and complications of using herbal medicines during antenatal counseling sessions. (Wake & Fitie, 2022)
11	Harmonizing Traditional	Busro		qualitative	Indonesia	This study explores the integration of Traditional Knowledge and Practices during

No	Title	Author	Sample	Methods	Country	Summary
	and Modern Maternal Healthcare Practices in Cirebon, Indonesia					pregnancy and childbirth with Modern Health Knowledge and Practices in Cirebon, Indonesia. The results showed that this integration occurs naturally in Cirebon. Respondents combined traditional and modern health practices to meet their health needs during pregnancy and childbirth, considering cultural factors, religion, family support, accessibility of health care, and past experiences. This study confirms that the integration of Traditional Knowledge and Practices during pregnancy and childbirth with Modern Health Knowledge and Practices is very important in maternal health care practices in Cirebon, Indonesia. (Busro, 2024)
12	Herbal medicine use during pregnancy and childbirth: perceptions of women living in Lilongwe rural, Malawi - a qualitative study	Dziwenji Makombe, Enalla Thombozi, Winnie Chilemba, Alexander Mboma, Joseph Banda, and Elias Mwakilama	28 women of reproductive age from four villages (Kagona, Champsinja, Mthupi, and Manja) in the Malili Traditional Authority, Lilongwe rural district, Malawi	Qualitative	Malawi	This study found that women continued to use herbal medicines despite media-mediated prevention messages. Factors influencing TM use included cultural beliefs, limited access to modern health services, and the perception that herbs are more "natural" and safer than modern medicine (Makombe et al., 2023).

The search results that match the research keywords yield 12 articles. These articles come from various countries, including Nigeria, Ethiopia, Indonesia, Malaysia, and Malawi, which are generally categorized as developing countries. In addition, the articles also cover developed countries such as Australia, New Zealand, and the United Kingdom, as well as China, which is a country with a large and rapidly growing economy. The following is a list of countries where the research in these articles was conducted.

Table 4. Distribution of countries in articles

Country	Freq	Country	Freq.
Nigeria	1	Inggris	1
Ethiopia	2	Indonesia	1
Australia	1	Malaysia	1
New Zealand	1	China	1
Malawi	1		

This article reviews the use of herbs and cultural influences in midwifery-led care. Analysis of studies shows that there is a strong trend in developing and developed countries to integrate practices in the use of herbs. Analysis of studies highlights women's preference for cultural practices in the use of herbs due to their effectiveness, accessibility, and affordability. The study also highlights the need for better education on the use of herbal medicines and increased collaboration between traditional and modern health care providers to improve maternal and child health outcomes.

Table 5. Article synthesis results

No	Thema	Subject
1	Cultural Influence on Herbal Use	a. Cultural preference for traditional midwives (1,5) b. Influence of cultural heritage on herbal use (5,6)
2	Challenges of Herbal Use	a. High self-medication practices with herbal use (2,10) b. Limited Scientific Evidence and Regulation in Herbal Use (9,12)
3	Integration of Herbal Use in Midwifery-Led Care	a. The role of midwives in integrating the use of herbs. (7,8,11) b. Herbal Training for Midwives (3,4)

Discussion

Cultural Influence on Herbal Use

a. Cultural preference for traditional birth attendants, research conducted in Kenya shows that traditional medicine practices, including the use of herbs, are heavily influenced by the culture and beliefs of the local community. Traditional birth attendants and traditional health practitioners play an important role in providing health care, especially in areas with limited access to modern health facilities. The Kenyan government has taken steps to integrate traditional medicine into the national health system, through regulations and policies that support this practice (Chebii et al., 2020). On the other hand, in rural communities in Indonesia, the use of herbal medicine is also very common and is often chosen over modern medicine. Factors such as family traditions, the availability and accessibility of herbal medicines, and beliefs about the effectiveness and safety of herbs are the main reasons for this preference. Research in West Java shows that demographic factors such as age, education level, and occupation also influence the use of herbal medicines in health care (Sayuti & Atikah, 2023).

b. Influence of cultural heritage on the use of herbs, cultural heritage has a significant influence on the use of herbal medicines, especially in the context of maternal health in various communities. The use of herbal medicine is often based on traditions passed down from generation to generation, where knowledge of medicinal plants and their use for various health conditions is maintained and passed on (Adane et al., 2020). A study in Ethiopia showed that semi-pastoral communities in the Suro Barguda district rely heavily on traditional medicinal plants to treat a variety of ailments, including maternal health problems. The use of these medicinal plants is based on knowledge passed down from generation to generation and is believed to have effective medicinal properties (Eshete & Molla, 2021).

