

Traditional Medicine Utilisation Among Pregnant Women in Sub-saharan African Countries: A Systematic Review of Literature

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Nicholas Mudonhi¹ and Wilfred N. Nunu^{1,2} 

Abstract

Traditional medicine has the potential to boost the health and economies of many SSA countries, especially if regulatory mechanisms are deployed to govern their protection and utilisation. There is lack of knowledge regarding traditional medicines and their impact on pregnancy. This paper reviews the literature on traditional medicine utilisation among pregnant women in Sub-Saharan African countries. The paper, determined the proportion of pregnant women utilising traditional medicines in Sub-Saharan Africa, identified the different types of traditional medicine used during antenatal care and reasons for Use in Sub-Saharan Africa and also identified challenges that are faced by women who use traditional medicine in antenatal care. A systematic exploratory review was conducted guided by the PRISMA framework. The databases that were searched included Google Scholar, PubMed, Cochrane, HINARI and the World Health Organization. Forty-one literature sources were eligible and included in the review process. Reported traditional medicine utilisation ranged between 12 and 93% among pregnant women in Sub-Saharan Africa. Different types of traditional medicines have been utilised in Sub-Saharan Africa for different purposes. Safety and poor management of usage were reported to be some of the challenges associated with traditional medicine. There is a need to determine chemical components and mode of action of these herbs as some could be beneficial, whilst others harmful, leading to severe pregnancy complications.

Keywords

traditional medicine, utilisation, prevalence, pregnant women, sub-saharan Africa

Highlights

- 1) Traditional medicine utilisation during pregnancy is common in many Sub-Saharan African (SSA) countries.
- 2) There are still gaps in knowledge on how traditional medicine is utilised and for what purposes during pregnancy
- 3) This research provides a window of opportunity to explore the different types of traditional medicines utilised in different countries in SSA and document these for possible further studies to explore its safety and efficacy to strengthen health systems in managing pregnancies.

Background

Traditional medicines (TM) have been used in pregnancy management in many countries, even where modern health care is readily available¹ TM refers to plants, animals, or minerals taken either by injection, ingestion, adsorption or absorption by pregnant women² It focuses on the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health and the prevention, diagnosis, improvement or treatment of physical and mental illnesses² There has been an increase of interest in the use

¹Department of Environmental Science and Health, Faculty of Applied Sciences, National University of Science and Technology, Bulawayo, Zimbabwe

²Scientific Agriculture and Environment Development Institute, National University of Science and Technology, Bulawayo, Zimbabwe

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Corresponding Author:

Wilfred N. Nunu, Department of Environmental Science and Health, Faculty Of Applied Sciences, National University of Science and Technology, Corner Gwanda Road and Cecil Avenue, Ascot, Bulawayo 00263, Zimbabwe.

Email: njabulow@gmail.com



and importance of TMs both by the WHO and many African countries³ Pregnant women utilise TMs for several reasons: lack of foetal turning, overdue delivery, pregnancy breech and false labour, morning sickness, abdominal pain, constipation, heartburn, uterus being dirty or full of air, sexually transmitted diseases and high blood pressure^{4,5} The utilisation of TMs is diverse in maternal health. It can be used for different purposes depending on individuals the culture and beliefs of individuals and is based on locally available natural resources⁶ The use is triggered by various practices, approaches, knowledge and beliefs about incorporating plant, animal and mineral-based medicines, spiritual therapies to maintain wellbeing and treat, diagnose or prevent illness^{2,7,8} However, it is reported in some studies that this increasing Use of TMs by pregnant women poses risks which in most cases are unknown and could compete with other modernised medicines used, leading to complications⁹

Treatment in the early stages of pregnancy is believed to prevent miscarriage and ensure proper growth of the foetus and stability of the woman's health^{10,11} Treatment with TM at the later stages of pregnancy ensures safe delivery minimising chances of complications even after birth¹² Though most professional health practitioners are sceptical about the safety of TM usage, they agree that traditional healers play an important complementary role in the provision of effective prevention and treatment of diseases¹³ The African continent is still developing, and several countries are classified as poor by the World Bank^{14,15} Poverty has negatively impacted health service provision due to poor infrastructure development and human resources exodus to developed countries¹⁶⁻¹⁸ Staff shortages in health institutions, among other challenges, have ensured that traditional health practitioners serve a large population and play an essential role in the health system¹⁹⁻²¹ There should, therefore, be an urgent need to recognise traditional practitioners and prioritise them in public health campaigns and health promotions as a mechanism to reduce maternal mortality² Studies in Sub-Saharan Africa (SSA) have shown that doctors are fewer than traditional healers aiding pregnant women to consult with the traditional system, which is more efficient^{2,22,23} Apart from the challenges mentioned above, sociocultural factors such as the knowledge passed from generation to generation, availability of TMs, unpleasant experiences with the formal health system, health beliefs and conceptualisation in most Africa settings also influence traditional medicine use in pregnant women SSA⁴

