Original Research Article

***Herbal Remedy Use During Pregnancy: A Phenomenological Study in Sagnarigu Municipality, Ghana***

**Abstract**

*Introduction:* The use of herbal remedies during pregnancy remains a prevalent practice in many African communities, particularly in northern Ghana, where cultural traditions strongly influence healthcare decisions. Despite its widespread use, limited qualitative research exists on women's lived experiences with herbal medicine during pregnancy.

*Aim:* This study explored the motivations, perceptions, and decision-making processes of pregnant women using herbal remedies in Sagnarigu Municipality, Ghana.

*Methods:* A qualitative phenomenological design was employed, with data collected through in-depth interviews with nine pregnant women selected via purposive and snowball sampling. Thematic analysis was conducted following Braun and Clarke's framework to identify key patterns and themes.

*Results:* Participants (aged 20-38) represented diverse educational and occupational backgrounds. The study participants comprised pregnant women aged 20-38 years with diverse educational backgrounds and occupations, including farmers, traders, seamstresses, and healthcare workers. Most participants were Muslim. Commonly used herbal remedies included neem leaf decoctions, bitter leaf extracts, guava leaf tea, and traditional herbal mixtures prepared by healers. Four key themes emerged from the analysis: First, participants strongly emphasized herbal use's cultural and spiritual significance, describing it as both a health practice and cultural obligation typically initiated by female elders. Second, women consistently reported perceived benefits, particularly for enhancing energy and preventing pregnancy complications. Third, knowledge about herbal remedies was primarily acquired through intergenerational transmission from mothers and grandmothers, though some women also consulted traditional healers. Fourth, while some participants experienced mild adverse effects like dizziness, most continued using herbs alongside antenatal care without disclosing this to healthcare providers.

*Conclusion:* Herbal remedy use in pregnancy is deeply embedded in cultural identity and community practices in Sagnarigu. The findings highlight the need for healthcare systems to develop culturally sensitive approaches that acknowledge traditional practices while promoting safe, integrated maternal care.

Keywords: *herbal medicine, pregnancy, maternal health, traditional medicine, cultural practices*

**Introduction**

The use of herbal remedies during pregnancy is a widespread global phenomenon, deeply embedded in cultural traditions and often perceived as a natural, accessible, and culturally congruent form of healthcare (1,2). Approximately 80% of the world's population relies on traditional medicine, including herbal remedies, for primary healthcare needs, with higher prevalence in low- and middle-income countries where access to conventional healthcare is limited (1–3). In many cultures, herbal medicine is not merely an alternative but an integral part of maternal healthcare, passed down through generations and often perceived as safer than pharmaceutical interventions (Adams et al., 2022). However, concerns persist regarding potential herb-drug interactions, lack of standardization, and possible adverse effects during pregnancy, which remain under-researched in many regions (4).

In sub-Saharan Africa, herbal medicine use during pregnancy is exceptionally high, with studies reporting rates between 60% and 80% (5,6). This practice is driven by cultural beliefs, affordability, accessibility, and the perceived inefficacy of biomedical treatments for pregnancy-related conditions (7,8). For example, in Ethiopia, over 70% of pregnant women use herbal remedies to manage nausea, prevent miscarriage, or enhance fetal strength, often without disclosing this to healthcare providers (9,10). Despite its popularity, safety concerns persist, as some herbal remedies have been linked to adverse pregnancy outcomes including preterm labor and fetal malformations (11,12). These challenges highlight the need for greater integration of traditional and biomedical healthcare systems (2).

In Ghana, herbal medicine is constitutionally recognized as part of the national healthcare system, with over 70% of pregnant women incorporating traditional remedies into their prenatal care (5,13). Cultural and spiritual beliefs play a pivotal role, as many Ghanaian women view herbs as divinely ordained protections against pregnancy complications (14). Elders and traditional healers serve as primary knowledge custodians, reinforcing herbal practices through intergenerational transmission (15). However, this reliance on traditional knowledge sometimes conflicts with biomedical advice, leading some women to conceal herbal use from healthcare providers (16).

