



UNIVERSITY
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School of Postgraduate Studies

**Utilisation of traditional medicines among pregnant women in Chilanga: A case study
of Nakachenje Mini Hospital in Chilanga District, Lusaka Province.**

By

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requirements of a Master's Degree of Public Health

April 2024

DECLARATION

I declare that this paper was written by me with my explanation and words, and I have appropriately recognized all the sources consulted throughout the research development. In addition, I declare that this report has been submitted in partial fulfillment of my Master of Public Health and is my exertion that has not been submitted for any other accreditation.

Signature:



Date: 10th April, 2024

Supervisor Endorsement

Signature:



Date: 10th April 2024

DEDICATION

I dedicate this dissertation to my loving husband Paul Mulendema, my mother Noreen Milomo Chisanga, my daughter Eliana Mulendema, and my son Lemuel Mulendema, whose untiring love, encouragement, and sacrifice have been my guiding lights. Their belief in my abilities and continual support have made this achievement possible.

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ABBREVIATIONS

FDG	Focus Group Discussion
HBM	Health Belief Model
HM	Herbal Medicines
KII	Key Informant interview
TM	Traditional Medicines
WHO	World Health Organisation

ABSTRACT

Background: The use of traditional medicines during pregnancy and childbirth is widespread and has been documented in many countries. Traditional medical practices have been passed down through generations and are deeply in cultural beliefs and traditions. The study explores the utilization of traditional medicines among pregnant women in Chilanga: A case study of Nakachenje Mini Hospital.

Methods: This study is qualitative research driven by a grounded theory design. The population was restricted to key informants in health, and pregnant women attending antenatal services at Nakachenje Mini Hospital in Chilanga District of Lusaka Province in Zambia. The method of data collection used were semi-structured interviews with Twelve (12) pregnant women, Two (2) Focus Group Discussions with pregnant women (9 and 10 participants respectively), and Two (2) Key informant interviews. The data were thematically analyzed.

Results: A total of Thirty-three (33) participants which included thirty-one (31) women of reproductive age eighteen years and above and Two (2) key informants who were midwives from the hospital were recruited and interviewed. Three main themes emerged from the interviews: (1) Knowledge and Attitude of traditional medicine use during pregnancy; (i) Perceived benefits, (ii) perceived risks and (iii) Cultural practices and beliefs (2) Types of commonly used herbs (i) Traditional medicine for labor inducing and quickening, (ii) Traditional medicine to prevent complications due to the partner being sexually unfaithful, (iii) Traditional medicine to helping with morning sickness and (iv) Traditional medicine to boost blood in pregnancy and (3) Communication between pregnant women and healthcare providers (i) Non-disclosure of traditional medicine use by pregnant women.

Conclusion: As seen from the study, many pregnant women prefer to use traditional medicines during their pregnancy for the perceived benefits and cultural beliefs. Despite this, all the key informants in the study still felt that herbal medicines may have more adverse effects on both the mother and the baby as compared to conventional medicines. The use of traditional medicines among pregnant women brings about serious encounters for health professionals, as most herbs are not made aware of if taken or not by pregnant women.

Key words: Utilization, Traditional medicines, herbs, Pregnant women, Chilanga

CHAPTER ONE

1.0 INTRODUCTION

In the sphere of healthcare, the use of traditional medicines by pregnant women is a significant concern. In poorer nations, including Zambia, the use of traditional medicines by pregnant women is still a serious public health issue. The use of traditional medicines during pregnancy and childbirth is widespread and has been documented in many countries. However, there are also concerns about the safety and quality of some traditional medical products and practices, especially when used without adequate guidance from qualified providers or when combined with conventional medicines (WHO, 2019). Despite a lack of science-based evidence, the use of herbal products for the management of pregnancy-associated challenges is common, due to the common notion that they are free of toxic effects and adverse reactions because they are "natural." (Bernstein et al., 2021).

Pregnancy is a critical phase in a woman's life, where utmost care and caution are necessary to ensure the well-being of both the mother and the developing fetus (Glynn & Sandman, 2011). Traditional medical practices have been passed down through generations and are deeply rooted in cultural beliefs and traditions. Even though modern medicine has made significant advancements in prenatal care, there is still a considerable number of women who rely on traditional medicines during their pregnancy (Mudonhi and Nunu, 2021), as some often turn to these traditional medicines due to their accessibility, affordability, and the perception that they are a natural and holistic alternative to modern pharmaceuticals (WHO, 2013).

In contrast to contemporary licensed drugs, traditional medical practices are often not supported by success or potency (Dew & Liyanagunawardena, 2023). This raises concerns regarding possible side effects, particularly in high-risk individuals like pregnant women where embryotoxicity occurs, as using herbal medicines in the first 3 months and late in the third trimester is dangerous for the fetus (Laelago, 2019). However, a study conducted in Zimbabwe found that the prevalence of traditional medicine utilization among pregnant women was estimated to be 28%, and the use is significantly related to the lesser chances of experiencing maternal complications. A significantly higher prevalence of maternal complications was observed in women who did not use traditional medicine compared to those who did (Mudonhi, 2021).

This dissertation aims to address some of these questions by examining the utilization of traditional medicine during pregnancy among women. By doing so, the research will be able

to shed light on this important topic and help inform pregnant women and policy decisions related to maternal health.

1.1 STATEMENT OF THE PROBLEM

Although there is a scarcity of qualitative data on the use of traditional medicine during pregnancy in Zambia, it is widely acknowledged that traditional medicine has played a key role in pregnancy, delivery, and the postpartum period since the pre-colonial era (El Hajj et al., 2020). The statistics in Zambia on the usage of traditional medicines by expectant mothers are still quite concerning. For instance, a study carried out in Lusaka, Zambia, discovered that more than half (70%) of women rely on the usage of herbal medicine for primary healthcare (Chichonyi & Mwiinga 2017).

There is a dearth of empirical information about the safety, efficacy, and potential hazards connected with utilizing traditional medicines during pregnancy, despite the increased interest in this topic among women (WHO, 2019). Some herbs used in traditional treatments have the potential to have negative side effects, be combined with prescription drugs, or have teratogenic effects on the growing fetus (Teschke and Eickhoff, 2015). This gap in knowledge poses potential risks for both maternal and fetal health, thereby necessitating a closer look at the utilization of traditional medicines among pregnant women. To guarantee the greatest potential health outcomes for expectant women, it is also necessary to comprehend how traditional medicine should be employed in conjunction with contemporary medical actions.

Therefore, this study aims to explore the knowledge, attitudes, and perceptions utilizing of traditional medicines among pregnant women. The study targeted pregnant women at Nakachenje Mini Hospital in Chilanga District of Lusaka Province.

1.4 JUSTIFICATION OF THE STUDY

There are few studies in Chilanga that have been conducted to explore the utilization of traditional medicines among pregnant women attending antenatal care services. The intention of this study is to bridge the knowledge gap and advance the facts about the advantages and hazards of using traditional medications while pregnant. Pregnant women are frequently left to make healthcare decisions without enough information or support due to a lack of guidelines and policies on the safe and effective use of traditional medicine during pregnancy.

The study's findings will help build a body of knowledge regarding the effectiveness and usage of traditional medicine during pregnancy and will guide policy and practice in Chilanga to

promote mother and child health. Investigating this subject has revealed how traditional medicine use during pregnancy is viewed by people and how they behave. Among the various reasons for the use of traditional medicines among pregnant women has been a mixture of several causes, not limited to perceived benefits and cultural practices and beliefs. The factors that influence women's decisions to use traditional medicine during pregnancy are necessary since they may provide insight into how to improve both maternal and fetal health through therapy.

The study paid attention to the common types of traditional medicines that are used. Knowing about the specific traditional medicines used during pregnancy will help with identifying the potential dangers and benefits of using traditional medicines during pregnancy. This knowledge can improve maternal and child health outcomes. Healthcare professionals may give pregnant women accurate advice and ensure the health of both mother and child by determining the efficacy and safety of these practices.

1.2 RESEARCH OBJECTIVES

1.2.1 Main objective

To explore the utilization of traditional medicines among pregnant women in Chilanga: A case study of Nakachenje Mini Hospital in Chilanga District, Lusaka Province

1.2.2 Specific Objectives.

- I. To explore the knowledge and attitudes of pregnant women towards traditional medicine use during pregnancy.
- II. To identify the types of traditional medicines commonly used by pregnant women.
- III. To determine the level of communication between pregnant women and healthcare professionals regarding the use of traditional medicine during pregnancy.

1.3 RESEARCH QUESTION

- I. What is the knowledge and attitude of pregnant women towards traditional medicine use during pregnancy?
- II. What are the types of traditional medicines commonly used by pregnant women in Chilanga?
- III. What is the level of communication between pregnant women and healthcare professionals regarding the use of traditional medicine during pregnancy?

1.5 THE SCOPE OF THE STUDY

The study aims to explore the knowledge, attitudes, and perceptions of the use of traditional medicines among pregnant women in Chilanga, identify the commonly used herbs, and determine the level of communication between pregnant women and healthcare professionals regarding the use of traditional medicine. The study will be conducted using a cross-sectional survey design and will involve pregnant women attending antenatal services in Chilanga at Nakachinje Mini Hospital. The sample included women from different socio-economic backgrounds, and the sample size was determined using the saturation principle for assessing the adequacy of purposive samples. This is the point in data collection when no additional issues or insights are identified and data begin to repeat so that further data collection is redundant, signifying that an adequate sample size is reached (Hennink and Kaiser, 2022). Unstructured questionnaires and focus group discussions were used to gather data, which was then thematically analyzed. The results of the study will give a thorough picture of how traditional medicines are utilized by pregnant women and alert healthcare professionals about potential areas of concern or opportunities for cooperation.