Generally, several studies conducted on TMs utilisation tend to focus mainly on the factors that lead women to utilise the different types of TMs, with most focussing on the proportions of pregnant women that utilise these medicines during pregnancy^{9,24-28} Furthermore, most of these studies do not explore in-depth the challenges reported by these women who utilise TMs thus, this current study is critical in ensuring that challenges faced by women who utilise TMs are comprehensively documented through synthesising the different studies that have been published in SSA.

TM can boost the health and economies of many SSA countries, especially if regulatory mechanisms are deployed to govern their protection and utilisation²⁹ To reduce maternal deaths and pregnancy-related complications, TMs used during pregnancy need to be better known and thoroughly researched regarding their safety. Research into the TMs used will aid women in receiving adequate treatment, to identify potentially unsafe use, and also preserve valuable information about medicinal in the future as well as declare the different types of TMs they would have used in their health facilities to aid complementarity and better management of the pregnancies^{9,30} Therefore, this review explored TM utilisation during pregnancy in SSA. The following 3 specific objectives have guided this enquiry:

- 1) Determining the proportion of pregnant women utilising TMs in SSA
- 2) Identifying the different types of TM used during antenatal care and reasons for Use in SSA
- 3) Identifying challenges that are faced by women who use TM in antenatal care.

Methodology

Inclusion Criteria

Studies were included if they reported the Use of TMs by SSA women for reasons related to preparation for pregnancy, promoting fertility, treating pregnancy-related symptoms, maintenance of general wellbeing during pregnancy, inducing or assisting labour. Studies were also included if they described the views, attitudes and beliefs of women regarding TM utilisation. All studies published in English (up to 17 November 2021) in reputable peer-reviewed journals, and available open access were targeted.

Exclusion Criteria

The study excluded all published literature sources that addressed TM related issues but did not focus on SSA. Furthermore, literature sources that focused on women's Use of TM for general purposes and other conditions other than pregnancy were excluded.

Keywords for Literature Search

The keywords for the literature search engines included traditional medicine utilisation, SSA pregnant women.

Search Strategy

The keywords (Traditional medicine; pregnant women; herbal medicines; phytotherapy, Sub-Saharan Africa complementary and alternative medicines) were used to search for literature on Google Scholar, PubMed, Cochrane,

HINARI and the WHO website. The literature search was done up to 17 November 2021.

Methods of Review

We reviewed independently titles and abstracts of articles and reports that were relevant and qualified to be included in this study. Disagreements were resolved through dialogue between us and reaching an agreement based on issues arising and exchanged. The 2 authors reviewed full texts of these articles and reports that met the inclusion criteria, and findings were discussed, and an agreement was reached.

Data Extraction and Synthesis

We developed a data collection form as guided by the objectives to facilitate uniformity in data collection (by the authors). We reviewed articles and reports and collected data. Discrepancies observed on collected data by the authors were resolved through dialogue and reaching a consensus. Findings from the articles and reports were then coded and thematically analysed in line with the specific objectives.

Quality Assessment

For this review, the quality was assessed using a purposive rating tool adapted from the AMSTAR checklist³¹. This scale is a freely accessible, validated tool for evaluating the methodological quality of reviewed documents. AMSTAR items contain several aspects; therefore, only components relevant to the research scope were used³¹. The primary purpose of this rating tool was to evaluate the scientific quality/rigour of systematic reviews in TM use, and question 1–6 was used in the checklist³¹.

Results

A total of 1770 literature sources were obtained from electronic databases. After excluding 1672 duplicates and irrelevant sources, 98 sources had their titles and abstracts screened. After screening, 47 articles were found not to address the objectives of this review, and some were not available open access, and some failed the quality test (16) and were excluded leaving 51 that underwent full manuscript review. Three of the 51 were excluded as they gave a general perspective of TM use, and the remaining 48 were eligible and included in this systematic review. The summary of this inclusion/exclusion process is shown in Figure 1.