The Sagnarigu Municipality in northern Ghana presents a unique setting for exploring herbal medicine use during pregnancy. As a peri-urban district with a predominantly Dagomba population, the area retains strong cultural traditions where herbal remedies are deeply intertwined with spiritual and communal health practices (14). Despite the availability of antenatal clinics, many women continue to rely on home-based herbal treatments influenced by family elders and traditional healers (5). Limited qualitative research has explored the lived experiences of pregnant women in Sagnarigu regarding herbal use, with most studies focusing on quantitative prevalence rates rather than sociocultural motivations (17).

This study addresses this gap by employing a phenomenological approach to explore the lived experiences of pregnant women in Sagnarigu who use herbal remedies. Specifically, it seeks to: (1) examine the cultural, spiritual, and social factors influencing herbal remedy use; (2) assess perceived benefits and risks; and (3) explore women's decision-making processes in balancing traditional and biomedical healthcare. By centering women's voices, this research contributes to a nuanced understanding of maternal health behaviors in northern Ghana and informs policy recommendations for safer, integrative healthcare approaches.

**Methods**

Study Design

This study employed a qualitative phenomenological design to explore the lived experiences of pregnant women who used herbal remedies during pregnancy. The phenomenological approach was chosen to gain deep insights into the personal, cultural, and social meanings that women attach to their use of herbs, focusing on their perceptions, motivations, and decision-making processes.

Study setting

The Sagnarigu Municipality, located in Ghana’s Northern Region, is a peri-urban district with a population of over 150,000, predominantly Dagomba people. Established in 2018, it borders Tamale and serves as an important agricultural and trading hub. The local economy relies on subsistence farming (yam, maize, livestock) and small-scale commerce, supported by its proximity to Tamale. Infrastructure includes basic schools, health centers, and road networks, though rural areas face water access and sanitation challenges. Culturally, the municipality is rich in Dagomba traditions, with festivals like Damba and Bugum playing a central role in community life.

Despite its growth, Sagnarigu faces key challenges, including youth unemployment, land disputes due to urbanization, and inadequate social services. Governance is structured under the Sagnarigu Municipal Assembly, with traditional chiefs also playing a vital role in local affairs. The municipality’s mix of rural and urban characteristics makes it ideal research setting for studies on development, livelihoods, and local governance in northern Ghana. Its dynamic socio-economic environment provides valuable insights into peri-urban transformation and community resilience.

Study Population

The study population consisted of pregnant women residing in the Sagnarigu Municipality who had used at least one herbal remedy during their current or any previous pregnancy.

Inclusion and Exclusion Criteria

Participants were eligible for inclusion if they were pregnant women residing in the Sagnarigu Municipality who had used herbal remedies during their current or any previous pregnancy. Women were included regardless of their age, educational background, religious affiliation, or number of pregnancies, provided they were able to communicate effectively in either English or Dagbani and gave informed consent to participate in the study. Women were excluded if they had never used herbal remedies during pregnancy or if they were experiencing serious medical or psychological conditions at the time of data collection that could interfere with their ability to participate in an in-depth interview. Additionally, women who declined to be recorded or were unwilling to share personal experiences were not included in the study.

Sample Size and Saturation

A total of nine (9) pregnant women participated in this study. The sample size was determined based on the principles of data saturation, a key concept in qualitative research that refers to the point at which no new information or themes emerge from additional interviews. After the seventh interview, the research team observed that responses were becoming repetitive and that no new codes or insights were being generated. Two additional interviews were conducted to confirm this trend, bringing the total to nine participants. At that point, thematic saturation was considered achieved, as the core themes had been thoroughly explored and adequately represented across participants with varying backgrounds.

Sampling Techniques

This study employed a combination of purposive and snowball sampling techniques to recruit participants. Purposive sampling was used to deliberately select pregnant women who had experience using herbal remedies during pregnancy, as they could provide rich and relevant insights aligned with the study objectives. Participants were selected based on their willingness to share their experiences and their ability to communicate in English or Dagbani. To broaden the sample and reach additional eligible participants, snowball sampling was also utilized, where initial participants referred other pregnant women within their networks who met the inclusion criteria. This combined approach facilitated access to a diverse group of participants with varying socio-demographic backgrounds and helped ensure data saturation.