1.6 DEFINITION OF KEY TERMS AND CONCEPTS

For this study, the following are the working definitions of the following key terms.

Utilization - Refers to the act of using or making use of something. In the context of healthcare, utilization can be defined as the process of seeking, obtaining, adapting, and applying healthcare services or practices available in the community (WHO, 2008).

Traditional medicines - The total of 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 as well as in the prevention, diagnosis, improvement or treatment of physical and mental illness (WHO,2013).

Herbs -

Pregnant women – Refers to individuals who are gestating a fetus within their uterus. This physiological condition is marked by the presence of a developing embryo or fetus and the associated anatomical and hormonal changes that occur in the body. Pregnancy typically occurs as a result of sexual reproduction, following fertilization of an egg by sperm, (Gary, 2018).

CHAPTER TWO

2.0 LITERATURE REVIEW

The utilization of traditional medicines among pregnant women has been a subject of increasing interest in recent years. Pregnant women often seek alternative healthcare options, including traditional medicine, to address various health concerns during pregnancy. This literature review aimed to explore the prevalence and factors influencing the utilization of traditional medicines among pregnant women.

2.1 Knowledge and Attitudes of Pregnant Women towards Traditional Medicines Use during Pregnancy

In many cultures around the world, traditional medicine has a long history as a kind of healthcare. Pregnant women have a high degree of knowledge regarding the use of traditional medicine during pregnancy, according to a study done by Alemu Anteneh et al, (2022) on Knowledge and Attitude of Women Towards the Use of Herbal Medicine During Pregnancy and Associated Factors, about 49.1% of participants who were mothers in the Dega Damot District, Northwest Ethiopia, had sufficient understanding of the impacts of HM use during pregnancy, and 55.9% were aware that HM use during pregnancy has negative effects. Additionally, the study's findings stated that roughly 57.3 percent of participants had a favorable opinion of the consequences of HM use during pregnancy, whereas 53.5 percent of participants felt that HM use during pregnancy is not safe for the mother or the unborn child.

According to studies done by (Okafor and colleagues,2016, Smith et al., 2018 and Mwanza et al. 2022), they found that while more than 70% of participants were aware of traditional medicines, only a small fraction (approximately 25%) had accurate knowledge about their safety and efficacy during pregnancy. This disparity brought to light the need for improved education and communication around the use of traditional medications during pregnancy. Johnson and Brown (2019), however, noted that there were a variety of viewpoints among individuals with knowledge, with some women seeing traditional remedies as natural and safer choices, while others raised concerns about potential negative effects on the fetus. This discrepancy highlighted the significance of individualized healthcare advice to meet specific problems.

In a different study, Okafor and colleagues (2016) assessed pregnant women's awareness of potential dangers associated with using traditional medicines in both urban and rural parts of Nigeria. The study's objective was to determine how well participants understood the safety

profiles of conventional treatments through structured questionnaires and interviews. Numerous pregnant women were found to be ignorant of potential negative effects, revealing a considerable knowledge gap that highlights the need for educational programs to raise awareness and encourage well-informed decision-making.

According to a systematic review by El Hajj and Holst (2020), the assumption that herbal products, being natural, are safe and have fewer side events than conventional drugs is the fundamental reason why herbal treatments are so popular among pregnant women. However, low-income nations with a high rate of maternal and newborn problems have not done enough research into the safety of herbal medicines during pregnancy. Traditional medical treatments during pregnancy come with hazards. Nevertheless, in contrast to the review, Mudonhi and Nunu's study in Zimbabwe in 2021 discovered that complications were reported by 29% of the women who were the subject of the study. Comparing those who used traditional medicine to those who did not, the percentage of women who experienced complications was higher in the former group (30 and 26 percent respectively). In a broad analysis, it was found that women who did not use traditional medicine were significantly more responsible for complications than women who did. This study discovered a strong correlation between using traditional medicines and having a lower risk of having a baby with complications, (Mudonhi and Nunu, 2021).

In a mixed-methods study conducted in Malaysian rural and urban areas, Chen et al. (2020) sought to better understand the informational factors influencing pregnant women's decisions to use traditional medicines. The study found that family, friends, and cultural beliefs were key informational sources influencing the usage of traditional medicine. It did this by combining surveys and focus group talks. It's interesting to note that ladies who got their information from healthcare experts were more likely to know their stuff and have a good attitude about using traditional treatment. In addition, Kabaso and Simwanza (2020) conducted qualitative interviews with pregnant women in both urban and rural areas of Zambia. The study also found that decisions about using traditional medicine were highly impacted by cultural values and family members' counsel. The results underscored the value of providing healthcare advice that is sensitive to cultural norms to promote secure conventional medical practices.

2.2 Types of Traditional Medicines Commonly Used by Pregnant Women

Studies have looked into the many traditional medicine types that pregnant women frequently take. Different types of traditional medicines have been utilized in Sub-Saharan Africa for

different purposes (Mudonhi and Nunu, 2022). Among the traditional treatments most frequently utilized by expectant mothers are herbal remedies. Typical examples of often used herbs include ginger and chamomile, which are frequently taken due to their rumored advantages in reducing nausea, digestive problems, and anxiety. To better understand the practice's global applicability, Li et al. (2021) conducted a study in China that looked at the prevalence of using herbal medicines while pregnant and its relationship to mother outcomes.

To investigate how traditional medicinal plants are used by pregnant women, Okafor et al. (2019) carried out a qualitative study in Nigeria. Specific applications, cooking techniques, and cultural value of the plants were all examined in the study. The research showed that a wide variety of plants were utilized for many different things, such as easing pregnancy-related discomforts, encouraging fetal growth, and guaranteeing a safe birth. The study stressed the necessity of incorporating local expertise in traditional plant medicines into maternal healthcare services for culturally aware and all-encompassing prenatal assistance. Additionally, Garcia et al. (2019)'s research in Zambia looked at pregnant women's use of herbal therapies in both urban and rural settings. The results of the study demonstrated the importance of locally accessible herbs and emphasized the demand for culturally appropriate medical advice.

Traditional pregnancy-related medicine frequently involves infusing herbs, roots, and other plants into teas and tonics. These mixtures are thought to have several health advantages, ranging from enhancing immunity to facilitating better digestion. The usage of medicinal teas by pregnant women in peri-urban villages was the subject of a study by Mwila et al. in Zambia (2019). The research revealed that making tea is frequently done with locally grown plants. In contrast, a study conducted in South Korea by Kim et al. (2017) looked at pregnant women's herbal tea consumption habits within the context of contemporary healthcare.

Pregnant women around the world use a variety of methods that are ingrained in local cultural traditions. The local relevance and cross-cultural nature of these practices are both highlighted by empirical reviews. International research emphasizes common patterns across societies, while studies from Zambia emphasize the importance of cultural awareness in guiding the use of traditional medicine.

2.3 The level Communication between Pregnant Women and Healthcare Professionals Regarding Traditional Medicines Use

To ensure informed decision-making and secure maternal healthcare practices, effective communication between pregnant women and healthcare professionals is essential. Results for

mother and fetal health can be considerably impacted by the degree of communication regarding the use of traditional medicines during pregnancy. The dynamics of communication between pregnant women and medical professionals were examined in a study by Nguyen et al. (2017). Both expectant mothers and medical professionals were questioned by the researchers. Only 40% of pregnant women reported having conversations with their healthcare providers about using traditional medicine, which pointed to a serious communication gap. This lack of communication may be caused by several things, such as healthcare professionals' reluctance to bring up the subject and a dearth of patient-initiated conversations.

The dynamics of communication are further emphasized in a mixed-method study done in south Korea by Lim et al (2020). The study was conducted with pregnant women from various backgrounds, the researchers ran questionnaires and focus groups. Only 15% of pregnant women-initiated conversations with healthcare professionals about using traditional medicine, according to the findings. Only 10% of medical professionals actively sought information on traditional medical procedures during prenatal visits. A number of variables, including time restraints during appointments and healthcare personnel's inadequate familiarity with traditional medical practices, were blamed for this lack of communication. The study recommended the creation of thorough training programs for medical practitioners to increase their knowledge of traditional medicine and improve their capacity for meaningful conversation.

Results from a Canadian study by Wong et al. (2019) indicated potential conflicts between conventional care and traditional treatments due to insufficient communication channels. This highlighted the significance of effective communication between healthcare professionals and expectant mothers to achieve a thorough grasp of their treatment choices. However, Chen et al. (2020) discovered through their research in Malaysia that pregnant women who received information from medical professionals were more likely to have accurate knowledge and favorable views on the use of traditional medicine. This suggests that healthcare practitioners have a significant influence on how pregnant women perceive and choose to use traditional medicine. The importance of communication is emphasized by a study done in Colombia by Martinez et al. (2021). They discovered that individuals' decisions to utilize conventional drugs were influenced by their access to healthcare services. This shows that better access to healthcare professionals and increased communication may result in patients making better decisions.

Mulenga et al. (2018) conducted a study in Zambia that showed different levels of communication regarding the use of traditional medicines between pregnant women and healthcare professionals. While several women claimed there were open dialogues, others voiced concerns about being judged, resulting in silence. In a similar vein, Ngoma et al. (2020) pointed out that cultural beliefs affected how pregnant women communicated with medical professionals about traditional medicine practices in Zambia. Due to perceived conflicts with Western medical practices, some women were reluctant to discuss their use of traditional medicine.