Proportion of Pregnant Women Utilising Traditional medicines in Sub-Saharan Africa

It is estimated that TM utilisation by women in SSA is estimated to be between 30 and 70%⁴. Subsidising influences to increase the Use of TMs include culture and beliefs, poverty,

long distance to health facilities, cost of modern medicines and acceptability of TM³². Results from different studies indicate that prevalence varies depending on the country, and in SSA, it ranges from 12 to 93% among pregnant women, as influenced by different contextual settings in different countries. These findings are presented in Table 1.

Traditional medicines Used During pregnancy Among Sub-saharan African Women

A study conducted in South Africa cited ten species as frequently used for the treatment of common pregnancy-related problems such as oedema, indigestion, constipation, infection, high blood pressure and post-partum healing³³. Also, a study conducted in Zimbabwe identified 8 species of herbal medicines, with many being used to quicken labour³⁴. Table 2 shows some traditional remedies used in Sub-Saharan Africa during pregnancy with *Asparagus Africanus* used in South Africa and Zimbabwe.

Challenges and pregnancy Complications Associated with Traditional Medicines Use

The review process revealed several challenges due to the utilisation of TMs during pregnancy. Themes that emerged included safety, regulation, adverse outcomes, inadequate monitoring, as indicated in Table 3.

Discussion

The review indicated that the prevalence of TM utilisation during pregnancy is predominant and varies across different countries. Increasing prevalence is no longer debatable even though there is a previous misconception regarding herbal medicinal products as safe and raw consumption from their natural state. In several countries, herbal medicines and related products are introduced without any mandatory safety or toxicological evaluation, which makes patients have access to them³⁵. Studies conducted in Australia are within the range obtained by our review, with between 48% and 69% prevalence^{36,37}. In Ghana, TM use in pregnancy is triggered by low education levels and long distances to the hospital and unpleasant interactions with health service providers in the modernised health facilities⁴. The promotion of TM in society and the media is another contributing factor that increases prevalence in some Sub-Saharan countries³². It should also be noted that TM utilisation is higher in countries that have poorly financed health systems that usually change significant amounts of monies from users, the majority of who would be poor and could barely afford the fees charged^{38,39}.

As our study indicated that prevalence varies, literature shows that increasing utilisation of traditional remedies is also caused by unease or discomfort about discussing their medical problems and fear of confidentiality in handling their health information⁴⁰. Influence of religion and a greater