Data Collection Tools and Techniques

Data were collected using a semi-structured interview guide designed to explore participants’ experiences with herbal remedy use during pregnancy. The guide included open-ended questions and probing prompts covering areas such as types of herbal remedies used, reasons for use, perceived benefits, sources of knowledge, side effects, and how herbal use was balanced with formal antenatal care. The tool was developed based on literature review and expert input, and was pretested with two women outside the study sample to ensure clarity and cultural relevance.

Participants were initially contacted through community health volunteers, antenatal clinics, and local women’s groups. After identifying eligible participants through purposive sampling, researchers obtained referrals using snowballing where participants helped identify others who met the criteria. Once potential participants expressed interest, the research team provided full information about the study’s purpose, voluntary nature, and confidentiality measures, both verbally and in writing.

Interviews were conducted face-to-face, either in the participants’ homes or at a neutral, quiet location preferred by the participant, ensuring privacy and comfort. Each interview lasted between 30 to 60 minutes and was conducted in either English or Dagbani, depending on the participant’s language preference. Interviews were audio-recorded with prior consent and later transcribed verbatim for analysis.

Before each interview, informed consent was obtained in writing or orally (for those with limited literacy), including permission to record the conversation. Participants were assured that they could withdraw at any point without any consequences. The study adhered to strict ethical standards, including protecting participant confidentiality through the use of pseudonyms and removing identifiable information from transcripts.

Data Analysis

The data collected from interviews were analyzed using thematic analysis, following the six-step framework outlined by Braun and Clarke. First, all audio recordings were transcribed verbatim and reviewed alongside field notes for accuracy and completeness. The researchers began with familiarization, reading through each transcript multiple times to immerse themselves in the data. Next, initial codes were generated manually and later refined using NVivo software to support the systematic organization of data. These codes were grouped into categories, and similar categories were then merged to form overarching themes and sub-themes that reflected recurring patterns and meanings across the data. The analysis was iterative, with themes continuously reviewed, refined, and defined in relation to the study objectives. Reflexive discussions were held within the research team to ensure consistency, credibility, and depth in interpreting the data. To further enhance trustworthiness, direct quotes from participants were used to illustrate themes, providing authentic representation of their lived experiences.

Methodological Rigour

To ensure methodological rigour and trustworthiness, this study adhered to the four key principles of qualitative research: credibility, transferability, dependability, and confirmability. Credibility was achieved through prolonged engagement with participants and the use of member checking, where selected participants were contacted after interviews to verify the accuracy of their responses and the interpretations drawn from them. This helped to ensure that the participants’ voices were authentically represented. Transferability was supported by providing thick, detailed descriptions of the research context, participant demographics, and data collection process. This allows readers to determine whether the findings may be applicable to other similar settings or populations. Dependability was ensured by maintaining an audit trail throughout the research process. This included documentation of all methodological decisions, coding schemes, and changes made during the analysis. The research team also engaged in regular debriefing and reflection sessions to maintain consistency in data interpretation. Confirmability was addressed by demonstrating neutrality and reflexivity. The researchers acknowledged their own potential biases and preconceptions and minimized their influence through reflexive journaling and peer debriefing. Additionally, all data, including field notes, transcripts, and coding files, were stored securely to allow for external review if needed.

Ethical consideration

Permission was also sought from relevant local health authorities and community leaders within the Sagnarigu Municipality to facilitate community access and participant recruitment. All participants were provided with detailed information about the purpose, procedures, risks, and benefits of the study in a language they understood. Written or verbal informed consent was obtained from each participant before the interview began. Participants were assured of the voluntary nature of their participation, their right to withdraw at any time without any consequences, and the confidentiality of their responses. To protect privacy, pseudonyms were used, and all identifying information was removed from transcripts and reports. Audio recordings and transcripts were securely stored and accessed only by the research team.