2.2 THEORETICAL FRAMEWORK

The theoretical framework for the use of traditional medicines among pregnant women was developed by combining theoretical stances from the fields of healthcare, sociology, and cultural studies. The following is a suggested theoretical framework that combines elements from these fields:

2.2.1 Health Belief Model (HBM): Rosenstock, I. M. (1974)

This model is a well-established theory in public health and healthcare communication. It posits that individuals' health-related behaviors, including their decisions regarding healthcare practices, are influenced by several factors: Perceived Susceptibility: This aspect of HBM relates to pregnant women's perception of their susceptibility to health issues during pregnancy and how traditional medicines may mitigate those risks. Perceived Severity: It involves pregnant women's perception of the seriousness of health issues during pregnancy and the potential consequences of using traditional medicines. Perceived Benefits: Pregnant women's beliefs about the effectiveness and benefits of traditional medicines in managing pregnancy-related concerns. Perceived Barriers: This element considers the obstacles or barriers that pregnant women may face when considering the use of traditional medicines, such as communication gaps with healthcare providers. Cues to Action: The theory suggests that cues, such as advice from family members, healthcare providers, or cultural beliefs, can prompt individuals to take action regarding their health. Self-Efficacy: This factor reflects the individual's confidence in their ability to take the necessary steps to protect their health, which includes making informed decisions about traditional medicine use.

CHAPTER THREE

3.0 METHODOLOGY

3.1 RESEARCH DESIGN

The study was a cross-sectional (descriptive) qualitative approach, with semi-structured interviews and focus group discussions serving as the primary data collection methods. This design gave room for in-depth exploration of participants' thoughts, experiences, and perspectives related to traditional medicine usage during pregnancy. The study commenced with a thorough review of relevant literature to establish existing knowledge in the field both locally and internationally.

The purpose of qualitative research is to get an in-depth understanding of social phenomena in their natural setting. Grounded theory was employed in this study to reveal pregnant women's distinct perspectives and experiences with traditional remedies. It provided insights into the various factors influencing their decisions to use traditional medicines, such as perceived benefits, cultural beliefs, personal experiences and lack of access to formal communication from healthcare providers. Thus, grounded theory is a qualitative research methodology in which the researcher creates a broad explanation of a process, action, or interaction informed by the perspectives of a large number of participants (Strauss & Corbin, 1998).

3.2 STUDY SETTING

The study took place at Nakachenje Mini Hospital, located in the Chilanga district of Lusaka province. The hospital was purposefully selected. The hospital is situated along Mumbwa Road, west of the police station checkpoint, and southeast of Westwood Police Station. This made it easier for many pregnant women from various socioeconomic backgrounds and statuses to access the facility, including referrals from the rural health centers nearby.

3.3 STUDY POPULATION

The sample for this study consisted of pregnant women in the reproductive age range of 18–49 years of age who were attending antenatal services at Nakachenje Mini Hospital in Chilanga district. It also consisted of key informants from the facility. The study did not include pregnant women attending antenatal services who were less than 18 years old at the time due to the fact that they are considered minors according to Zambian laws. Chilanga District has a population of about 225,276 people, of which 50.7% (114,181) are women, according to Zamstats 2022.

3.4 SAMPLE SIZE

Data saturation was used to establish the sample size, where new information or insights were no longer being obtained from additional participants. This technique is the moment in data collecting when no more issues or insights are uncovered, and data begin to duplicate so that further data collection is redundant, indicating that an acceptable sample size has been attained (Hennink and Kaiser, 2022).

3.5 SAMPLING TECHNIQUES

Participants at the Nakachenje Mini Hospital were chosen using purposive sampling, ensuring a diversity of age, educational background, and cultural background. Thirty one (31) pregnant women were chosen from the Hospital. The pregnant women selected are those that were attending Antenatal services from the Hospital at the time of the study. The women were selected with the help of the midwives present at the Hospital.

Secondly convenience sampling was used to select two (2) facility's medical staff. The staffs were chosen as they are the ones who have direct contact with expectant mothers during their antenatal appointments.

3.6 DATA COLLECTION

Semi-structured interviews, focus groups, and key informant interviews were used to obtain data.

3.6.1 Semi-structured Interviews

Semi-structured interviews were conducted with the chosen pregnant women in a semi-structured manner. The interviews were focused on learning about the participants' perspectives on using traditional medicines during pregnancy as well as their experiences, attitudes, and beliefs in this regard. The questions were open-ended, allowing participants to express their opinions in their own terms. Interviews were conducted in English, with Nyanja explanations provided as needed. Further exploration of particular aspects of their experiences was accomplished using probing questions.

3.6.2 Focus group discussions

Focus Group discussions were held in addition to interviews to promote group interactions and produce a wider diversity of viewpoints. During the moderated conversations, participants were asked to share their experiences, views, and any similarities or differences they had noticed in the use of traditional medicine during pregnancy.

3.6.3 Key informants Interviews (KII)

A key informant in this study is someone who has comprehensive knowledge of maternal and pediatric health. The KII was incorporated to help understand how pregnant women use traditional remedies through their experience with pregnant women. Participants in this strategy were midwives chosen from the Nakachenje Mini Hospital. The goal was to understand how traditional medicines are used by pregnant women in the Nakachenje Mini Hospital catchment area by gathering a variety of opinions from experts and policy implementers.

In all these methods, a semi-structured guide with mostly open-ended questions was employed to aid the collection of data.

3.7 DATA ANALYSIS

The data was analyzed using thematic analysis approaches for interpreting qualitative data, which entail going through a data collection to locate, analyze, and report repeating patterns (Braun and Clarke 2006).

Data preparation and organization were done immediately after each interview and FGD. The data was organized immediately after each interview and FDG. It was carefully managed by ensuring that all the acquired data which included the notes, interviews, focus group discussions, and participants were appropriately labeled. To keep participants' identities hidden, labeling required the use of codes. All notes taken during the interviews were coded, as were the audio files. To avoid tying any participant to a specific name, none were mentioned. The data that was gathered was verbatim transcribed and the transcripts were reviewed multiple times to gain a comprehensive understanding of the participants' responses. This step allowed for immersion in the data and facilitated the identification of potential patterns and themes. After this followed the initial coding of the data. This involved manually capturing the key ideas, concepts, and phrases present in the transcripts. The data was firstly written down in a proper format for easier processing. Each segment of data was systematically coded to reflect the content and context of the participants' experiences and perspectives.

The next stage was to identify the themes that emerged from the initial. The initial codes were then organized into overarching themes through a process of iterative comparison and grouping. Themes emerged as common patterns and connections across codes, representing the central ideas and issues relevant to the research objectives.

Lastly the data was reviewed and interpreted, this involved reviewing the identified themes and refining them. The themes were interpreted in relation to the research questions and theoretical framework, highlighting the significant findings and insights derived from the data.

This technique was appropriate for this study because it allowed me to examine the data gathered through one-on-one interviews and FDGs, revealing patterns and themes that provided a deeper understanding of valuable insights into the use of traditional medicines among pregnant women in Chilanga. This was accomplished by meticulously scrutinizing the data to uncover similar themes, subthemes, category and codes of meaning that appear repeatedly.

3.8 ETHICAL CONSIDERATION

The applicable institutional review board, which includes the research ethics committee, the National Health Research Authority, and the District Health Office through the District Health Director for Chilanga, provided ethical permission for this study. The study adhered to ethical principles such as voluntary participation, informed consent, and confidentiality. It was recognized that participants had the right to leave the study at any time. No problems concerning the three ethical principles while carrying out the study were experienced, such as consent, confidentiality, potential risks, reimbursements, and justice, which are some ethical concerns.

3.8.1 Informed Consent

The key informants and pregnant women who volunteered to participate in the study were given written consent. The study included only pregnant women and key informants who consented to being questioned. It was essential to obtain consent for this study to respect the participants' rights and dignity. Additionally, it implies that the participants have been made aware of the objectives, procedures, risks, and advantages and that they have freely chosen to participate or withdraw at any time (Faden & Beauchamp, 1986).

3.8.2 Beneficence

Participants were given the reassurance that nothing bad would happen to them because there were no risks associated with this study other than the potential for accidental disclosure of private or confidential information or unpleasant conversations regarding the use of traditional medication. Encouragement and assurances that all interview material will be kept confidential, as well as the ability for participants to withdraw from the interview or not discuss topics with which they are uncomfortable helped to mitigate possible risks. In terms of benefits, a drink

was given to only participants who took part in the focus group discussions, as the discussions took more time compared to one-on-one interviews.

3.8. 3 Justice

All participants were informed about how they had been chosen to participate in the study. This minimized doubt and answered respondents' questions about why they were chosen for the study over other women. Participants were informed about their rights to stop the study at any moment and to file complaints with authorities and even the researcher.

CHAPTER FOUR

4.0 PRESENTATION AND ANALYSIS OF STUDY FINDINGS

This study was established to explore the utilization of traditional medicines among pregnant women. In terms of the study's specific objectives, three key themes emerged about the use of traditional medicines among pregnant women, which were: Knowledge of traditional medicine usage during pregnancy, attitude toward traditional medicine use during pregnancy, and communication between pregnant women and healthcare practitioners.

4.1 Knowledge and attitudes of traditional medicine use during pregnancy

4.1.1 Perceived benefits

Inducing and Quickening labour stages

One-third of the participants alluded to taking the following traditional medicines: okra roots, mbono, papaya, tomato fruit, and rabbit droppings (see table 2). They indicated that using traditional medicine during pregnancy helps to induce and speed up the labor process in the third trimester, particularly from the seventh to the ninth month. The following sentiment exemplifies this:

From my experience, I think women who take medicines have easier births as compared to those who do not. [Most participants nodded]. (36-year-old woman, FDG1)

“In one of my earlier pregnancies, I was admitted to the hospital for one month and two weeks with signs of labor; yet, without making any progress, other women would arrive, deliver, and leave me behind. Not until my relatives decided to secretly give me Mbono and Okra roots (see table 2) soaked in water for me to drink while in the hospital, and the last thing I was told to do was drink the herbs and intentionally drop the cup I drank from on my tummy, and no sooner did I do that, I went into active labor and was successfully delivered the same day” (26 year old, FDG1).

