Review Article

Accessible and low- to zero-cost remedy: Traditional medicine use during pregnancy and labor

ABSTRACT

Traditional medicine (TM) has played an essential part in maternity services around the world, which has led to increased utilization among pregnant women. Herbs, herbal preparations, and completed herbal products are examples of TMs that contain active substances such as plant parts or other plant components that are thought to have therapeutic advantages. This study review aimed to identify the herbs commonly used, reasons for use, and effect of use, to make adequate recommendations on herbal medicine use as a remedy for pregnancy and labor. Incorporating evidence from reviews, personal correspondence, and diaries, this study demonstrates that about 80% of people used TM such as herbal remedies for sickness diagnosis, prevention, treatment, and promotion of general well-being. Due to its accessibility, cost, and availability, TM is usually used by expectant mothers. Examples of TM used in pregnancy and labor include honey, aloe, raspberry, jute mallow, and hibiscus leaves. It is important to note that its use in pregnancy and labor can be beneficial or harmful to both mother and child. Lack of standardization, financial risk, lack of safety, and effectiveness are challenges to TM. There is a need of creating awareness of the safe use and effects of TM in pregnancy and labor through the provision of health education programs for women in the community.

Keywords: Labor, pregnancy, remedy, traditional medicine

INTRODUCTION

Traditional medicine (TM) utilization during pregnancy and labor has been on the increase in several countries mostly in sub-Saharan Africa where there is difficulty in accessing health-care facilities because of the high cost and socioeconomic status of clients.[1] TM has played a vital role in maternal health-care services in many countries and its global use by expectant mothers has increased significantly,[2-5] greatly influenced by the region, ethnic group, cultural traditions, socioeconomic situation, and several other factors.[6] Since herbal remedies do not have the same tight controls as modern drugs, it is worrisome that their usage is on the rise, especially during pregnancy and labor.[4] Herbal medicine is the most frequently used TM in the African community, and it has played an essential role in maternal health-care services in many countries since the precolonial period.[1,2,7-9] In fact, TM is used by about 80% of the global population for the prevention, diagnosis, treatment of illnesses, and enhancement of health.[10] The aim of this review is to identify the herbs commonly used, reasons for use, and effect of use, in order to provide adequate recommendations on therapeutic usage of herbal medicine during pregnancy and labor.

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CONCEPT OF TRADITIONAL MEDICINE IN PREGNANCY AND LABOR

TM is extensively practiced in Nigeria, but there are limited data on how many individuals utilize it.[11] The concepts of TM and complementary and alternative medicine (CAM) are synonymously used as regards the cultural origin of the traditional practices. Studies from Western nations frequently use the term CAM, but developing locations (like Africa) use the term TM. This is due to the fact that African women frequently use TM for problems relating to their reproductive and maternal health since they have little access to modern maternity care.[12]

TM is utilized by more than 80% of people in Africa,[13] and its continuous use in Africa is largely due to the limited accessibility, availability, and cost of modern medicine, especially in rural African areas. In addition, because TM has been practiced in Africa for a longer time compared to Western medicine, many Africans have a strong cultural trust in those who practice it.[14] Furthermore, traditional birth attendants (TBAs) are typically preferred by rural African women over biomedical health-care providers because these TBAs usually utilize TMs for women in pregnancy and labor.[15] Furthermore, studies from various locations indicate that many women use TM, with estimates ranging between 20% and 60%.[16] Moreover, international statistics vary greatly, as evidence shows an increase in the use of CAM in pregnancy.[17]

THE ROLE OF PRIMARY HEALTH CARE

Since the World Health Assembly urged member countries to adopt TM practices in primary health care in 1978, TM has been employed to meet fundamental health-care needs.[18] The use of medicinal plants in the health-care systems of numerous poor countries has been highlighted by the World Health Organization and was re-established at the Alma Ata Conference in 1978 when it was proposed that governments prioritize the full utilization of human resources by defining the role, supportive skills, and attitudes required for each category of health worker based on the functions required to ensure effective primary health care. Furthermore, a team made up of community health officers, development workers, nurses, midwives, doctors, and, if necessary, traditional health practitioners and TBAs was also recommended.[19]

