DETERMINANTS OF TRADITIONAL HEALTH PRACTICES AMONG WOMEN OF REPRODUCTIVE AGE IN EGOR LOCAL GOVERNMENT AREA, BENIN CITY

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BENIN CITY, EDO STATE

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MAY, 2026

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BEING A ONE YEAR PROJECT SUBMITTED TO THE DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE, SCHOOL OF MEDICINE, COLLEGE OF MEDICAL SCIENCES, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA

IN PARTIAL FUFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF MEDICINE, BACHELOR OF SURGERY(MBBS) DEGREE IN THE UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA.

MAY, 2026

DECLARATION

We hereby declare that this project work titled **Determinants of Traditional Health Practices among Women of Reproductive Age in Egor Local Government Area, Benin City** was conducted under supervision and has neither been presented nor published anywhere else in part or in full for any other purpose.

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CERTIFICATION

This is to certify that this research study titled **Determinants of Traditional Health Practices among Women of Reproductive Age in Egor Local Government Area, Benin City** was conducted by **EDIGUE IMUETINYAN RUTH** with matriculation number **MED1807387** and **ARAROMI TOLULOPE JULIET** with matriculation number **MED1807369** under the supervision of **PROF. V.Y. ADAM** in the Department of Public Health and Community Medicine, College of Medical Sciences, University of Benin as part of the requirements for the award of Bachelor of Medicine, Bachelor of Surgery (MBBS) degree.

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LIST OF ABBREVIATION

ANC: Antenatal Clinic

CAM: Complementary and Alternative Medicines

EBF: Exclusive Breast Feeding

EMRO: Eastern Mediterranean Regional Office

FGD: Focused Group Discussion

FGM: Female Genital Mutilation

HIV: Human Immunodeficiency Virus

HM: Herbal Medicine

ITN: Insecticide-Treated Net

MMR: Maternal Mortality Rate

MSH: Maternal Health Services

OM: Orthodox Medicine

PCOS: Polycystic ovarian syndrome

SSA: sub-Saharan Africa

TBA: Traditional Birth Attendant

TCAM: Traditional Complementary, and Alternative Medicine

TCM: Traditional and complementary medicine

TM: Traditional Medicine

TPMC: Traditional post-partum care

USA: United States of America

WHO: World Health Organization

WRA: Women of Reproductive Age

OPERATIONAL DEFINITION OF TERMS

Health: a state of complete physical, mental and social wellbeing of individuals and not merely the absence of diseases or infirmities.

Traditional Medicine: the sum total of all knowledge and practices whether explicable or not used in the diagnosis, prevention and elimination of physical, mental or social imbalances and relying exclusively on practical experiences and observation handed down from generation to generation, whether orally or in writing.

Women of Reproductive Age: the population of women between 15 and 49 years old.

Ubuntu: a collection of values and practices that black people of Africa or African origin view as making people authentic individuals as being part of a relational, societal, environmental and spiritual world.

ABSTRACT

Background: Traditional health practices (THP) remain prevalent among women of reproductive age in Nigeria, often intersecting with modern healthcare utilization. In Nigeria, the use of traditional medicine is deeply embedded in cultural and social life, and women of reproductive age are particularly vulnerable to its associated risks. Egor Local Government Area of Edo State reflects these broader national challenges, with cultural beliefs, economic constraints, and limited access to modern healthcare identified as key drivers of THP utilization. Few studies have specifically assessed THP utilization using a comprehensive multi-dimensional approach in this urban Nigerian setting.

Objectives: This study assessed the types of traditional health practices, providers, perceived benefits and risks including the factors associated with its use among women of reproductive age in Egor LGA, Benin City.

Methodology: A descriptive cross-sectional study design was used. Six hundred and thirty-six women of reproductive age (15–49 years) residing in selected communities across Egor LGA were recruited using a multistage sampling technique. Data were collected using a structured, interviewer-administered questionnaire and analysed with IBM SPSS version 26.0. Descriptive statistics, chi-square tests, and binary logistic regression were performed. Statistical significance was set at $p < 0.05$.