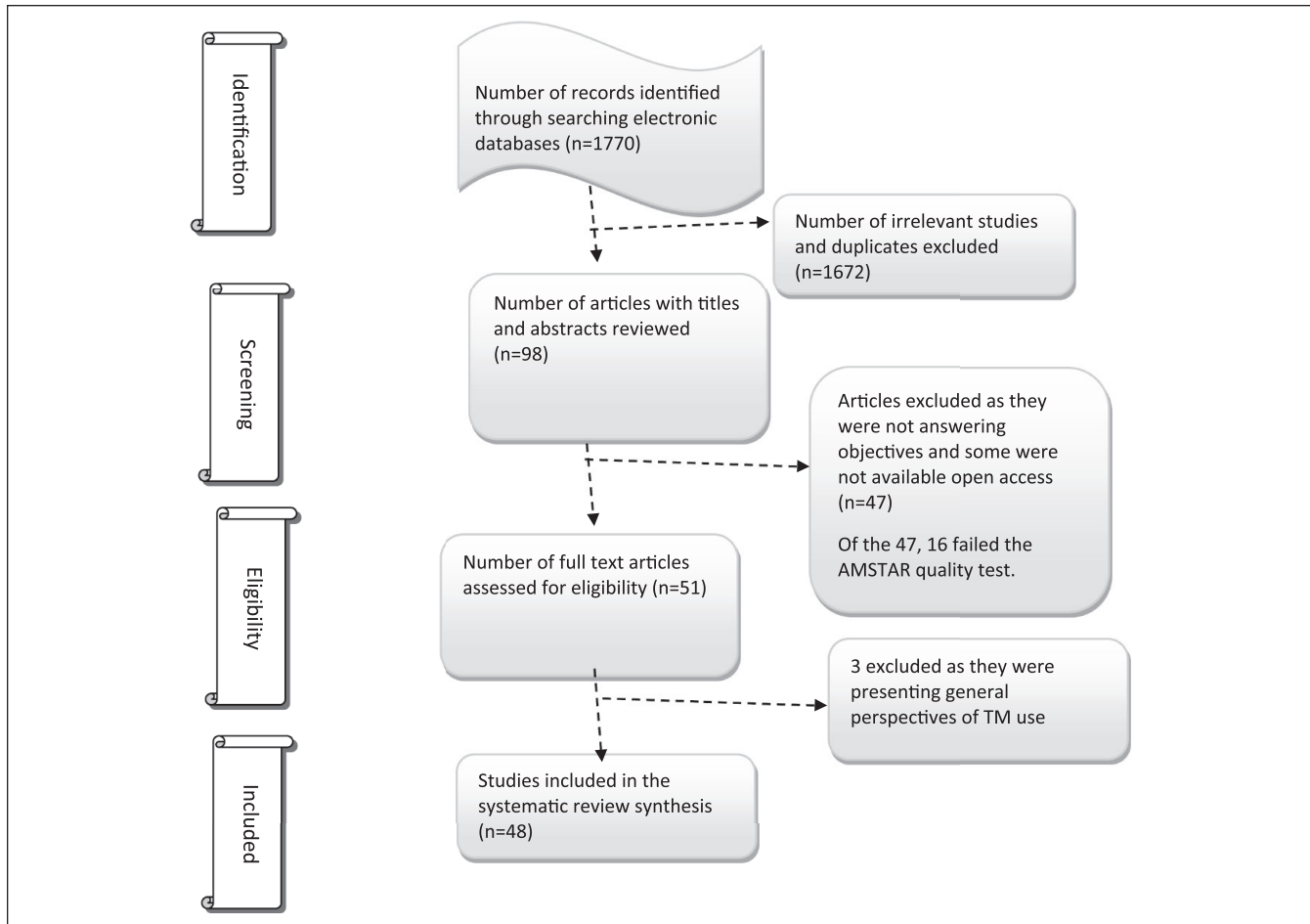


Figure 1. Document review process.

Table 1. Prevalence of Traditional Medicines Use in Sub-Saharan African.

Country	Prevalence (%)	Citations
1. South Africa	33–93	4,56–58
2. Nigeria	31.4–68	4,28,59,60
3. Mali	80	30
4. Zimbabwe	52–69.9	61–63
5. Tanzania	55	32
6. Ethiopia	48.6–50.4	64,65
7. Ghana	<50	66
8. Tanzania	42	4
9. Cote d' Ivoire	35	4
10. Malawi	25.7	67,68
11. Kenya	12	69
12. Zambia	21	70
13. Uganda	20	71

level of spiritual consciousness, many individuals tend to be increasingly disposed to accepting the therapeutic value based on faith or intuition rather than scientific reasoning⁴¹ Numerous studies also indicate that traditional remedies

usage is mostly recommended by traditional birth attendants, close relatives, and on rare occasions by health care providers. It is revealed that family members who advise on using herbal medicines may not have sufficient knowledge of the herbs and remedies⁴²

Confidence in herbal remedies is relatively high among primitive individuals, mainly those based in rural populations. It is associated with a lack of access to public healthcare, social and cultural values, perceived efficacy, beliefs about safety and general ease of access⁴³ However, though women have access to public healthcare facilities in urban areas, women still rely on alternative or traditional systems of care⁴³ In public health care, herbal medicines have been proved to impact the health-seeking behaviours of patients, prescribed drug use and health outcomes⁴⁴ Some women use herbal medicines secretly as compared to modern medications⁴⁴

Even though our review showed that Meconium-Stained Liquor (MLS) is a result of traditional remedies used but other scholars highlight that it can occur without any form of medications or if there is no foetal distress during pregnancies^{33,45}, the review indicated Isihlambelo, which is commonly used in South Africa among Zulu that causes

Table 2. Some Traditional Medicines used in Sub-Saharan Africa.