Other participants together with the key informants disputed this as they stated that even if those herbs are taken, if the time has not come for the baby to be brought forth, it will not happen, this can be illustrated further by the following quotes:

Uuuuummm, as for me, I was given some medicines to rub on my belly for the path to open up, but honestly, I did not see the medicines working because, despite having taken the medicines, I was in labor for a very long time (22 years old, P6).

Hahahahahah, aweh sure, but to be honest, what I was given to take did not give me any complications, but the medicines did not seem to work for the intended purpose of quickening labor as I was in labor the longest time (30 years old, P7).

Further, when asked about what her views were on common reasons why pregnant women choose to use traditional medicines during pregnancy, one of the key informants from the hospital stated that some pregnant women tend to think and believe that when they take the herbs, their labor will be fastened. This is evidenced by the following quote:

Most pregnant women that come to be delivered at the hospital take herbs starting from the third trimester in the hope of having a quick delivery, as they do not want to wait for the stages of labor to progress naturally, which can take even up to twelve hours. All they want is to be delivered immediately; they reach the hospital and are sent back home quickly (Nurse: 36).

Helps with morning sickness

Findings have revealed that some participants stated that taking traditional medicines helps with reducing the morning sickness that a pregnant woman goes through because, according to them, morning sickness is very uncomfortable and makes them feel very reckless and powerless, and what sometimes contributes to it is the conventional drugs that they are given at the hospital. Due to this, they take herbs such as ginger and lemon, which help prevent or stop the morning sickness. This is exemplified by the quote:

You find that the drugs that are given at the hospital do not go well with me; they make us feel like vomiting. Hence, we take herbs like ginger and lemon to help with vomiting, and it does not give us any side effects. Hence, we are prompted to continue taking the traditional herbs because they have no side effects as compared to conventional medicines. [All participants agreed and nodded.] (20 years old, FDG1)

Boost Blood in pregnancy

Most study participants reported taking the following traditional medicinal plants to boost their blood to prevent anemia; Bondwe, Mukuyu, Avocado leaves, Muzungula, Molasses, and beetroot to prevent anemia (see Table 2), as they felt that anemia can be fatal to a pregnant woman and can even be deadly to their babies as well. According to them, conventional drugs seem to have side effects as compared to traditional medicines, hence the incorporation of herbs in their prescriptions. This is exemplified by these quotes:

"I have an issue with anemia, and my blood is always on the low side. The doctors always give me ferrous sulfate tablets and recommend that I buy feroglobin to boost my blood. Unfortunately, I usually find it very challenging to take those meds as they make me feel like vomiting and lose my appetite for food; hence, my mother always gives me herbal medicines (beetroot boiled in milk and

molasses) to boost the blood quickly and help me to feel less nauseated and less weak (30 years old, P3).

I was given a concoction made of beetroot, mukuyu, and milk to drink that boosted my blood in two weeks as compared to the ferrous tablets they gave me at the hospital, which proved to be slow (32 years old, P12).

Those drugs from the hospital, when taken, make me nauseated and develop headaches, especially in the first trimester. My heart starts to beat fast, so I was advised by my mother to instead take natural remedies like bondwe and Fig tree leaves to help boost the blood. [Some participants were aware of this combination of herbs.] (34 years old, FDG2)

4.1.2 Perceived risks

Maternal and child health complications

Most of the participants alluded to the fact that taking herbs during pregnancy may come with a lot of complications that can affect both the mother and the unborn baby in the womb. Most of the herbs are not taken in specified quantities compared to conventional medicines. This can be exemplified by the following quotes:

You may never be too sure about the kind of herbs someone can be giving you; some people can give you the wrong medicines that will harm your baby when you choose to drink them (29 years old).

Many times, traditional medicines do cause complications such as threatened abortions, and some women have even died due to that. I don't see any good with the medicines (26 years old, P5).

It is always 50/50; whether you take the herbs or not, you might or might not have complications; taking herbs is no guarantee for a safe delivery (36-year-old, P10).

The key informants also had something to say when asked what some of the perceived risks associated with using traditional medicines during pregnancy, their responses are illuminated in these quotes;

women tend to take these herbs without paying attention to the quantity which may cause overdose resulting in stillbirths due to concoctions as they are not clear whether they are poisonous or not (Key informant 1)

Further the study findings discovered that the babies born from some mothers who took herbs when pregnant to some extent look different just by sight when they are born as compared to

those born from mothers who did not take any herbs, this was exemplified by both the participants and one of the key informants;

When you pay attention to children being born, you will notice that a child born from a woman who took traditional herbs looks different as compared to a baby born from a mother who did not take any herbs, the child whose mother took herbs goes into panic to come out, it is like the child is being forced by something to come out, this usually causes the child to drown, become distressed and even die due to the herbs (FDG 1).

When a pregnant woman drinks some herbs to have a quick labor, it usually disadvantages their babies as they come out very tired and fetal distressed when born, and the medicines can be swallowed by the baby, which causes complications for the baby. The baby can have what is known as disilia, difficulty breathing, tiredness, or even death (Key informant 2).

The study further found out that some participants from the two FDGs had personal experiences regarding the risks they incurred from one of their previous experiences, where some lost their babies and others had their babies saved by the health personnel at the hospital all due to the intake of traditional medicines. This is what they had to say;

As for my first pregnancy before I studied nursing, I never knew that it was not allowed to take herbs while pregnant. I used to take different herbs when my pregnancy reached seven months up to nine months; unfortunately, the child came out looking greenish, and by then I was still young and the nurses were not happy with me [all participants expressed sadness] (32 years old, FDG2).

I took the herbs in my previous pregnancy, and when it was delivered, the baby was born greenish, to the point that the nurses with me in the labor ward started scrubbing the baby to remove the green staff to save the baby's life (23 years old, FDG2).

After my child was born, the baby started fitting like someone about to die. Due to the herbs that I took at home before going to the hospital when labor pains started, I was very scared, but luckily the baby was saved (FDG1, 26 years old).

Despite all the risks that were brought forward, one participant was not in agreement that traditional herbs could cause maternal complications and stillbirths, as she believes that herbs always work just fine to help pregnant women. This is illustrated by the following quote:

I have never heard anyone having complications due to the intake of the herbs, unless they just took the wrong herb. (18 years old, P11)

4.1.3 Cultural practices and beliefs

Protection from the partner's unfaithfulness

Findings from this study revealed that many women believe that the unfaithfulness of their partner during pregnancy can cause obstructed labour, a situation they call Nchila in the local language. The study discovered that this belief has a major influence on the use of traditional medicines among pregnant women. Women take this belief seriously, which according to them, results in delivering a baby through a caesarian section and to a worse extent, death. This is exemplified by the following quotes from both the respondents and key informants:

There are herbs we drink in order to protect a mother in labour if the husband is unfaithful, this is called Nchila. If my husband sleeps with another woman while am pregnant, that will cause the fetus not to be able to pass through the cervix, hence I need to take medicines to protect myself just in case my husband cheats on me because when asked he might never accept having done so (P1, 30 years old)

Traditional medicines like Shimakole and Crossroads Sand are good in pregnancy as they protect us women from a cheating husband because if you don't take them, you can end up having a caesarian section due to obstructed labor (P9, 29 years old).

In my previous pregnancy, my husband had an affair with another woman, and when my time for labour started, the baby started moving upwards instead of downwards. I felt like the baby was kicking my heart, and that experience made me feel like dying. To help me, my elders understood what was happening and thus how I was given the herbs (Shimakole) to drink, and I felt better [some participants were thrilled to hear this]-(20 years old, FDG1).

One key informant also added to this perception of Nchila when asked why many women take the herbs when pregnant, this is what she had to say;

Ummmmmm some pregnant women believe that when the husband is having an affair then she will have difficulties in labor, due to this they are prompted to take the herbs to avoid the complications they believe will occur (Key informant 1)

External influence from the community and family

Across all interviews, participants stated that the influence they receive from both family and the community is critical to deciding whether to use the herbs or not. More than two-thirds of the study participants stated that their family members, elderly women, the community, and

their friends pressured them to use traditional medicines due to culture. More quotes are illustrated as shown:

“In my community, we use herbal medicines because that’s what the old people believe and pass on the message to us young folks. When you are pregnant, the elderly will reach out to you and give you different types of roots and leaves to induce and quicken labour (Table 2) and direct you on how to use them, in most cases they advise us to start taking the herbs when the pregnancy reaches 7 months going upwards and emphasize not before seven months (P12, 18 years).

We get such information from parents Grandparents, friends, community. The elderly bring medicines to us and say that these medicines I have given you will open the path for the baby to pass so that you have the quickest labour especially if your husband does have an affair with a different woman while pregnant. [All participants were in agreement.] (28 years old, FDG1)

The health personnel from the hospital, when asked what they thought were the common reasons why pregnant women choose to use traditional medicines during pregnancy stated that many times it is due to cultural beliefs that run in the community and among close relatives and friends who advise the pregnant woman to decide to use the herbs, the following quote illustrated the discussion;

Many times it is their parents' influence and experiences that they have with regards to the use of herbs in pregnancy. They tell pregnant women to also take some herbs, especially teenagers and first-time moms who are not yet experienced, it’s the most common reason that influences mothers to take the drugs (Key informant 2)

Pregnant women, when asked why they took the herbs, often say that it is our culture and they believe that taking herbs will protect them from many health issues. (Key Informant 1)

Encourage someone to use

The findings of the study found that most pregnant women who have used traditional medicines in their pregnancies would not encourage another fellow woman to take what they took unless it’s a relative or someone they know closely. According to them, taking herbs may lead to both positive and negative outcomes, and if things go to the negative and they encourage someone, they fear that they can be blamed for having done so, hence they would rather not say. These findings are narrated as follows:

“I can never allow anyone else to go through what I went through by taking traditional medicines because the time I did so, my child was born looking green, and had it not been for the nurses who took care of my child at that time, I could have lost the baby.” [All participants agreed] (32 years old, FDG2). “I can never allow anyone else to go through what I went through by taking traditional medicines because the time I did so, my child was born looking green, and had it not been for the nurses who took care of my child at that time, I could have lost the baby.” [All participants agreed] (32 years old, FDG2).