**Results**

**Socio-demographic characteristics**

The table 1 presents data on nine participants, highlighting their age, obstetric history (gravida and parity), education level, occupation, religion, and the type of herbal remedy used during pregnancy. The ages of respondents range from 20 to 38 years. Gravidity ranges from G1 to G6, and parity from P0 to P5. Educational attainment varies, with some having no formal education while others have reached tertiary level. Occupations include seamstress, trader, teacher, housewife, farmer, nurse, student, and food vendor. The majority are Muslims, with a few Christians and one Traditionalist. Various herbal remedies were reported, including neem leaves decoction, bitter leaf extract, guava leaf tea, and herbal mixtures from traditional healers.

|  |
| --- |
| Table 1: Socio-demographic characteristics of the respondents |
| Participant | Age | Gravida | Parity | Education Level | Occupation | Religion | Herbal Remedy Used |
| P1 | 24 | G2 | P1 | Secondary | Seamstress | Muslim | Neem leaves decoction |
| P2 | 31 | G4 | P3 | Primary | Trader | Muslim | Bitter leaf extract |
| P3 | 27 | G3 | P2 | Tertiary | Teacher | Christian | Herbal mixture from a traditional healer |
| P4 | 20 | G1 | P0 | No formal education | Housewife | Muslim | Guava leaf tea |
| P5 | 36 | G5 | P4 | Secondary | Farmer | Traditionalist | Powdered roots in water |
| P6 | 29 | G2 | P1 | Tertiary | Nurse | Christian | Herbal tonic |
| P7 | 33 | G3 | P2 | Primary | Trader | Muslim | Boiled bark extract |
| P8 | 23 | G1 | P0 | Secondary | Student | Christian | Herbal tea from the family |
| P9 | 38 | G6 | P5 | No formal education | Food vendor | Muslim | Ground leaves with shea butter |

**Main and sub-themes**

Table 2 presents the main themes, sub-themes, and their operational definitions related to the use of herbal remedies during pregnancy. The themes highlight cultural influences, perceived benefits, sources of knowledge, and safety concerns. Cultural and religious beliefs, along with the influence of elders and community norms, play a significant role in encouraging herbal use. Women often believe that herbs provide strength, energy, and protection against pregnancy complications. Knowledge about herbal remedies is largely passed down through generations or obtained from traditional practitioners. Despite these beliefs, concerns about side effects and the need to balance medical advice with traditional practices influence women's personal decisions regarding herbal use.

|  |
| --- |
| Table 2: Themes, Sub-Themes, and Operational Definitions |
| Theme | Sub-theme | Operational Definition |
| 1. Cultural Influences on Herbal Use | 1.1 Traditional and Religious Beliefs | The role of cultural and religious teachings that support or promote herbal use in pregnancy |
| 1.2 Influence of Elders and Community Norms | Influence from family members, especially elders, on the use of traditional remedies |
| 2. Perceived Benefits of Herbal Remedies | 2.1 Strength and Energy | Beliefs that herbs improve stamina and resilience during pregnancy |
| 2.2 Prevention of Pregnancy Complications | Beliefs that herbal use prevents miscarriage or illness in the fetus or mother |
| 3. Sources of Herbal Knowledge | 3.1 Intergenerational Knowledge | Learning about herbs from family, especially older women |
| 3.2 Traditional Practitioners | Seeking herbal care or advice from traditional healers or birth attendants |
| 4. Safety Concerns and Personal Decisions | 4.1 Side Effects and Reactions | Negative outcomes experienced during or after herbal use |
| 4.2 Balancing Medical and Herbal Practices | How women juggle the advice from hospitals versus traditional remedies |

Cultural Influences on Herbal Use

This theme captures the deep-rooted cultural and spiritual values that shape women’s use of herbal remedies during pregnancy. Across different faiths and family settings, there is a strong sense of cultural expectation and social pressure to use traditional herbs.

Traditional and Religious Beliefs

Women expressed that herbal use was not just a health decision, but a spiritual and cultural duty. Whether Muslim, Christian, or Traditionalist, participants felt their beliefs supported or allowed the use of herbs, sometimes as a first line of defense.