A systematic review of factors influencing the use of complementary and alternative medicine (CAM) worldwide also found that one of the main reasons for CAM use is tradition and cultural heritage. Many people choose CAM, including herbs, because of the social and cultural influences in their environment, as well as the belief that these methods are more natural and safer than modern medicine. (Eshete & Molla, 2021). In addition, a study in Australia in an African migrant community showed that migrant women continued to use TM for maternal health after migration. The use of TM is influenced by factors such as cultural beliefs, previous experiences, and limited access to health care that they believe in in the new country (Shewamene et al., 2020).

Challenges of Herbal Use

a. High practice of self-medication with herbal use

The main challenge in the use of herbal is the high practice of self-medication without consulting a health professional. This is driven by the belief that herbal medicine is more natural and safe, ease of access, and the influence of culture and family traditions. In various countries, including developing and developed countries, the practice of self-medication with herbs is quite high. A study among health students showed that the medical knowledge they had actually encouraged them to self-medicate, on the grounds of saving time and the cost of medical consultations (Akande-Sholabi et al., 2021). A study in Iran found that more than half of pregnant women used herbal medicine during pregnancy. The main reasons for this use were the influence

of social norms and the belief that herbs can overcome health problems during pregnancy, despite the risks associated with the lack of medical supervision (Karimian et al., 2021).

In Zimbabwe, a study showed that women who used TM during pregnancy tended to experience fewer maternal complications compared to those who did not use TM. However, this is in contrast to several other studies that suggest that TM use may increase the risk of complications due to lack of regulated dosages and knowledge of drug interactions (Mudonhi & Nunu, 2021).

b. Limited Scientific Evidence and Regulation in Herbal Use

The use of herbal medicine faces significant challenges due to limited scientific evidence and inadequate regulation. One major issue is the lack of strong scientific validation regarding the safety and effectiveness of herbal medicines. Many medicinal plants used in traditional practice have not undergone rigorous clinical trials, so information regarding safe dosages and potential side effects is often unavailable. For example, several studies have shown that although herbal use has potential benefits, the risks associated with contamination, drug interactions, and serious side effects are still poorly understood and reported (Ahmed et al., 2023).

In addition, regulations governing herbal medicines vary across countries, leading to inconsistencies in safety and quality standards. In some countries, lack of financial support and human resources hinders the ability to conduct adequate research and implement effective regulations. For example, in Ghana, researchers struggle to secure funding for clinical trials, making it difficult for herbal products to be registered for marketing (Ng et al., 2022). Research also shows that despite financial incentives and research initiatives in some countries such as Brazil and India, there are still gaps in regulatory harmonization that make international oversight and standards difficult. These limitations point to the need for a more structured and collaborative approach to increasing scientific evidence and strengthening the regulation of herbal medicine use, so as to ensure their safe and effective use in health practice (Veziari et al., 2021).

3. Integration of Herbal Use in Midwifery-Led Care

a. The role of midwives in integrating herbal use

The role of midwives in integrating herbal use in midwifery care is critical to ensure the safety and effectiveness of their use during pregnancy and labour. Midwives serve as a link between traditional and modern health practices, helping to educate pregnant women about the safe use of herbal medicines and supervising their use to prevent adverse side effects. In Malawi, midwives play a key role in providing education and ensuring that herbal use does not compromise maternal and infant health. (Makombe et al., 2023)

Research suggests that midwives should have in-depth knowledge of the range of herbs that can be used to support maternal and infant health (Dubreucq et al., 2024). Furthermore, midwives can assist in developing policies and clinical protocols that integrate herbal medicine into midwifery practice. This requires collaboration with other health professionals and regulators to ensure that the herbs used meet stringent safety and effectiveness standards (Mattison et al., 2020).

b. Herbal Training for Midwives

Herbal training for midwives is essential to ensure they have the knowledge and skills necessary to use herbs safely and effectively in midwifery practice. Training programs should include identification of safe medicinal plants, appropriate dosages, potential interactions with other drugs, and contraindications to herbal use. This will enable midwives to provide evidence-based advice to pregnant and lactating mothers. (Dubreucq et al., 2024).

A study in Jordan showed that the use of herbal medicine is very common among the adult population, with approximately 80% of respondents using herbs to treat illness or maintain health. This highlights the importance of appropriate education and training for midwives to be able to provide accurate and evidence-based information to their patients (El-Dahiyat et al., 2020).

Limitations

This study was limited to English and Indonesian articles with full-text access, which limited the data sources. The results of the study depend on the quality of the included studies, which may have bias. Variability in the definition and implementation of midwifery-led care (MLC) across contexts may affect the generalizability of the findings.

Novelty

This study offers novelty by exploring the interaction between herbal use and culture in MLC, focusing on the influence of culture and herbal use in maternity health in developing countries, and highlighting the importance of specialized training for midwives in MLC to improve the quality of care.

CONCLUSION

The use of herbal medicine in MLC is highly influenced by cultural factors and local preferences. Midwives play an important role in integrating herbal use with conventional medical practices, but special training is needed to ensure safe and effective use. Successful integration of traditional and modern medicine can improve the quality of maternal and child health care.

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