Country	Traditional Medicine	Reasons and How it is Used	Citations
South Africa	<i>Isihlambelo</i>	Taken orally in the third trimester for a quick labour, foetal growth, and wellbeing and it is a mixture of different ingredients such as fish heads, snakeskin, crocodile parts and mercury	33,72–74
	<i>Imbelekisane and Inembe</i>	<i>Imbelekisane</i> is used to treat prolonged labour whilst <i>Inembe</i> is used for labour induction but can cause severe complications such as abortions or uterine rupture	33,46
	<i>Umchamo wemfene</i>	This is solidified <i>imbila</i> (cape hyrax, dassie) urine and faeces is taken orally, to treat menstrual difficulties and to ease childbirth	75,76
	Kgaba remedies and crushed ostrich eggshell	These are taken orally; crushed ostrich eggshell is used to trigger labour even though its chemical properties are unknown and kgaba is a mixture of different plants such as kgaba etona (<i>Rhoicissus tridentata</i>)	76
	<i>Usigidi</i>	Drop of mercury given orally to induce labour and can be mixed with <i>isihlambelo</i>	76
	Gramophone record	Crushed and mixed with water to induce labour	76
	<i>Mpundulo</i>	<i>Mpundulo</i> a herb taken orally daily in preparation for labour whilst <i>Mbheswana</i> is drunk to enhance labour and reduce foetal distress	57,77
	<i>Mbheswana</i>		
	<i>Asparagus africanus</i>	Quickens labour	78
	<i>Imbiza</i>	Class of purgative medicines for internal cleansing so that uterus accept foetus	79
Zimbabwe	Elephant's dung	Mix with water to quicken labour	34,63
	Donkey placenta		
	Eel fish		
	<i>Dicerocaryum zanguebarium</i>	Soak in water lubricate vagina and widens it for baby to come out easy	34,61
	Sweet potato leaves	Boil and drink for 36–40 days till the onset of labour to quicken labour	34
	<i>Asparagus africanus</i>	Quickens labour	
Ghana	Snot leaves	Crushed and soaked in water to induce labour	
	<i>Pouzolzia mixta</i> solms	Roots extract inserted into the vagina to expand birth canal	
	<i>Annona glauca</i>	For easy delivery	80
	<i>Prosopis africana</i>	Lower abdominal pain	80,81
	<i>Moringa oleifera</i> (moringa)	Blood pressure, bleeding and constipation	82
	<i>Citrus limon</i> (lemon)	Loss of appetite and body weakness	80
	<i>Adansonia digitata</i> (baobab)	Cardiovascular conditions such as hypertension	83
	<i>Carica papaya</i> (pawpaw)	Worm infestation and malaria	84
	<i>Pennisitumn glaucum</i> (millet)	Seeds are used to treat skin rashes and jaundice	80
	<i>Securidaca longepedunculata</i>	Root, bark, and leaves used for health purposes such as liver problems and food poisoning	
	boiled tealeaf and fenugreek herbs	Dizziness, fever and malaria	4
	(<i>Zingiber officinale</i>), peppermint (<i>Mentha × piperita</i>), thyme (<i>Thymus Lamiaceae</i>), sage (<i>Salvia officinalis</i>), aniseeds (<i>Pimpinella anisum</i>), fenugreek (<i>Trigonella foenum-graecum</i>), green tea (<i>Camellia sinensis</i>), garlic (<i>Allium sativum</i>), tea leaf (<i>Camellia sinensis</i>), raspberry (<i>Rubus idaeus</i>), and echinacea leaf (<i>Echinacea purpurea</i>)	Used in combinations treat pregnancy-related complications such as relief of back pain, dizziness, stress and depression, cold, fever, malaria, vomiting and nausea reduction, as well as in the prevention of miscarriages	4

(continued)

Table 2. (continued)