“I cannot encourage anyone to take traditional medicines while pregnant because they can be harmful to both the mother and baby.” (26 years old, P5)”

“I would not encourage anyone to take the traditional medicines because our elders tell us not to disclose the traditional medicines they give us, as it is our culture that should be respected at all times.” (24 years old, P7).

“The only reason I can discourage someone from taking the herbs is because they do not allow them at the hospital to take the herbs, the reason being that if anything were to go wrong, I would be blamed for it.” [Most participants nodded] (28 years old, FDG1)

“I cannot encourage anyone to take traditional medicines because even after I took the herbs, I was given to quicken labour, I experience long labour pains, meaning the herbs might not have worked for me” [A third of participants nodded] -(19 years old, FDG2)

In contrast, despite not being a good idea for most pregnant women to encourage another pregnant woman to take the herbs, others still felt the need to encourage their peers. They believe that just because traditional medicines have not worked for others, it does not mean that they do not work at all. Here is what one participant had to say:

“I can encourage someone because nowadays men cheat a lot, which results in Nchila, which would result in labor complications if traditional medicines are not taken.” (36 years old, P10)

4.2 Traditional medicine used

The study has revealed that pregnant women use the traditional medicines listed in table two and table three to induce or facilitate labor, to help with morning sickness, to boost blood to prevent anemia and to protect themselves from their husband's infidelity.

Table 2: Most common traditional medicines used by pregnant women to facilitate labour, quicken labour, and protect themselves from their partner's unfaithfulness

Types of herbs	No. of women who reported using	Preparation	Reason for use
Ripe tomato fruit	2	Cut the vegetable into small pieces and eat	To activate labour
Crossroad sand	25	Get a hand full of sand and out in a bottle of water and drink	Prevent complication due to husband's infidelity
Caster plant (Locally known as Mbono or Mabbona in Zambia)	20	Leaves or roots are soaked in water and to drink when labour begins	Open birth canal to quicken labour
Lady fingers and bush okra (Locally known as delele)	25	Boil the leaves and drink the fluid	Induces labour
Papaya	7	Cut the fruit into pieces and eat	To activate labour
Fyopolela	26	Get the roots of the tree and boil it in water and fruit the fluid	Prevent complications due to husband's infidelity
Any tree whose roots have crossed a pathway	2	Put the dung in water and drink it	To activate and fasten labour
African chewing gum or snot apple (locally known as Shimakole/matohwe in Zambia)	26	Crushed roots or leaves are put and mixed with Vaseline/ Petroleum jelly to make a paste that is applied on the belly	To prevent complications due to the partner being sexually unfaithful
Rabit droplets	2	Dried droplets are crushed and mixed with Petroleum jelly to make a paste that is applied on the belly, then mixed up with water on the onset of labour	To induce and quicken labour

Table 1: Most common herbal preparations used by the participants to boost blood and reduce morning sickness during pregnancy

Types of herbs	No. of women who reported using	Preparation
Fig tree leaves (Locally known as Mukuyu in Zambia)	17	Boil the leaves and drink the liquid, can be used as a tea or use the liquid to prepare porridge
Avocado leaves	14	Boil the leaves and drink the fluid
Moringa leaves (stenopetala)	5	Dried leaves added to hot water and taken as a tea.
Kigelia Africana/Sausage tree (Locally known as Muzungula in Zambia)	3	Dry the fruit, add the dried fruit to hot water and let it cool to drink
Amaranth leaves, (Locally known as Bondwe in Zambia)	25	Boil the leaves and drink the fluid or prepare it as a vegetable and eat with as a meal
Beetroot	13	Cut into small pieces, boil in water, and drink. Milk can be added to the water.
Molasses	13	Add the molasses to tea or warm water and drink.
Ginger	20	Chewed directly as it is/ cut into pieces and added into hot water and drink/used in powder form too- for morning sickness
Lemon	24	Extract the juice and drink it- for morning sickness

4.3 Communication between pregnant women and healthcare providers

4.3.1 non-disclosure of traditional Medicine Use

The urge to protect their source of traditional medicines

Several women mentioned that they fear talking to health personnel about issues related to traditional medicines for fear of being asked about where and who gave them the herbs. In trying to protect their source, mainly their family members, they would rather say when asked; this is exemplified by the following quotes;

We fear to open up to nurses when asked if we took the herbs because we might get in trouble with the people that made us drink the herbs most likely our grandparents, [All the participants giggled] - (FDG2).

“On the first pregnancy, my grandmother gave me the medications to take when my pregnancy was 7 months old, when I went into labour, I was instructed not to disclose her name and mention anything to nurses about taking any drugs, so I only got to tell the nurse that I took drugs after I saw that me not disclosing would lead to the death of my child” (30 years old, P3).

Fear of a negative response from their healthcare providers

It was discovered in the study that a third of pregnant women mentioned that it is not easy to open up to the nurses when asked if they took any herbs prior labour for fear of a response, they would get from the health professionals. According to them, many times health personnel do not take it lightly if they find out that a woman took some herbs before delivery. Pregnant women would rather not say anything even when asked so that they are given the same treatment as those who did not take it.

“When in labour one of the nurses told me that if the child died because of the herbs I took I would be on my own, hence I decided to not agree that I drank some herbs, luckily the baby did not have any complications when born” (36 years old, P10)

“I would rather not say this because am afraid to be told that the child has developed a problem because of the herbs I took” (18 years old, P8)

“The nurses get upset when they hear that a woman has taken some herbs before labour, so we would rather not say so that they give me the complete services that I need from the hospital.” [All the participants nodded] - (FDG1)

During antenatal visits all the pregnant women are educated on the dangers that taking traditional medicines could cause to the pregnancy, due to this woman who still choose to take the herbs, do not find it easy to open up to the midwife to elucidate the issue because they believe that it becomes like a crime since, they are warned during antenatal visits.

“I arrived at the hospital fully dilated, when I was asked by the midwife if I had taken any herbs, I denied it because I was very much aware that during antenatal visits, I was warned by the nurses not to take any herbs” (FDG1).

Lack of stated guidelines from the government

The study found that in Zambia there are no stipulated guidelines on how to handle a woman who has taken herbal medicines and has come to be delivered, or what medicines are good or not to be taken. Most participants stated that they would feel free to talk to the health personnel only if there were written and documented guidelines unlike the word-of-mouth pieces of advice and teaching that they receive during antenatal visits. This is what one participant had to say;

“You know when something is written on the wall or given as a leaflet from the hospital is taken more seriously unlike being told not to take herbs when pregnant when in the community, we hear a lot of good things from those who have taken the herbs while pregnant”. (32 years old, P12)

When the key informants were asked if there are any specific guidelines or regulations in place regarding the utilization of traditional medicines during pregnancy in this community, this is what they had to say:

Not that I know of, it has just been preached by word of mouth (Key Informant 1).

They are taught through word of mouth; there are no stipulated guidelines that I know of (Key Informant 2).

Table 2: Summary of Data analysis showing key codes and key themes and sub-themes

Themes	Sub-themes	Category	Codes
Knowledge and attitude	Perceived benefits	Inducing and quickening labour Helping with morning sickness Boost blood in pregnancy	Fast delivery Makes us feel at ease Boost blood faster without side effects
	Perceived risks	Maternal and child health complications	Cause stillbirths Delays labour
	Cultural practices and beliefs	Protection from the partner's unfaithfulness External influence from the community and family Encourage someone to use	Causes obstructed labour Culture is from one generation to another Not easy to do so
Types of commonly used herbs	Traditional medicine for labor inducing and quickening	Ripe tomato fruit, Caster plant, bush okra, Papaya, tree whose roots have crossed, Rabbit droplets	The medicines are taken orally starting from the 7 th month or rubbed on the belly when labor starts
	Traditional medicine to prevent complications due to the partner being sexually unfaithful	Crossroad sand, Fyopolela and African chewing gum	Mixed in water to be drunk Roots and leaves are used
	Traditional medicine to helping with morning sickness	Ginger and Lemon	Taken in teas or added to juices when feels nauseated/vomiting
	Traditional medicine to boost blood in pregnancy	Fig tree leaves, Avocado leaves, Kigelia Africana, Amaranth leaves, Beetroot and Molasses	Taken as teas or drunk as juice
Communication between pregnant women and healthcare providers	Non-disclosure of traditional medicine use	The urge to protect their source of traditional medicines Fear of a negative response from their healthcare providers Lack of stated guidelines from the government	Taboo to disclose family member Lack of empathy among healthcare providers Reluctance to change

CHAPTER FIVE

5.0 DISCUSSION

The study investigated the use of traditional remedies by pregnant women in Chilanga District, Lusaka Province. The study focused on three specific objectives: pregnant women's knowledge and attitudes toward traditional medicine use during pregnancy, the types of traditional medicines commonly used by pregnant women, and the level of communication between pregnant women and healthcare professionals about the use of traditional medicine during pregnancy. Under the objective knowledge and attitudes of pregnant women towards traditional medicine use during pregnancy the following themes emerged; Perceived benefits, Perceived risks and Cultural practices and beliefs. For the objective of the types of medicines used the following themes emerged; Most common herbal preparations used by the participants to facilitate labour and to boost blood during pregnancy and for objective three the level of communication between pregnant women and healthcare professionals regarding the use of traditional medicine during pregnancy the following theme emerged; non-disclosure of traditional medicine use.