Results: A total of 636 women participated with a response rate of 100%. The mean age of respondents fell within the 15 – 25 years age group, and most were married 296 (46.5%), predominantly Christian 559 (87.9%), with tertiary education accounting for 352 (55.4%) and the majority engaged in trading or self-employment (43.4%). Overall, 236 (37.1%) reported utilizing THP within the preceding 12 months. Herbal preparation was the most widely used practice 209 (88.6%), followed by traditional birth attendant 69 (29.2%). Among the respondents 313 (49.2%) perceived THP as beneficial, while 316 (49.7%) regarded THP methods as safe. However, 44 (18.6%) reported adverse effects, most commonly stillbirth 17 (38.6%), and 34 (77.3%) sought medical care following complications. Marital status ($\chi^2 = 115.783$, $p < 0.001$), educational level ($\chi^2 = 58.495$, $p < 0.001$), religion ($\chi^2 = 21.043$, $p < 0.001$), and monthly income ($\chi^2 = 48.243$, $p < 0.001$) were significantly associated with THP utilization. Cost of modern healthcare was the predominant factor associated with traditional health practices.

Conclusion: Approximately one-third of women of reproductive age in Egor LGA utilized traditional health practices, driven primarily by economic, socio-cultural, and marital factors. Health authorities should continue to implement existing community-sensitive health education at all primary health centres, strengthen engagement with traditional health providers, and address financial barriers to modern healthcare to improve reproductive health outcomes in the area.

Keywords: Traditional health practices, Women of reproductive age, Herbal medicine, Traditional birth attendant.

CHAPTER ONE

INTRODUCTION

1.1 Background

Traditional healthcare system, the oldest medical system in Nigeria, is the initial avenue of assessing care for 75% of Nigerians. Similarly, 80% of Africans use some form of traditional medicine. Traditional herbal medicines therefore constitute major component of primary healthcare system in rural communities. [1]Traditional medicine {TM} is "the knowledge, skills and practices based on the theories, beliefs and experiences indigenous to different cultures, used in the prevention, diagnosis, improvement or treatment of physical and mental illness. It is typically the primary line of healthcare in the community since it is frequently entwined with daily life and belief systems, and because traditional healers are respected community members. When the closest primary healthcare centre is located far from the community, conventional medical care could be the last option.[2]

Nigeria was the third highest contributor to maternal mortality in 2023.[3] In Nigeria, while 60% of women attend antenatal care, approximately 50.7% use facility care, though this statistic is lower in rural areas with limited access to health facilities. The remaining percentage seek assistance from alternative care systems or unskilled care personnel who lack knowledge and skill on approaches to managing pregnancy and birth, which could result in severe maternal morbidity and mortality.[3]

There are numerous traditional health practices among women of reproductive age. Some of which include: male circumcision, female genital mutilation, inappropriate neonatal cord care, home delivery, backing of children, prolonged breastfeeding, and use of herbal remedies.

Male circumcision is a universal occurrence that a male child is circumcised according to their tradition, religion, culture and race with social class, personality, attractiveness, capacity to sexual satisfaction and hygienic factors undertone. Traditionalists in Nigeria endorsed this practice in women and view it as a pre-requisite rite into that guaranteed cleanliness or better marriage.[4]

The World Health Organization (WHO) posited that customs/practices that allow excision and/or injury to healthy female reproductive organs is a violation of female bodies but recommends that it allowed among males as a preventive measure in places where there are high incidences of HIV. It is worrisome to note that Female Genital Mutilation (FGM) results

in adverse health outcomes, including long-term complications that impact on physical, mental, sexual well-being of females, thus such practices are unacceptable, regardless of who performs them, the other adverse health impacts of female circumcision are infections, difficulty urinating and menstrual flow, pain, infertility, and complications during parturition.[4]

Neonatal sepsis resulting from inappropriate neonatal cord care has been reported to be one of the leading causes of new-born infant death under 1-month-old. This could ensue during the severing of the umbilical cord of the new-born with dirty or contaminated equipment. In Nigeria and other African countries, during home delivery, the umbilical cord of the newly born is sometimes cleaved with unsterilized razor blade or any other sharp instrument and treated with different herbal substances. At times the severed stump of the cord is covered with native concoctions several times until the stump falls, without cognizant to the neonatal morbidity and mortality due to neonatal infections including tetanus. Significant infection occurs during home delivery in a dirty environment attended by unqualified birth attendants under sub-standard delivery procedures and practices.[4]

The WHO endorses clean and dry cord for new baby in health facilities and at home to lower neonatal mortality using chlorhexidine solutions. The use of such agent could help curb the application of harmful traditional substance such as cow dung in the treatment of cord stump because this obsolete practice exposes the new-born to infection that can lead to death. [4]