Furthermore, the Alma Ata Declaration rules required member states to clarify the function that the traditional healers and midwives may perform as part of the primary health-care team. In order to achieve the goal of Health For All by the year 2000, it was important to include traditional health practitioners to execute health programs in the community. As a response, the TM strategy was launched by the WHO in 2000 to help countries build national policies for evaluating traditional medical practice to ascertain if it might be included in the National Health Plans. Due to the fact that it is culture bound, TM was thought to provide a solid foundation for providing cheaper, more accessible, and more dependable health care. However, a policy on TM was devised to provide regulatory and legal systems pertaining to the promotion and preservation of good practice.[20]

Cultural and traditional medical practices have a substantial impact on maternal health care in the majority of Africa.[15] Communities in rural areas of Africa frequently uphold the customary notion that TBAs should only be trusted with women who are pregnant and in labor.[21] As a result, traditional healers are seen as the main health-care providers by African women. However, there is currently a dearth of research addressing African women's traditional health practices to improve fertility, encourage healthy pregnancies and childbirth, and sustain health throughout the puerperium.[12]

THE PREVALENCE OF TRADITIONAL MEDICINE USE IN PREGNANCY AND LABOR

Depending on the location, social, and cultural context, including the ethnic group, between 7% and 55% of pregnant women utilize traditional herbal remedies.[4] Previous studies by Peprah *et al*.[2] and Adane *et al*.[22] reported a 21% utilization rate of herbal medicine among pregnant women in Uganda, 35% in Cote d'Ivoire, 33% in South Africa, 42% in Tanzania, and 47.77% in Ethiopia. According to endurance,[23] in Nigeria, only a few of these studies have been explored; however, Mekuria *et al*.[24] and Duru *et al*.[25] reported the prevalence rate as 67.5%, with a 37.3% rate in the southwest, 35.8% in the northcentral, and 26.9% in the northwest.

THE CHOICE OF TRADITIONAL MEDICINE IN PREGNANCY AND LABOR

In order to attain the Sustainable Development Goal (SDG) of reducing maternal mortality between the years 2016 and 2030 by 7.5%, several nations employed various health systems to provide adequate maternity services.[26] Access to modern health-care facilities was discovered to be extremely difficult in Africa due to the high cost and economic circumstances of those who need them.[27] Utilization of TM has however increased in a number of African nations due to its critical role in prenatal care.[28] It could have a beneficial or negative

impact on achieving SDG 3, which emphasizes the reduction in global maternity mortality rate to 70/100,000 births.[3]

FACTORS INFLUENCING THE UTILIZATION OF TRADITIONAL MEDICINE IN PREGNANCY AND LABOR

Pregnant women utilize TM for a number of reasons that varies from traditional/cultural beliefs and practice, spiritual beliefs, and the client's comparison of experiences with modern medicine and TM.[29,30] Reported reasons for using TM during pregnancy include fostering fetal growth, spiritual purification, protection from bad influences, gender preference, and facilitating labor and as well as dietary supplements.[11,28,31,32] Women strongly believe that TM is more beneficial than Western drugs due to factors such as their gender, accessibility, and cheaper cost.[1] It is common practice among African nations to utilize TMs to manage pregnancies and to speed up and induce labor.[33]

There are mother- and child-related indications for using TM, which differ across areas and nations.[6] It is frequently used to enhance the health of the mother and to treat pregnancy-related issues as part of maternal care. The common cold or flu, gastrointestinal issues, pain, prevention of miscarriage, reduction of anxiety, treatment and/or prevention of anemia, nausea and vomiting, urinary tract infections, and treatment of edema, are commonly reported indications of TM use in pregnancy and labor.[3,4,6,34]