Country	Traditional Medicine	Reasons and How it is Used	Citations
Mali	<i>Ximenia americana</i>	Treat heartburn in pregnancy and prevent foetal diseases	85
	<i>Trichilia emetic</i>	Should only be used externally as a wash to treat fever	85,86
	<i>Euphorbia hirta</i>	Often recommended in pregnancy to increase breast milk production	
	<i>Ficus capensis</i>	Leaf and stem bark facilitate labour	30
	<i>Cola cordifolia</i>	Infants are given barks to gain weight	83
	<i>Adansonia digitata</i> (baobab) <i>Cassia sieberiana</i>	The root bark has a use as a purgative and has a strong bitter taste. The plant is also used against infertility	85
Ethiopia	<i>Zingiber officinale</i> (ginger), <i>Allium sativum</i> (garlic), <i>Ocimum lamiifolium</i> (basil or damakisie), <i>Hagenia abyssinica</i> (koso), <i>Taverniera abyssinica</i> (emergency herb), <i>Ruta chalepensis</i> (rue or tena adam), <i>Lepidium sativum</i> (peppergrass or fetu), <i>Coffea arabica</i> linn (altet), <i>Eucalyptus globulus</i> (eucalyptus leaf), <i>Brassica nigra</i> (mustard seed), <i>Tenaadam</i> (<i>Rutachalensis</i>)	The accessed study did not report the reasons or purposes of using these specific TMs. However, it is generally reported that the herbs are used to treat nausea, morning sickness, vomiting, cough, deficiency in nutrition and malaria	26,27
Benin	<i>Musaceae</i> Bananier, <i>Musa sapientum</i> , <i>Euphorbiaceae</i> <i>Plante corail</i> , <i>Jatropha multifida</i> , <i>Apocynaceae</i> , <i>Rauwolfia vomitoria</i> Afzel, <i>Annonaceae</i> <i>Pomme</i> , <i>Annona senegalensis</i> , <i>Macrosphyra longistyla</i> , <i>Newbouldia laevis</i> , <i>Holarrhena floribunda</i> , <i>Terminalia macroptera</i> Guill, <i>Crescentia cujete</i> , <i>Chassalia kolly</i> Schumach, <i>Ceiba pentandra</i> , <i>Entada africana</i> Guill, <i>Diospyros mespiliformis</i> Hochst, <i>Piliostigma thonningii</i> Schumach, <i>Carica papaya</i> , <i>Lawsonia inermis</i> , <i>Piliostigma reticulata</i> , <i>Ageratum conyzoides</i> , <i>Jatropha curcas</i> , <i>Strophanthus sarmentosus</i> , <i>Boerhavia diffusa</i> , <i>Acacia nilotica</i> , <i>Achyranthes aspera</i> , <i>Aloe buettneri</i> , <i>Annona muricata</i> , <i>Arachis hypogaea</i> , <i>Berlinia grandiflora</i> Vahl, <i>Bidens Pilosa</i> , <i>Bridelia micrantha</i> Hochst, <i>Bryophyllum pinnatum</i> Lam, <i>Cassia sieberiana</i> , <i>Combretum micranthum</i> , <i>Dialium guineense</i> Willd, <i>Eucalyptus camadulensis</i> Dehn, <i>Ficus exasperata</i> Vahl, <i>Ficus lutea</i> Vahl, <i>Guiera senegalensis</i> , <i>Hibiscus surattensis</i> , <i>Hyptis pectinate</i> , <i>Imperata cylindrica</i> , <i>Mangifera indica</i> , <i>Mirabilis jalapa</i> , <i>Moringa oleifera</i> Lam, <i>Nauclea latifolia</i> , <i>Paullinia pinnata</i> , <i>Pterocarpus erinaceus</i> Poir, <i>Spondias mombin</i> , <i>Stereospermum kunthianum</i> Cham, <i>Tamarindus indica</i> , <i>Terminalia avicennioides</i> Guil, <i>Terminalia laxiflora</i> Engl, <i>Uvaria chamae</i> , <i>Vernonia amygdalina</i> Delile, <i>Vernonia colorata</i> Willd, <i>Ximenia Americana</i>	These were found to be used by pregnant women as Antihemorrhagic medicinal plants	87
Nigeria	Bitter leaf, Palm kernel oil, Bitter kola (<i>Garcinia kola</i>), Dogoyaro (Neeme leaf), Garlic, Jute leaves (<i>Utazi</i>), Ginger, Holy Basil leaf/scent leaf, Honey, Herbal mixture (Agbo), Calabash chalk (Nzu), Aloe Vera, Drum stick tree (<i>Moringa</i>), Palm wine, African teak (iroko seed), Bitter lemon/lime, Onion, Cod liver oil, Pumpkin leaves, Shea butter, Pepper/spice, Bark of cashew, lime juice (<i>Alabukun</i>)	There were a number of herbs that were used in Nigeria however the reasons for their use were not specified	28

uterine contraction thereby quickening labour⁴⁶ Although some studies reveal adverse effects of traditional herbs, some highlights their benefit as some herbs have sugar components that can be the source of nutrition and energy

to a pregnant woman, although others are antioxidants with health benefits, thereby boosting the immune system, preventing respiratory diseases and preventing birth defects⁴⁷⁻⁴⁹

Table 3. Challenges and Complication of Traditional Medicine Use in Pregnancy.