*“It is part of who we are. Even before you go to the clinic, you must protect the baby spiritually with herbs like n’taba (guava).”* (P2, Muslim)

*“For us Christians, we believe in faith, but I still used herbs. My pastor said as long as it’s not harmful, it’s God’s plant.”* (P6, Christian)

For the Traditionalist woman, spiritual beliefs guided her medicinal choices:

*“I don’t trust the hospital alone. My ancestors guide me, and they show me which root to take.”* (P5, Traditionalist)

Influence of Elders and Community Norms

Many women described how they were influenced—or expected—to use herbs because of pressure from elders or what was considered the "normal way." The decision was often communal rather than personal.

*“My grandmother didn’t even ask. She brought the herbs and said, ‘Start taking this every evening before bed.’”* (P1, Muslim)
*“When I was newly pregnant, my aunties gave me a leaf to boil. Everyone in the house had used it.”* (P8, Christian)

Perceived Benefits of Herbal Remedies

This theme reflects participants’ motivations for herbal use, often framed around improving maternal strength and preventing complications. These perceived benefits formed strong justification for continuing traditional practices.

Strength and Energy

Participants believed that herbs helped boost energy and made them more resilient during pregnancy. Many preferred herbs over hospital medications for this reason.

*“I used to feel weak every morning until I started the neem. After that, I was able to do my sewing and household chores.”* (P1, Muslim)
*“Even though I’m Christian, I used the bitter leaf to fight tiredness. It worked better than those pills from the hospital.”* (P3, Christian)

Prevention of Pregnancy Complications

Participants used herbal remedies to prevent miscarriages, protect the fetus, and promote smooth delivery. These practices were considered protective, even when women still attended antenatal clinics.

*“In my second pregnancy, I bled a lot. This time I used boiled roots, and by God’s grace, everything went well.”* (P7, Muslim)
*“I drank a bark extract every morning. They said it would make the baby strong and settle in my womb.”* (P4, Muslim)

The use of such remedies was tied to a desire for control and reassurance during pregnancy.

Sources of Herbal Knowledge

This theme explores how women learned which herbs to use. Knowledge was mostly passed on through female relatives or acquired through trusted traditional practitioners in the community.

Intergenerational Knowledge

Many participants recalled learning about herbs from their mothers, grandmothers, or elder siblings. This knowledge transmission reinforced herbal use as a generational norm.

*“My mother used these herbs when she was carrying me, and now she showed me how to prepare the same leaves.”* (P4, Muslim)

*“You grow up seeing your sisters and aunties doing it. When it’s your turn, you don’t ask much—you just follow.”* (P8, Christian)

Traditional Practitioners

Some participants sought help from traditional birth attendants or local healers. These individuals were respected for their knowledge and experience in handling pregnancy-related issues.

*“The old woman in our area has helped many pregnant women. She mixes herbs depending on how your body feels.”* (P5, Traditionalist)
*“When the pain started, I went straight to a healer. The hospital gave me paracetamol, but she gave me a tonic that worked faster.”* (P3, Christian)

Their role complements the formal health system and demonstrates the hybrid nature of health-seeking behavior.

Safety Concerns and Personal Decisions

While most women spoke positively of herbal use, some acknowledged risks and side effects. This theme also highlights how women balanced hospital advice with traditional practices—sometimes covertly.

Side Effects and Reactions

A few women reported experiencing unpleasant reactions after taking certain herbs. These experiences did not always stop usage but made women more selective.

*“One time, I took too much of the bitter leaf and started feeling dizzy. I had to stop.”* (P9, Muslim)
*“I vomited badly after taking something my friend gave me. I think it wasn’t meant for early pregnancy.”* (P6, Christian)

These concerns highlight the lack of dosage regulation in herbal practice.

Balancing Medical and Herbal Practices

Participants often managed both hospital care and herbal use simultaneously. Some did so openly, while others avoided disclosing herbal use to health professionals.

*“The midwife said not to use anything not prescribed. But at home, I take herbs at night. I don’t want trouble with my family.”* (P2, Muslim)
*“My husband is a health worker, so he warned me. But I still use mild herbs like guava tea—it’s common here.”* (P3, Christian)

This sub-theme shows how women’s agencies play out in decision-making between modern and traditional medicine.