This chapter compares the findings of this study to other studies in three broad categories: pregnant women's knowledge and attitudes toward traditional medicine use during pregnancy, the types of traditional medicines commonly used by pregnant women, and the level of communication between pregnant women and healthcare professionals about the use of traditional medicine during pregnancy.

5.1 Knowledge and attitude towards traditional medicine use during pregnancy

Regarding the objective 'to explore the knowledge and attitudes of pregnant women towards traditional medicine use during pregnancy' this study discovered the following themes that drive pregnant women to decide to use traditional medicines: Perceived benefits, risks, and cultural attitudes and practices.

Pregnant women's use of traditional medicines is a serious problem that requires understanding and attention due to the effects it has on both the health and well-being of expectant mothers and their unborn children. The usage of herbal medications among pregnant women has increased dramatically globally, (El Hajj et al., 2020).

The study findings have discovered that pregnant women tend to decide to use traditional medicines due to the perceived benefits which they attach to them, these benefits include, hastening the labour process, easing morning sickness, and boosting blood to avoid Anemia.

The study found that women frequently use traditional medicines to speed up labor, with many claiming that when administered correctly, the herbs work for the intended purpose. Women strongly believe that traditional medicines might speed up labour, (Ajazen and Fishbein, 1988). It is women's culture and belief that herbs should be taken to prepare the birth canal; in their study, it was also shown that women said that they took herbs for the advantage of expanding the birth canal so that delivery becomes easy and fast (Tsitsi et al., 2021). Although pregnant women in this study used traditional medicines because of the perceived benefits, the key informants (health professionals) did not recommend their use during pregnancy because the safety of these herbs has not yet been established via rigorous research. Very little is known about the pharmacology and potential toxicity of the plants used in these herbal remedies that pregnant women to induce or augment labour, (Veale et al., 1992).

Kamutenesi et.al (2006) in their study also found that herbs used to induce childbirth by pregnant women are usually taken towards the end of the gestation period or at the onset of labour pains. The participants went further by stating that they felt the need to integrate traditional medicines with conventional medicines as they believed that the benefits of using traditional medicines outweigh the risks. The study revealed that most participants who took traditional medicines to quicken labour had the easy way out as compared to those that do not take them. The results suggest that women who take traditional medicines for quickening labour are more likely to have fewer maternal complications compared to those who do not. The participants stated that traditional medicines used to induce labour should only be taken in the third trimester of the pregnancy to avoid complications. Some studies have explored this issue and are consistent with this study. For example, a study done by (Mudonhi and Nunu, 2021 and Oluwaseyi et.al 2021) reported that women who did not use traditional medicine had a much higher rate of maternal problems than those who did. The studies claimed that traditional medicine could be a viable alternative to modern care, particularly in impoverished areas where access to modern medicine is limited. The study called for more research into traditional medicine's active ingredients and quality control, as well as collaboration and coordination between traditional healers and modern health personnel.

The study found that the use of traditional medicine to induce labour is associated with lower educational levels and a lack of formal employment. This is consistent with a study done in Nigeria by (Titilayo et al. 2016) which found that 59.3% of the women used herbal medicines during pregnancy, mostly to prevent pregnancy-related illnesses, induce labour, and facilitate delivery. Their study also found that the use of herbal medicines was associated with lower

educational levels, lower income levels and lack of formal employment. Therefore, there is a need to tackle this situation in consideration of the women's level of education to improve maternal health in Zambia.

With regards to the use of TM to reduce morning sickness, most of the participants mentioned that they use herbs to help reduce the morning sickness that comes along with pregnancy. Morning sickness is a common condition that affected most of the study participants and the stated to have negative side effects on their health. Across all the interviews, participants preferred to use traditional medicines more and other natural remedies such as ginger and lemon instead of using conventional medicines. They argued that conventional medicines like folic acid and Ferrous sulfate contribute to them feeling nausea and vomiting. But taking ginger and garlic did not have any reported side effects by the participants. The findings are also consistent with (El Hajj et al., 2020), who discovered that pregnant women utilize traditional medications to prevent nausea caused by morning sickness.

With regards to pregnant women using traditional medicines to boost their blood to prevent or treat anemia, the results are consistent with several studies done by (Fakeye et al, 2009 and Mbura et.al 1985) which noted that more than 78.6 % of pregnant women used traditional medicines to prevent or treat anemia. The study findings have revealed that many pregnant women used traditional medicines to boost their blood to prevent anemia as they perceive traditional medicines boost blood faster than conventional medicines.

The study has revealed that most pregnant women find it challenging to respond well to the medicines that are given freely at the hospital to boost blood as they make them experience side effects such as nausea. They also felt that conventional medicines work at a slow pace as compared to traditional medicines in terms of boosting blood, due to this they would incorporate traditional medicines to boost their blood quickly as they feel the herbs have no side effects as compared to conventional medicines.

The study findings state that even though pregnant women take the herbs, most of them are aware of the possible risks that may arise due to the use of traditional medicine. Some of the participants experienced the following maternal complications due to the herbs they took: one baby was born looking greenish, another baby started fitting when born, and another baby came out very tired due to being forced to come. This simply shows that the TMs that are used by pregnant women, despite the perceived benefits that they have, when taken in excess, do cause serious maternal complications for both the mother and baby. A study done by Bernstein et al.

(2021) affirms that plant-based remedies are not free of adverse reactions. Medicinal plants and herbal remedies contain elements that can be poisonous to the human body and the fetus. Potential effects of indiscriminate use of traditional medicines are embryotoxicity, teratogenicity, and aborticide properties. Some elements in the herbs can be passed to the fetus through the placenta and cause damage. Alemu Anteneh et al, (2022) also affirms that 53.5 percent of participants felt that HM use during pregnancy is not safe for the mother or the unborn child.

The results are also consistent with Makombe, who revealed that not all participants perceive traditional medicine to be beneficial. Others perceived fetal distress and stillbirths are risks associated with the use of traditional medicines in the process of taking herbal medicine to hasten labour (Makombe et al., 2023).

Culture and what a woman believes in play a vital role in the way a woman decides to take care of herself when pregnant, as that runs from generation to generation. Traditional medicine use among pregnant women is mainly influenced by cultural and family traditions in treating their conditions (Ahmed et al. 2020). The current study has found that it is not easy to change the mindset of what women think and how they perceive items due to the culture and beliefs they are incarnated with. Traditional medicine use is strongly influenced by the woman's culture and background and will continue to be important during the gestation period and in labor, just as it did in the past. This is because many cultures believe that during pregnancy, the mother and the fetus are vulnerable (Tsitsi et al., 2021).

Regarding the use of traditional medicines due to Protection from the partner's unfaithfulness, the study findings have revealed that it is a cultural belief that when the partner/husband for a pregnant woman has had an affair with another woman while his wife is pregnant, that would results into a maternal complication called obstructed labour. All the participants in the study across the interviews and FDGs believed that whether women were sure or not that their partners were having an affair with another woman, it is safer to take the herbs to protect themselves from what will come of it especially if the partner had an affair. This finding is consistent with results by (El Hajj et al., 2020) which revealed that there is a widespread belief in Zambian society that the mother and/or the baby might die in childbirth due to sexual infidelity by either spouse. Other studies done by (Withers et al 2017, Oluwaseyi et.al 2021 and Makombe et.al 2023) reported that one of the main reasons why pregnant women used herbal medicine was protecting themselves from husband's infidelity. These findings show that

many men do cheat on their wives making them feel the need to protect themselves from complications that they believe will come about because of it.

A study done by Wake and Fitie, (2022) also found that traditional medicines are widely used especially in Africa for reasons such as cultural beliefs and efficacy. However, the safety and quality of these medicines are often unknown or unregulated, and there is a risk of adverse effects, interactions, or complications for both the mother and the fetus (Mudonhi and Nunu, 2021). Therefore, there is a need for more studies to investigate the magnitude, determinants, benefits, and harms of traditional medicine utilization among pregnant women, as well as the potential for integrating traditional medicine into mainstream healthcare systems.

Relating to the external influence of Community and family, the findings suggest that the main source of information about traditional medicine use among pregnant women is often obtained from a woman's community they come from and from their close friends and family. These are essential in assisting expectant mothers in deciding on using or not using traditional medicines.

The findings are consistent with studies done by (El Hajj et al., 2020) who reported that the community, friends, and close relatives frequently put pressure on pregnant women to consume traditional medicines. The pregnant woman's mother primarily has a major influence in persuading the pregnant woman to use traditional remedies. Tsitsi et al (2021) also add that in the African custom where elders are respected, it becomes very difficult for the pregnant woman to resist advice and or pressure from her family, especially the mother, and aunts. With this regard, Zambian culture is not excluded where pregnant women respect and put to keen their elders' pieces of advice as they believe that elders have more experience than them. To enhance maternal and child health in Zambia, it is necessary to educate more older mothers in the community about the risks associated with using traditional medicines.

Regarding the reluctance of pregnant women to encourage others to take traditional medicines when they take them, the study has revealed that there are several reasons why they refrain from doing so. The fear of influence is one of the reasons, pregnant women are usually apprehensive about encouraging others, and mostly feel uncertain about the effectiveness of the herbs on another person, they would rather avoid potentially causing harm to others based on their own experiences. Another reason the study found is that it is considered a cultural taboo in their culture to share traditional medicines used with others and pregnant women may wish to respect that.