The WHO estimates that 80% of the world population relies on complementary and alternative medicines (CAM), or traditional medicine, which includes all healing practices indigenous to different cultures.[5] Traditional medicine is often juxtaposed with modern biomedicine. Usage of traditional medicine is often attributed to its relative ease of access and affordability when compared to biomedicine. This is particularly relevant in the African continent, where the ratio of traditional healers to population can be 100 times greater than that of medical doctors to population. However, traditional medicine (TM) usage has also been shown to interfere with proper adherence to biomedical treatment regimes. Relationships do exist between traditional medicine usage and medication non-adherence, and many patients turn to biomedical treatment only after traditional medicine has failed to cure them. Unfortunately, a majority of patients do not disclose their use of traditional medicine to biomedical doctors, in large part because doctors fail to ask.

The use of maternal health services (MHS) among women of reproductive age such as antenatal, skilled attendance at birth, and post-natal care are critical steps towards reducing maternal mortality. Over the years, several strategies, such as the Sustainable Development Goals (SDG 3:1), have been developed globally to reduce maternal mortality. The SDG #3:1 aims to reduce maternal mortality. Despite the potential of this strategy to promote maternal health, women in many sub-Saharan African (SSA) countries face challenges in accessing prenatal, birth, and postnatal care. Consequently, SSA countries contributed 70 percent of global maternal mortality in 2020.[6]

A study in Ibadan, Nigeria found that people were more likely to choose traditional medicine because of perceived higher effectiveness, accessibility, and affordability. In terms of accessibility, traditional medical practices are more broadly accessible, readily obtainable, and reasonably priced than contemporary orthodox medical services in underdeveloped nations such as Nigeria.

Pregnancy is a condition associated with immense physiological alterations resulting in many pregnancy-related problems, including nausea, vomiting, constipation, and heartburn. These ailments usually result in pregnant women self-medicating using traditional medicine, especially herbs. Approximately 65–80% of the world's population use traditional medicine as their primary form of health care, including use during pregnancy. In sub-Saharan Africa, up to 80% of the population uses TM to meet their health care needs, including use during pregnancy.[5]

Traditional health practices also known as alternative medicine is increasing in many low and high-income countries for several reasons. This practice is due to the popular belief that herbs are natural and free of any adverse effects compared to conventional medicine. Local traditions and social pressure, for example, high costs of drugs and medical visits, as well as insufficient health coverage, could also be the reason behind this practice. [2]

While childbirth is biological, the sequel of pregnancy and birth are socially constructed and shaped by cultural perceptions and practices. Motherhood is a unique experience shaped by various values and norms, which are beneficial, harmful, and existential, believed to preserve and protect the mother and baby. Given that most MHS strategies in SSA are biomedical-centric on promoting skilled birth attendance, limited attention has been paid to cultural and religious structures within communities that influence access to facility care. Cultural and religious structures are collective norms, systems, practices, and beliefs that form a pattern of

behaviour among a group of people. Such cultural and religious structures include language, arts, rituals, religion, customs, and other intergenerational cultural norms shared within a community. [6]

In SSA, cultural and religious structures are further compounded due to cultural diversity comprising distinctive linguistic, religious, and cultural values and norms that play a crucial role in women's health-seeking behaviour around childbirth. Thus, a critical exploration and understanding of these cultural and religious structures is essential in SSA given the cultural context and the emphasis on 'ubuntu philosophy' that emphasizes the significance of community and the interconnectedness of all individuals, promoting an environment of hospitality, justice, honesty and mutual support among individuals within a context.[6] Ubuntu is a collection of values and practices that people of African origin hold which makes them part of a relational, communal, societal, environmental and spiritual world. It is translated from *"umuntu ngumuntu ngabantu"* summarized to mean, I am because we are.

Consistent with the Ubuntu philosophy which stresses that individuals are inextrincably linked to their communities; pregnancy and childbirth in SSA heavily rely on cultural norms and day-to-day interaction among individuals within the community, which influence people's behaviour and shape decisions made around pregnancy and childbirth. Consequently, it becomes challenging to meet the multifaceted maternal health issues in SSA with international and national maternal health policies that are mainly limited to scientific and technological strategies but lack relational principles.[6]

Traditional leaders remain strong influences in communities and are respected. [7] Unfortunately, there is a paucity of information on the influence of traditional practices on maternal and child health practices in Edo State, Nigeria. This study is therefore crucial to identify the determinants of traditional health practices among women of reproductive age in Egor Local Government Area, Benin City.