Other reasons include the need to address pregnancy-related illnesses such as fatigue, headache, and waist pain as well as conditions such as nutritional deficiencies, swollen feet, back pain, digestive issues, fever, stomach discomfort, edema, and urinary tract infections.[5,15,28,35] According to Elkhoudri *et al*.,[36] TM is often used to help childbirth, get back in shape after giving birth, enhance breast milk production, and lessen pregnancy pain. The major reasons of using TM were to avoid discomfort, preeclampsia, obstructed labor, breech presentation, postpartum hemorrhage, and perineal tearing.[31,32] Pregnant women typically self-medicate with over-the-counter drugs, seek prescription medications, or use traditional herbal remedies to treat these mild symptoms.[2,37,38]

THE EFFECT OF HERBS COMMONLY USED IN PREGNANCY AND LABOR

Herbal use is becoming more popular across the globe, especially among women in African nations. The lack of scientific support, monitoring, and potential for negative effects raise questions about the usage of herbs. In addition, there have been observed to be numerous concerns among professionals regarding the general safety of herbal treatments. Examples of common herbs used in pregnancy and labor include ginger, Echinacea (red sunflower), jute mallow, berberine-containing herbs, St. John's wort, raspberry, peppermint, chamomile, aloe, honey, hibiscus leaves, brimstone tree leaves, lemon grass, wild mango, and raspberry.[2,39] Ameade *et al*.[40] reported the use of moringa, baobab, pawpaw, African custard apple, dawadawa, lemon, guava, neem, and dirigutim.

Ginger

Ginger is the most consumed herb worldwide and it belongs to the Zingiberaceae grown in Asia and the tropics.[41] With scientific evidence supporting its antiemetic action, it is a well-known traditional medication used to treat a variety of illnesses connected to gastrointestinal issues. One of the most prevalent complaints of the early stages of pregnancy is nausea and vomiting of pregnancy (NVP)[42] and affects approximately 85% of pregnant women.[43] Lete and Allué[41] reported that using ginger to treat mild-to-moderate NVP is effective. However, ginger has been reported to have effects on clotting time and anticoagulant effect.[41,44] Terzioglu Bebitoglu[45] reported that during the first trimester of pregnancy, it can also have other effects including dry mouth or increased nausea and dehydration; however, in the second and third trimesters, it has been linked to bleeding or spotting.

Echinacea (red sunflower)

It is commonly used to treat upper respiratory tract infection in pregnant women.[46,47] Echinacea lowers the risk of cold by 58% and shortens the duration by 1–4 days.[48] It also boosts the immune system. Its long use is dangerous as it can cause multi-organ failure and severe allergic reactions.[49]

Jute mallow

The jute or jute mallow is fundamentally utilized for its fiber to make ropes and solid textures, however, the plant's leaves are edible. It is found in tropical and subtropical regions from Asia to Africa. It has been noticed particularly among Yoruba talking networks in Nigeria that pregnant women who eat Ewedu soup as often as possible experience speedy, smooth, painless labor.

Berberine-containing herbs

It is frequently administered as an immune booster during pregnancy to treat upper respiratory tract infections. The Oregon grape, barberry, and goldenseal are a few of the herbs. There are some worries that berberine administered close to delivery could displace albumin-bound bilirubin. Based on research conducted on rats, it has been demonstrated that berberine displaces bilirubin bound to albumin and may exacerbate infant jaundice.[50]

Neem (Dongoyaro)

Neem is a popular ayurvedic drug with antiviral properties. Through the enhancement of antioxidant properties, suppression of bacterial growth, and genetic pathway modification, its products have demonstrated a significant contribution to the prevention and treatment of disease. Its anti-inflammatory, anti-arthritic, antipyretic, hypoglycemic, antigastric ulcer, and antibacterial properties have all been established. It should be used with caution since, if taken in excessive doses or over an extended length of time, it can harm the liver and kidneys.[51]

St John's wort

It is an herbal remedy that has gained popularity as an antidepressant, particularly for seasonal affective disorder, is this one. It is utilized throughout pregnancy to treat symptoms of depression.[52]