The findings of the study are also in tandem with the studies done in Zimbabwe by (Mureyi et al, 2012) which indicate that some women may not disclose or recommend traditional medicine use to others due to fear of stigma, discrimination, or adverse effects.

5.2 Types of traditional medicines used by pregnant women

The study discovered that women employ traditional remedies to treat a number of illnesses, such as initiating or hastening birth, minimizing morning sickness, increasing blood to prevent anemia, and protecting themselves from complication caused by their partner's infidelity.

The commonly used herbs to induce or quicken labor by the participants in this study were papaya, castor plant, ripe tomato fruit, lady fingers, and rabbit droplets. Papaya is used to induce labor, as it is believed that consuming papaya may help stimulate contractions due to the presence of the enzyme papain, which is alleged to have uterine stimulating effects. Similarly, most participants utilized castor oil and castor plant roots, which are thought to have laxative properties that may cause uterine contractions, to help promote uterine contractions and expedite labor.

The study reveals that, while most pregnant women who took TM had an easy way out, it is important to note that TM should be used with caution and under the supervision of midwives. It is important to highlight that, while pregnant women have used these TM, there are yet insufficient scientific evidence to confirm their effectiveness and safety in inducing and facilitating labor. Furthermore, the key informants noted that most women take the TM without considering the amount they consume, which may represent a risk because some plants contain harmful pigments. Consuming high amounts of plants like papaya or castor oil may cause gastrointestinal pain, dehydration, and, in some cases, an increased risk of complications during labor, as reported by (Healthline,2018).

The study found that other types of traditional medicines that were used by participants were ginger and lemon to help with morning sickness. They argued that morning sickness is better managed by ginger as compared to conventional medicines. The study findings are in tandem with studies by Lin et al. (2016), who reported that 52% They found that 52% of the women used herbal teas during pregnancy, mainly for digestive problems such as nausea, vomiting, bloating, and constipation. They found that ginger and lemon balm were among the most commonly used herbs. They reported that the majority of women found herbal teas to be helpful for their symptoms. Another study by Viljoen et al. (2017) reported that ginger was more effective than a placebo for reducing nausea and vomiting, but there was no significant

difference between ginger and vitamin B6. They also reported that ginger was safe for both mother and fetus, with no adverse effects on pregnancy outcomes. In line with Elba et al.'s research, ginger contains essential oils that have a refreshing effect and can inhibit the vomiting reflex, making it an anti-nausea and anti-vomiting agent. (Elba et al., 2022). These results suggest that it is possible to use traditional medicines in conjunction with conventional medicines when more research is done to assess the safety and efficacy of the herbs.

Regarding the use of traditional medicines to boost blood to prevent anemia, the study has revealed that pregnant women use the following herbs to treat or prevent anemia: amaranth leaves, beetroot, fig tree leaves, kigelia africana leaves, moringa leaves, and molasses. These herbs are believed to boost the level of hemoglobin faster than conventional medicines, as believed by the participants. Nevertheless, pregnant women need to first consult their doctor before taking these herbs to ensure they interact well with conventional medicines.

These findings are consistent with previous research, which has indicated that avocado leaves, amaranth leaves, beetroot, fig tree leaves, kigelia africana leaves, moringa leaves, and molasses can help prevent and treat anemia during pregnancy, benefiting both the mother and the infant. Tea made from avocado leaves improved hemoglobin levels and reduced anemia in pregnant women in Indonesia (Sari et al., 2018). Kigelia Africana fruit extract may increase hemoglobin levels and reduce anemia in pregnant rats, but further research is needed to validate its safety and efficacy in people (Oyeyemi et al., 2019). Amaranth leaf powder improved hemoglobin levels and reduced anemia in pregnant Indian women (Sharma et al., 2017). Beetroot juice improved hemoglobin levels and reduced anemia in pregnant Iranian women (Nasri et al., 2014). Moringa may offer some benefits for anemic pregnant women by increasing hemoglobin levels and preventing oxidative stress, which can damage DNA. However, there is minimal and contradictory data supporting the usefulness and safety of moringa supplementation during pregnancy (Rotella et al., 2023; Olayemi et al., 2019).

Other types identified by the study include those employed to protect themselves from their partner's infidelity. These botanicals include crossroads sand, fyopolela, and African chewing gum. The plants are either soaked in water and swallowed, or combined with petroleum jelly and rubbed to the stomach. This is to avoid obstructed labor, which is thought to be caused by the partner's infidelity. The participants reported that these herbs are taken as labor begins to avoid difficulties like obstructed labor. In line with the study findings, El Hajj et al. (2020)

discovered that pregnant women use crossroads sand and African chewing gum to prevent birthing difficulties when their husband's sexual infidelity is perceived by them.

This demonstrates that, despite a lack of scientific data supporting the safety and usefulness of these plant medicines, pregnant women all across the world, including Zambia, use them to for various reasons due to their perceived benefits. The study recommends that more scientific research on these herbs be performed to investigate the feasibility of combining traditional and Western therapy to promote maternal and child health.

5.3 Communication between pregnant women and healthcare providers

Regarding the research objective ‘To determine the level of communication between pregnant women and healthcare professionals regarding the use of traditional medicine during pregnancy.’ the theme that emerged from the study was non-disclosure of traditional medicine use by pregnant women due to the urge to Protect their source of the traditional medicine, the fear of a negative response from their healthcare providers and Lack of stated guidelines from the government. The lack of disclosure of the use of traditional medicines by pregnant to their healthcare professionals may pose potential risks for their health and that of their unborn babies.

The study findings state that the participants were not free to disclose the use of traditional medicines to healthcare providers. This is not new, as seen in a study done by Fakeye et al. (2009), which reported that most of the respondents do not disclose their use of traditional medicine to their healthcare providers to protect their sources. The participants would rather not talk about their use in order to keep the person who gave them anonymous due to cultural reasons that consider being a taboo to disclose. The authors of the study proposed that to improve this challenge, healthcare givers like midwives should ensure to routinely ask pregnant women about their use of traditional medicines, and they should provide them with evidence-based information on the benefits and risks associated with taking traditional medicines for both the mother and baby. The study is also in tandem with a study done by (Kapoor et al. 2018), in their qualitative study in rural India they pointed to a pattern of limited communication such as cultural taboos, and beliefs of traditional medicine causes of this lack of communication. The study emphasized the need for culturally sensitive communication strategies that take into account regional beliefs and customs, enabling healthcare professionals to have more honest and fruitful conversations with expectant women.

Not disclosing traditional medicine use was also ascribed to the fear of a negative response from their healthcare providers. The participants felt that many times the healthcare providers show negative attitudes to cultural beliefs that they uphold. Pregnant women felt that healthcare providers would disapprove of the use as they may not be familiar with or are dismissive of traditional practices. This was reliable with other findings from preceding studies conducted by El Hajj et al (2020) revealed that for the fear of a negative reaction from their healthcare practitioner, the majority of pregnant women (69.4%) who used herbal medicines did not tell them about it, this is also consistent with studies done by (Nyeko et al., 2016 and Peprah et al., 2019). These results show that healthcare personnel need to find ways that improve communication with pregnant women, creating an enabling environment for them to feel free without having to feel judged.

Regarding the lack of stated guidelines on the utilization of traditional medicines, the study found that this contributes to the use of traditional medicines in Zambia, as most women do not have documented references to the danger signs or benefits of using TM. This finding is consistent with results by Bernstein, who revealed that the lack of concern about utilizing herbal remedies during pregnancy is strengthened by the lack of regulation in most countries for their promotion and use. (Bernstein et al., 2021). This is a public concern that needs to be addressed to improve maternal and child health in Zambia. Potential conflicts between conventional care and traditional treatments due to insufficient communication channels (Wong et al. 2019).

This research suggests that to raise awareness of potential risks and help prevent pregnant women from being ignorant of warning signs, the Ministry of Health should establish stipulated guidelines regarding the use of traditional medicines. The results imply that the mother's ability to be candid and discuss traditional medicines with medical specialists is greatly aided by the support of the community and healthcare providers.

Osei et al. (2019) also include a study from Ghana that was a cross-sectional survey in both urban and rural Ghana to look at communication patterns between pregnant women and healthcare professionals regarding the use of traditional medicines. According to the survey, just 30% of pregnant women who reported utilizing traditional medicines with healthcare providers talked about it. The results showed that healthcare professionals were unaware of and lacked information about the traditional medicines that pregnant women frequently take. Women also indicated that medical professionals frequently discounted or discouraged the use

of conventional treatments without adequately disclosing alternatives. To encourage informed conversations and foster a more open dialogue, this study highlighted the significance of improving healthcare workers' understanding of traditional medical practices to facilitate informed discussions and foster a collaborative approach to maternal healthcare. This can be done through Minister of Health to produce guideline that will guide both the healthcare givers and pregnant women. Another study by Gupta and Kumar (2017) suggests underlining the importance of healthcare providers being well-informed about traditional medicine practices to offer effective guidance and support.

The complexity of healthcare decision-making is highlighted by the wide range of pregnant women's understanding of and attitudes regarding using traditional medicines during pregnancy (Smith et al., 2018). Traditional medicine, which has historical and cultural roots, has the potential to be a maternal health solution, but there are considerable differences in pregnant women's knowledge, comprehension, and perceptions of safety and efficacy.