1.2 Statement of Problem

Women of reproductive age play a pivotal role in ensuring the continuity of the society, yet, they are faced with high risks of complications and even death in the course of performing this role. Improving maternal health outcomes has faced substantial challenges across the globe. Research shows an estimated 99% of maternal deaths occur in low and middle-income

countries. Globally, about 810 women die daily from pregnancy and childbirth complications, and the burden is highest in Africa. The United Nations sustainable development goal has a maternal mortality ratio (MMR) target of 70 per 100,000 live births by 2030.

Nigeria, the largest country in Africa, has an MMR of 512 per 100,000 live births, thus there is need for intensified efforts to reduce maternal deaths in the country. Proper utilization of maternal health services including health facilities for delivery is crucial to achieving this. Delivery in a health facility by skilled birth attendants and with available life-saving facilities reduces maternal morbidity and morbidity significantly. Health facility delivery also reduces stillbirth rate and neonatal morbidity.[8]

In Sierra Leone, a cross-sectional study carried out in 2020 showed that only 45.2% utilized skilled birth assistance during delivery, in Mali 39.9%, and in Niger 32.6%. In Nigeria, only 41% of Nigerian women deliver in health facilities. Variations in health facility delivery exist across Nigerian geopolitical zones, ranging from 16% in the Northwest zones to 81% in the Southeast zones. Tackling the challenges associated with health-care delivery is critical, especially in Nigeria, where the crude birth rate is an estimated 38 births per 1000 women, with a total fertility rate of 4.94 in 2025.

Traditional health practices are associated with different maternal and child adverse outcomes such as preterm birth, cesarean birth, low birth weight, vaginal bleeding during pregnancy, as well as various maternal and neonatal morbidity. [9] Traditional health practices among women of reproductive age have its attendant benefits and risks. The majority of the pregnant mothers are unaware of the possible maternal and fetal complications of herbal medicine utilization, and those pregnant mothers and breastfeeding women are vulnerable to harmful effects of herbal medicines consumption since the appropriate dosages are not well established.

The first trimester of pregnancy is of particular concern in relation to the teratogenic potential of medicine use. Globally, HM is commonly used by pregnant women to alleviate various pregnancy symptoms or complications, including relief from nausea and vomiting, improvement of fetal growth, stimulation of labour and delivery, prevention of premature labour and spontaneous abortion, and aiding placental expulsion. The prevalence of HM use in pregnancy varies based on geographic location, ethnicity, cultural traditions, and socioeconomic status.[5]

A multinational study in 2022 reported a prevalence of 27.7%, 11.9%, 51.9%, 26.6%, 17.9% and 43.8% among pregnant women from Western Europe, Northern Europe, Eastern Europe, North America, South America, and Australia respectively. Generally, HM use among pregnant women in African countries is higher compared to other parts of the world, with prevalence of up to 90% reported. [5] Studies conducted in sub-Saharan Africa have reported different factors that influence HM use during pregnancy; one of which is a systematic review done in Ghana, 2020 that stated factors such as respect of cultural norms, religious affiliation, perceived efficacy and safety of HM over OM, poverty, low level of education, high prevalence of diseases, limited access to mainstream maternity care, limited care facilities in rural settings, and availability and accessibility of traditional birth attendants.[10]

Low access to MHS also extends to the postnatal period, with only 35 per cent access and with only four out of ten women having access to contraceptives in 2021. Though several maternal health policies have been developed in Nigeria, such as the Integrated Maternal, Newborn and Child Health Strategies (IMNCH) and the Midwives Service Scheme, both policies are biomedically focused on increasing skilled attendance.[6]

The cultural acceptability of traditional healers and traditional health service providers, the relatively low cost of traditional medicine, and difficult access to modern health facilities were some of the reasons for herbal medicines utilization in sub-Saharan Africa. Nigeria as a sub-Sahara African (SSA) country is also enmeshed in these cultural and religious structures, which also contributed significantly to the Nigerian high maternal mortality ratio of approximately 1047 per 100,000 live births, making Nigeria the third-highest contributor to maternal mortality globally in 2020 due to limited use of MHS.[6]

Medical and technological strategies are essential in maternal health, but their success remains hindered by the lack of cultural consideration development. Studies reveal that cultural and religious structures influenced by existing cultural beliefs, practices, gendered roles, and social structures are significant issues that influence decisions around childbirth in Nigeria. Additionally, religious norms and practices are critical issues linked to each other, which influence the uptake of MHS and maternal health outcomes. In Nigeria, the extent to which religion influences maternal health-seeking behaviours and decisions around child birth differs among ethnicities and religious systems. Exploring these significant cultural and religious structures is critical to promoting understanding and provision of adequate holistic intervention tailored to the maternal health needs of communities.