**Discussion**

This study examined the factors influencing herbal remedy use among pregnant women in the Sagnarigu Municipality. The findings show that herbal use is deeply rooted in cultural and religious beliefs, often encouraged by elders and community norms. Women perceived herbs as effective for boosting strength and preventing complications. Knowledge was mostly passed down through generations or provided by traditional healers. Although some participants reported side effects, herbal use remained common, with many women combining it with medical care, often without informing healthcare providers, to meet both cultural expectations and health needs.

In this study, pregnant women in the Sagnarigu Municipality described herbal remedy use as an indispensable cultural and spiritual duty, viewing plant-based preparations as ancestral safeguards intertwined with their religious and communal identities. This perspective aligns with evidence from Ghana and other parts of sub‑Saharan Africa, where herbs are considered the “first line of defense” against pregnancy ailments and integral to holistic health beliefs (10,18). Conversely, a sequential mixed‑method study in Ethiopia found that higher education and household income correlate with reduced herbal medicine use, indicating that socioeconomic status can attenuate even deeply held spiritual imperatives (9,17). These observations imply that maternal health initiatives must be both culturally sensitive—honoring spiritual traditions—and practically empowering, by addressing educational and economic barriers through tailored literacy and livelihood programs.

Family elders, particularly mothers and grandmothers, emerged as authoritative figures whose unsolicited recommendations shaped much of the participants’ herbal practices. Similar intergenerational knowledge transfer has been documented in Ghana, where elder women’s counsel is rarely questioned, reinforcing communal health wisdom (17,19)Gan. However, urban Accra residents report a gradual decline in elder authority due to increased access to formal education and media‑based health information, leading to more autonomous decision‑making (15,16). Engaging respected community elders as active partners—inviting them to co‑facilitate antenatal workshops or community dialogues—could harness their influence to promote evidence‑based herbal use while preserving valuable cultural continuity.

Participants believed herbal tonics enhanced physical stamina and protected against miscarriage and other complications, often preferring traditional botanicals to pharmaceuticals for relieving fatigue . A global review confirmed that energy enhancement and symptom relief are key motivators for herbal use during pregnancy (20,21). Yet research on non‑conventional herbal uterotonics in northern Ghana linked specific preparations to adverse neonatal outcomes, including birth asphyxia and stillbirth, challenging assumptions of safety (5,6). These contrasting findings underscore the need for public health messaging that acknowledges perceived benefits while transparently communicating potential harms, encouraging women to discuss herbal use openly with their healthcare providers.

Participants frequently consulted traditional healers and birth attendants for personalized herbal formulations, valuing their cultural congruence and perceived efficacy . Historical analyses document traditional birth attendants in Ghana as mediators of pregnancy and birth through spiritually informed herbal care (14,22). Yet in urban areas with enhanced healthcare infrastructure, some women are shifting toward formal medical consultations, driven by perceptions of improved clinical safety and efficacy (23). Establishing formal collaborations between healthcare systems and accredited traditional practitioners may bridge this divide, fostering mutual respect and ensuring coordinated, culturally appropriate care.

Although most women reported positive experiences, some described adverse effects—such as dizziness, gastrointestinal upset, and suspected uterine hyperstimulation—after consuming certain herbal preparations. Under‑reporting of adverse events remains pervasive, perpetuating the myth that “natural” equates to “risk‑free” (24,25). Community‑based pharmacovigilance programs, coupled with targeted education on safe dosing, preparation hygiene, and risk recognition, are essential to mitigate potential harms and empower women to make informed choices (26).

Finally, many women combined herbal remedies with prescribed antenatal medications without disclosing their traditional practices to healthcare providers. This covert strategy reflects a balancing act between cultural expectations and formal medical advice, but it can hinder comprehensive care and safety monitoring (24,27).Healthcare professionals should be trained in culturally sensitive communication and to inquire non‑judgmentally about herbal use, fostering open dialogue and enabling more holistic, patient‑centered maternal healthcare.