Pregnancy Challenges and Complications	Explanation	Citations
Poor monitoring and safety	Several traditional remedies remain untested, and their mode of action or safety is unknown in pregnancy management. Also, their interactions with pharmaceuticals and food consumed by pregnant women are unknown	45,73
Regulation of TM	Some countries have put measures to regularise utilisation of TM even though they still run parallel with the modern system	29,59,69,73
Scanty data	Numerous studies focus on perceptions, prevalence and utilisation patterns of TM	30,32,33,43,62
Negative outcomes	Foetal distress is shown by the high frequency of meconium-stained liquor (MSL), caesarean section and uterine rupture uterine, hyper stimulation, and low neonatal birth weights, preclamsia, nausea, vomiting has been reported due to TM use	32,73
General pregnancy complications	Some pregnancy-related complications have been noted such as miscarriage, separation of the placenta, haemorrhage, obstructed labour and the retention of the placenta	50

Note. TM = Traditional Medicine.

Preeclampsia, nausea and vomiting have been noted in the review as complications among pregnant women who utilise traditional remedies. Other studies acknowledge that preeclampsia, vomiting and nausea are common during pregnancy and suggest modern ways of controlling such as regular intake of at least 1500 mg of calcium each day during pregnancy could significantly reduce the risk of preeclampsia and substantially lower blood pressure⁵⁰ It is also reported that hyperemesis gravidarum, *Zingiber officinale* (ginger) root is beneficial both in milder nausea and hyperemesis⁵¹

Results revealed that several factors had triggered utilisation of TMs, and studies in different geographic setups indicate factors such as the belief that herbal products are superior to manufactured products⁵² Furthermore, discontent with the results from approved modern medicines and the belief that herbal medicines might be helpful in the treatment of certain diseases where conventional therapies and medicines have proven to be ineffective. Some TMs are locally available and easily accessible in SSA. Accessibility and availability of TM in SSA are well documented and highlighted in the literature as an alternative remedy that promotes self-medication⁵²

The review also indicated that there are no formal regulations of this herbal medicines²⁹ The absence of these regulations is contrary to the European Union (EU), which implemented a directive to harmonise the management of traditional herbal medicinal products across the EU and establish a simplified licensing system to help the public make informed choices about the use of herbal products⁵³ It is expected that stakeholders producing herbal products have a product license or become registered as a traditional herbal medicinal dealer/distributor^{53,54} In developing countries, there is a lack of capacity to regulate manufacturing practices and enforce quality standards⁵⁰ These herbal products have been consistently made available to consumers without

prescription, and in most cases, the potential hazards in a low-grade product are hardly recognised⁵²

This review indicated that different TM was used to ensure the sound development of the foetus, quicken labour, prevent or cure malaria and prevent miscarriages. Published sources from countries such as Ivory Coast, Nigeria, Zambia, Uganda, Tanzania, Benin and Gabon reveal extensive use of different types of TMs among women⁵⁵ In a study conducted in Uganda, Ivory Coast, Tanzania, Benin, Gabon study among women, 75, 75, 23, 248, 189 plant species were identified for use during pregnancy and labour, respectively⁵⁵

Limitations of the Study

We did not find some Latin Names for some of the TMs that different women in the literature used, and some literature just presented. It should also be noted that the environment we live in is dynamic, and new information comes through. Therefore, some studies may have been missed in this study. It should also be noted that this study was not funded; therefore, the literature search was limited to only those available sources open access from the databases.

Conclusion

There is proof that TM is widely used during pregnancy among Sub-Saharan African women. However, there is a gap as most studies focus on presenting general TMs utilisation patterns without paying particular attention to its application to maternal health-related issues and the complications associated with its use thereof. There is a need to determine the chemical components and mode of action of these herbs as some are beneficial, whilst others could be harmful, leading to severe maternal complications. Stakeholders within the domain of maternal health systems should design standardised

guidelines and policies that might regulate the utilisation of traditional remedies by pregnant women.

Author's Note

This review was part of a broader study on traditional medicine utilisation and maternal health-related issues.

Author Contributions

NM conceptualised the research idea and designed the methodology and data collection tools. WNN refined the idea and, together with NM drafted the manuscript. WNN performed the management, screening and data extraction in the review process. All the authors coordinated the manuscript writing process; they read and approved the final manuscript.

Declaration of Conflicting Interests

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ORCID iD

Wilfred N. Nunu  <https://orcid.org/0000-0001-8421-1478>

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