Raspberry

Due to the red raspberry leaf's alleged ability to stimulate labor, it is one of the most popular herbal teas consumed during pregnancy. Red raspberry leaves are thought to ease labor by tightening and toning the muscles in the pelvic region, particularly the lining of the uterus.[45,53,54]

Peppermint

Another herb that is used to treat flatulence and emesis is peppermint, which also has antispasmodic and breast milk-enhancing properties. Along with treating respiratory and urinary tract infections and morning sickness in pregnancy, it also has sedative properties. There has not been evidence of any negative effects of peppermint tea on the mother or fetus. Due to its emmenagogue properties, excessive usage of it is not advised in the first trimester of pregnancy.[4,34]

Chamomile

Another popular herbal supplement is chamomile. It is used to treat sleeplessness, joint irritability, and gastrointestinal irritability. However, regular use has been linked to an increased risk of preterm labor or miscarriage.[55,56]

CHALLENGES ASSOCIATED WITH THE USE OF TRADITIONAL MEDICINE IN PREGNANCY AND LABOR

The challenges of TM use in pregnancy and labor include lack of standardization, lack of safety and effectiveness, and financial risk.

Lack of standardization

To guarantee safety, effectiveness, and quality control, there is a lack of universal criteria, knowledge, and acceptable procedures for assessing TM.[20] Due to the lack of standardization, one herbal product of the same type may be highly beneficial while another is ineffective.[57]

Safety and effectiveness

Women have difficulty in making informed decisions due to dearth data on the safety and efficacy of TM.[58,59] Traditional use may provide some assurance regarding the usefulness of a therapy, but it does not guarantee its safety or efficacy. Moreover, there have been cases of fetal death among childbearing families that choose to use unskilled birth attendants in their homes.[57]

Financial risk

Although it is true that TM treatment is less expensive than conventional medicine, investing a reasonable amount of money in untested therapies that may or may not enhance wellness, prevent disease, or promote healing is a financial risk.

IMPLICATION TO NURSING EDUCATION, RESEARCH, AND PRACTICE

The use of TM in pregnancy and labor is high among majority of women and lack of evidence of safety and efficacy is not an impediment.

Implication to nursing education

This implies that there is a need to integrate the use of TM into curriculum of nursing education to equip students. Training and retraining of nurses on TM should be encouraged. Reorientation of nurses on TM use is vital.

Implication to nursing practice

Midwives and nurses working with women need a knowledge of TM use in pregnancy and in labor, as well as the benefits and risk of such remedies. The knowledge of TM among maternal health-care providers will assist in documenting use of TM during history taking. Clients also need to be empowered appropriately on safe use of TM during pregnancy and in labor through antenatal education.

Implication to nursing research

The role of evidence-based nursing is important as nurses and midwives need to conduct research on TM to improve clinical practice.

CONCLUSION

TM has played an important part in maternal health-care services in many countries, and its usage among pregnant women has increased significantly globally. Herbs, herbal

preparations, and completed herbal products are examples of TMs that contain active substances that are plant parts or other plant components that are thought to have therapeutic advantages. Around 80% of the world's population uses TM, including herbal remedies, for sickness diagnosis, prevention, and treatment, as well as to promote general well-being. TM is used by pregnant women for reasons associated with its availability, accessibility, and affordability. Some of the types of TM used in pregnancy in labor include honey, aloe, raspberry, jute mallow, and hibiscus leaves. It uses in pregnancy and labor is beneficial and harmful to women. Lack of standardization, financial risk, and lack of safety and effectiveness are disadvantages of TM use. It is reported that women are not aware of the harm caused by TM in pregnancy and labor.

Recommendations

There is a need of creating awareness of safe use and effects of TM in pregnancy and labor through provision of health education program for women in the community. Health-care providers should be trained on safe use of TM for women in pregnancy and labor. Integration of TM into modern medicine should be encouraged. Nurses and midwives should take history on the use of TM during antenatal visits. All health-care providers need orientation and reorientation on the use of TM in pregnancy and labor. Clinical trial research should be carried out to determine the safety, efficacy, and potential risk of the use of TM in pregnancy and labor.

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