This study offers valuable insight into the cultural and health beliefs surrounding herbal remedy use among pregnant women in Sagnarigu Municipality. One of its key strengths lies in its rich qualitative design, which allowed for an in-depth exploration of participants' lived experiences, capturing a range of perspectives across different religious, educational, and occupational backgrounds. The use of direct quotes from women gave voice to their realities and enhanced the authenticity of the findings. However, the study also has limitations. The small sample size of nine participants limits the generalizability of the findings beyond the immediate study setting. Additionally, as with most qualitative studies, there is a risk of social desirability bias, where participants may underreport or overstate certain behaviors, particularly in relation to hospital or herbal use. Despite these limitations, the study contributes meaningfully to understanding how traditional beliefs intersect with maternal health behaviors, offering a basis for culturally informed healthcare interventions.

**Conclusion**

In conclusion, this study reveals that the use of herbal remedies during pregnancy in Sagnarigu Municipality is deeply embedded in cultural, spiritual, and social traditions. Women often rely on advice from elders, intergenerational knowledge, and perceived health benefits to guide their use of herbs, even when accessing formal antenatal care. While most participants viewed herbal remedies positively, some reported adverse effects and admitted to concealing herbal use from healthcare providers due to fear of judgment. These findings highlight the complexity of maternal health-seeking behaviors in culturally rich communities. A key recommendation is that healthcare providers adopt culturally sensitive approaches that encourage open dialogue about herbal use without stigma. Additionally, community education programs should involve traditional leaders and family influencers to promote safe practices. Policymakers and researchers should also prioritize the regulation and scientific evaluation of commonly used herbal remedies to ensure their safety and appropriate use during pregnancy.

Consent for publication

Not applicable

Data Availability

Data used to support this study are available from the corresponding author upon request.

Conflicts of Interest

The authors declared that they have no competing interests.

Disclaimer (Artificial intelligence)

Authors at this moment declare that generative AI (ChatGPT) has been used during the editing of manuscripts.

References

1. World Health Organisation. WHO traditional medicine strategy: 2014-2023 [Internet]. 2013 [cited 2025 Apr 20]. Available from: https://www.who.int/publications/i/item/9789241506096

2. World Health Organisation. WHO global report on traditional and complementary medicine 2019 [Internet]. 2019 [cited 2025 Apr 20]. Available from: https://www.who.int/publications/i/item/978924151536

3. Ekor M. The growing use of herbal medicines: issues relating to adverse reactions and challenges in monitoring safety. Front Pharmacol. 2014 Jan 10;4:177.

4. Kennedy DA, Lupattelli A, Koren G, Nordeng H. Herbal medicine use in pregnancy: results of a multinational study. BMC Complement Altern Med. 2013;13(1):355.

5. Peprah P, Agyemang-Duah W, Arthur-Holmes F, Budu HI, Abalo EM, Okwei R, et al. ‘We are nothing without herbs’: a story of herbal remedies use during pregnancy in rural Ghana. BMC Complement Altern Med. 2019;19(1):1–12.

6. Shewamene Z, Dune T, Smith CA. The use of traditional medicine in maternity care among African women in Africa and the diaspora: a systematic review. BMC Complement Altern Med. 2017 Aug 2;17:382.

7. Mothupi MC. Use of herbal medicine during pregnancy among women with access to public healthcare in Nairobi, Kenya: a cross-sectional survey. BMC Complement Altern Med. 2014;14(1):1–8.

8. Nyeko R, Tumwesigye NM, Halage AA. Prevalence and factors associated with use of herbal medicines during pregnancy among women attending postnatal clinics in Gulu district, Northern Uganda. BMC Pregnancy Childbirth. 2016;16(1):1–12.

9. Bekele GG, Woldeyes BS, Taye GM, Kebede EM, Gebremichael DY. Use of herbal medicine during pregnancy and associated factors among pregnant women with access to public healthcare in west Shewa zone, Central Ethiopia: sequential mixed-method study. BMJ Open. 2024 Feb 5;14(2):e076303.

10. Aynalem BY, Melesse MF, Bitewa YB. Cultural Beliefs and Traditional Practices During Pregnancy, Child Birth, and the Postpartum Period in East Gojjam Zone, Northwest Ethiopia: A Qualitative Study. Womens Health Rep. 2023 Aug 16;4(1):415–22.