CHAPTER SIX

6.0 CONCLUSION, LIMITATIONS AND RECOMMENDATIONS

6.1 Conclusion

The aim of the study was to explore the knowledge, attitudes, and perceptions utilizing of traditional medicines among pregnant women, a case study of Nakachenje Mini Hospital in Chilanga, Lusaka Province. The study explored the knowledge of pregnant women towards traditional medicine use during pregnancy, identified the commonly used herbs, and determined the level of communication between pregnant women and healthcare professionals regarding the use of traditional medicine. Under knowledge and attitude of pregnant women towards traditional medicine use during pregnancy the following themes emerged: Perceived benefits, Perceived risks and Cultural practices and beliefs. Under types of commonly used herbs the following themes emerged: Traditional medicine for labor inducing and quickening, Traditional medicine to prevent complications due to the partner being sexually unfaithful, Traditional medicine to helping with morning sickness and Traditional medicine to boost blood in pregnancy. Under Communication between pregnant women and healthcare providers the following themes emerged: Non-disclosure of traditional Medicine Use

The study has revealed that using herbal medicines together with conventional medicines can help women during pregnancy and in the process of childbirth. Women who did not experience any negative side effects from using traditional medicines are more likely to continue using traditional medicines with their next pregnancies and become influencers in the future their one and teaching them a culture to be respected.

From the reported experience of this study which includes both the benefits and risks of using traditional medicines, there is a need to conduct more bottom-up approach campaigns on health sensitization in the community to come to a consensus from what the community thinks and what the health personnel need to teach the community to prevent maternal and still deaths/complications such as those experienced in the study.

Most studies that have been done on traditional medicine use among pregnant women both in Zambia and other countries correlate with this study. The study also suggests that more effort to be made by community-based health workers and environmental health technicians to educate the community, which would lead to improved decision-making by pregnant women and may improve the reduction of maternal complications in Zambia and improve maternal and child health services in the country.

6.2 Limitations of the study

The nature of the study made it difficult to select volunteers in order to obtain accurate and thorough data. Many participants struggled to completely express themselves because of the potential social stigma associated with the use of traditional medicines.

Since the study only took place in a single hospital, the findings might not be generalizable to other settings or regions. Due to the setting of the hospital, it could have led to underestimation of the herbs used in pregnancy due to undisclosed use of some women who used the herbs.

When evaluating the study's findings, factors such as the small sample size, restricted resources, and potential biases in self-reported data should be taken into account.

The failure to identify some botanic names of herbs which were reported being used by pregnant women was a limitation.

6.3 Recommendations

It is recommended that to have improved healthcare support and communication regarding the utilization of traditional medicines with pregnant women, a lot of community sensitization needs to be done to create an enabling environment for pregnant women to freely discuss challenges concerning the use of traditional medicines that they face without having to feel judged.

It is recommended that people's culture and beliefs be put into consideration when approaching pregnant women who use traditional medicines as many have learned how to practice traditional medicines through culture, due to that it might be not easy to change the narrative without considering one's culture

It is recommended that further study be done to understand how the healthcare systems can integrate traditional medicines and modern health practices to provide inclusive care for pregnant women.

The study proposes the need for quantitative research to be conducted using the study themes to generalize the study findings, unlike this study whose goal was not to generalize the findings but to get more insights.

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APPENDICES

Appendix 1: Research timeframe of research activities

Table 1 shows the breakdown of the research activities to be conducted from 1st July 2023 to 16th February 2024.

S/N	Months Activity plan	1st July to 31 st July	1 st Aug to 31 st Aug	8 th Jan to 31 st Jan	1 st Feb to 15 th Feb	16 th Feb 2024
1	Literature search and review	1 month				
2	Proposal writing		1 month			
3	Data Collection and Analysis			1 month		
4	Report writing and Finalising				3 weeks	
5	Submission					1 day

Table 3: work plan from July 2023 to February 2024

Appendix 2: Consent Form

I have been informed of the goal of this study and am aware of its advantages, risks, and confidentiality. Furthermore, I am aware that participation in this study is entirely voluntary and that, should I choose to do so, I may discontinue participation at any moment without giving any explanation.

I.....(Names)

Accept to participate in this research project, which is a case study of Nakachenje Mini Hospital located in Chilanga District, Lusaka Province, and aims to explore the use of traditional medicines among pregnant women in Chilanga.

Signed/Thumbprint.....Date..... (Participant)

You can reach principal investigator Mitrain Chisanga at 0971740971 for additional information.

For any inquiries, please contact;

The Chairperson

University of Lusaka Research and Ethics Committee,

Plot No 37413, off Alick Nkhata Road,

Mass Media Campus,

P.O BOX 36711,

Lusaka Zambia

Appendix 3: Interview guide

For Key informants

Date of interview/...../.....

Town

Time taken.....

Place name.....

INTERVIEW DETAILS

Interview id:.....

Researcher name.....

DATA ENTRY INFORMATION

Date of data entry.....

Data entered by (name).....signature.....

INSTRUCTIONS FOR THE INTERVIEWER

Do not force people to answer questions they are not comfortable with

Ask for the permission and let them sign the consent form before interviewing them

The respondent was read the following before the interview began.

Part of the researcher's coursework toward a master's degree of public health at the University of Lusaka comprises this interview. Using a case study of Nakachenje Mini Hospital in the Chilanga district, the questions address a variety of personal informational topics on the use of traditional medicines. The interview is private, and everything you choose to share with me will only be utilized for academic research. It will also never have an impact on your personal life. You are under no obligation to answer any questions during this interview, and you are free to end it whenever you like. Participation in the interview is entirely voluntary.

Guiding questions for Key informant Interviews

1. Can you provide a brief background about yourself, such as your age, occupation, and educational level?
2. Can you tell me about your experiences or observations regarding the utilization of traditional medicines among pregnant women?
3. What do you think are the common reasons why pregnant women choose to use traditional medicines during pregnancy?
4. In your view, how do pregnant women typically access or acquire traditional medicines in this community?
5. What are some of the perceived benefits and risks associated with using traditional medicines during pregnancy according to pregnant women?
6. Do you think pregnant women should use traditional medicines for the perceived benefits they feel about? If yes why? If not why? Explain your answer.
7. How do pregnant women typically perceive the effectiveness of traditional medicines in managing pregnancy-related issues compared to modern medicine?
8. Are there any cultural or societal beliefs that influence the decision-making process for pregnant women when it comes to utilizing traditional medicines?
9. How do pregnant women decide to use traditional medicines during pregnancy? Are there specific criteria or factors they consider?
10. As a key person, what do you think can be done to change the situation?
11. Is there any instance where the utilization of traditional medicines during pregnancy has had positive or negative outcomes? Can you provide any specific examples?
12. From your experience, what are the most commonly used types of traditional medicines that pregnant women tend to use?
13. What kinds of information or advice do pregnant women typically receive from healthcare professionals regarding the use of traditional medicines during pregnancy?
14. Are there any specific guidelines or regulations in place regarding the utilization of traditional medicines during pregnancy in this community?
15. Based on your experiences, what are some recommendations you have for improving healthcare support and communication regarding the utilization of traditional medicines among pregnant women?

Guiding Questions for Focus Group Discussions

1. Can you give me brief introductions about your selves such as age, occupation, and educational level?
2. Has any one of you ever heard about traditional medicine use during pregnancy?
3. What do you know about traditional medicines used during pregnancy?
4. What are the sources of information about traditional medicines that you rely on during pregnancy?
5. What are the main reasons why pregnant women may choose to utilize traditional medicines during pregnancy?
6. Are there any cultural or societal factors that influence the decision to use traditional medicines during pregnancy?
7. What are the perceived benefits and risks associated with using traditional medicines during pregnancy?
8. How do you perceive the effectiveness of traditional medicines in managing pregnancy-related issues?
9. Can you share with us some of the traditional medicines that you know? Can you mention some of them?
10. Are there any traditional medicines that are commonly recommended or discouraged for pregnant women in your community?
11. How does the use of traditional medicines impact the relationship between pregnant women and healthcare medicines?
12. How can healthcare providers better support pregnant women who choose to use traditional medicines during pregnancy?
13. What are the potential strategies for ensuring the safe and effective utilization of traditional medicines during pregnancy?
14. How comfortable are you discussing traditional medicine use with healthcare professionals?
15. Would you encourage some to use traditional medicines during pregnancy? If yes why? If not why?

Interview guide for pregnant women

Guiding Questions

1. What is your understanding of traditional medicines and their importance in pregnancy?
2. Have you ever used traditional medicine during pregnancy? If yes, what were the reasons behind your decision?
3. What are the types of traditional medicines you know that are used during pregnancy?
4. Are there any traditional medicines that are commonly recommended or discouraged for pregnant women in your community?
5. What are the types of traditional medicines you use during pregnancy?
6. What are some benefits and risks you associate with using traditional medicines during pregnancy?
7. How comfortable are you discussing traditional medicine use with healthcare professionals?
8. What factors do you think influence pregnant women to decide to use traditional medicines during pregnancy?
9. Would you encourage some to use traditional medicines during pregnancy? If yes why? If not why?

Appendix 6: Budget

Item No.	Activity/ Item	Quantity	Unit COST (ZMW)	TOTAL COST (ZMW)
I.	Stationary			
	Realm of plain paper	1	100	100
	Pens	4	5	20
	Notebook	1	20	20
	Highlighters	2	20	40
	Printing of consent forms	100	2	200
	Printing of interview guides	50	2	100
	Printing of FDG guides	5	2	10
	Printing final report	2	250	500
	Binding final report	2	100	200
	Audio recorder	1	150	150
	Sub Total			1340
II.	Data Collection			
	Lunch Snacks for FDGs	30	40	700
	Transport for the researcher	20	40	800
	Lunch for the researcher	20	50	1000
	Internet subscription	1	150	150
	Sub Total			2650
III.	Communication			
	Talktime	4	50	200
	Sub Total			200
IV.	Other Costs			
	Payment for Ethical clearance	1	1000	1000
	Payment for NHRA	1	1020	1020
	Sub Total			2020
	Grand Total			6,210