11. Holst L, Wright D, Haavik S, Nordeng H. Safety and efficacy of herbal remedies in obstetrics-review and clinical implications. Midwifery. 2011 Feb;27(1):80–6.

12. Tiran D. The use of herbs by pregnant and childbearing women: a risk-benefit assessment. Complement Ther Nurs Midwifery. 2003 Nov;9(4):176–81.

13. Ghana Health Service. Ghana Health Service 2016 Annual Report. GHS. Accra. 2016;

14. Aziato L, Omenyo CN. Initiation of traditional birth attendants and their traditional and spiritual practices during pregnancy and childbirth in Ghana. BMC Pregnancy Childbirth. 2018 Mar 7;18:64.

15. Ganle JK, Mahama MS, Maya E, Manu A, Torpey K, Adanu R. Understanding factors influencing home delivery in the context of user-fee abolition in Northern Ghana: Evidence from 2014 DHS. Int J Health Plann Manage. 2019;34(2):727–43.

16. Opara UC, Iheanacho PN, Li H, Petrucka P. Facilitating and limiting factors of cultural norms influencing use of maternal health services in primary health care facilities in Kogi State, Nigeria; a focused ethnographic research on Igala women. BMC Pregnancy Childbirth. 2024 Aug 27;24(1):555.

17. Ganle JK. Addressing Socio-cultural Barriers to Maternal Healthcare in Ghana: Perspectives of Women and Healthcare Providers. J Women’s Health Issues Care [Internet]. 2014 [cited 2025 Apr 20];03(06). Available from: http://www.scitechnol.com/addressing-sociocultural-barriers-maternal-healthcare-ghana-perspectives-women-healthcare-providers-9wKH.php?article\_id=2391

18. El Hajj M, Holst L. Herbal medicine use during pregnancy: a review of the literature with a special focus on sub-Saharan Africa. Front Pharmacol. 2020;11:866.

19. Okaiyeto K, Oguntibeju OO. African herbal medicines: Adverse effects and cytotoxic potentials with different therapeutic applications. Int J Environ Res Public Health. 2021;18(11):5988.

20. Ganle JK, Dery I. ‘What men don’t know can hurt women’s health’: a qualitative study of the barriers to and opportunities for men’s involvement in maternal healthcare in Ghana. Reprod Health. 2015 Oct 10;12:93.

21. Makombe D, Thombozi E, Chilemba W, Mboma A, Banda KJ, Mwakilama E. Herbal medicine use during pregnancy and childbirth: perceptions of women living in Lilongwe rural, Malawi – a qualitative study. BMC Womens Health. 2023 May 4;23:228.

22. Ganle JK. Chasing out traditional birth attendants in Ghana – implications for maternal and newborn health. J Glob Health Columbia Univ. 2014 Dec 19;39-42 Pages.

23. Yihune Teshale M, Bante A, Gedefaw Belete A, Crutzen R, Spigt M, Stutterheim SE. Barriers and facilitators to maternal healthcare in East Africa: a systematic review and qualitative synthesis of perspectives from women, their families, healthcare providers, and key stakeholders. BMC Pregnancy Childbirth. 2025 Feb 3;25:111.

24. Atiba FA, Popoola OA, Odukogbe AA, Ihunwo AO. Prevalence and consumption pattern of kolanut among pregnant women in Ibadan metropolis. Sci Rep. 2023 Sep 2;13:14422.

25. Kamel N, El Boullani R, Cherrah Y. Use of Medicinal Plants during Pregnancy, Childbirth and Postpartum in Southern Morocco. Healthcare. 2022 Nov 21;10(11):2327.

26. Im HB, Hwang JH, Choi D, Choi SJ, Han D. Patient–physician communication on herbal medicine use during pregnancy: a systematic review and meta-analysis. BMJ Glob Health. 2024 Mar 5;9(3):e013412.

27. Bayisa B, Tatiparthi R, Mulisa E. Use of Herbal Medicine Among Pregnant Women on Antenatal Care at Nekemte Hospital, Western Ethiopia. Jundishapur J Nat Pharm Prod. 2014 Sep 15;9(4):e17368.