Disregarding adequate actions to improve health facility delivery in Nigeria will exacerbate the country's already high maternal mortality rate (MMR) of 512 per 100,000 live births, which makes Nigeria still a long way from meeting the Sustainable Development Goal of fewer than 70 maternal deaths per 100,000 live births by 2030. While a number of studies have been conducted in Africa on HM use during pregnancy, this study aims to identify the actual determinants of traditional health practices among women of reproductive age.[8] Traditional healers and birth attendants remain key players in the delivery of care and are known to integrate traditional medicine into their practices. [7] Traditional health practices among women of reproductive age is a public health concern and this study aims to ascertain the determinants of these practices in this population.

1.3 Justification

Traditional health practices also known as alternate medicine is an indigenous medical system based on the customs and culture of the people, identifying the various types of traditional health practices in women of reproductive age in Egor Local Government provides insight into traditional health practices that is frequently utilized and the study also helps to identify the traditional health practices amongst women of reproductive age so as to access their health seeking behaviour and the implication of the traditional health practices adopted to be able to make necessary recommendations to policy makers . [11]

Several studies have assessed the impact of tradition health practices in health care and have not largely examined the providers of traditional health in women of reproductive age this study will determine the role of the providers of traditional health, document their approach and how they can be integrated into health care systems. [12]

There are various benefits and risks associated with traditional health practices in women of reproductive age assessing the perceived risks and benefits is essential for reducing harmful traditional health practices and promoting safe evidence-based interventions. [13]

The findings from this study will help health care providers identify the factors associated with traditional practices and understand why women of reproductive age persistently carry out some potentially harmful practices, so as to implement policies and make appropriate recommendations.[6]

1.4 Research Questions

1 What are the various types of traditional health practices reported and utilized by women of reproductive age in Egor Local Government Area, Benin City?

2 Who are the providers of traditional health services to women of reproductive age in Egor Local Government Area, Benin City?

3 What are the perceived benefit and risks associated with the traditional health practices of women of reproductive age in Egor Local Government Area, Benin City?

4 What are the factors associated with traditional health practices of women of reproductive age in Egor Local Government Area, Benin City?

1.5 Research Objectives

1.5.1 General Objective

To identify the determinants of traditional health practices among women of reproductive age in Egor Local Government Area, Benin City

1.5.2 Specific Objectives

1 To ascertain the various types of traditional health practices reported and utilized by women of reproductive age in Egor Local Government Area, Benin City.

2 To ascertain the providers of traditional health services to women of reproductive age in Egor Local Government Area, Benin City

3 To determine the perceived benefit and risks associated with the traditional health practices of women of reproductive age in Egor Local Government Area, Benin City

4 To identify the factors associated with traditional health practices of women of reproductive age in Egor Local Government Area, Benin City

CHAPTER TWO

LITERATURE REVIEW

This chapter provides a comprehensive review of the literature regarding Traditional Health Practices (THPs) among women of reproductive age, specifically within the context of Egor Local Government Area. The review is structured into a conceptual exploration of indigenous medicine, an analysis of current health policies, and the application of a theoretical framework to explain health-seeking behaviours.

Conceptual Review

Overview of Traditional Health Practices

Traditional Health Practices (THPs) represent a holistic blend of indigenous knowledge, spiritual beliefs, and cultural experiences used to maintain physical and mental well-being.[4] In Nigeria, these practices serve as a primary healthcare pillar, bridging the gap between rural tradition and urban modernism.[1,2] For women aged 15 to 49 years, THPs are not merely alternatives but are often the first line of defence during critical reproductive milestones such as infertility management, pregnancy, childbirth, and the postpartum period.[1, 17]

The landscape of THPs is categorized into four primary areas. First, the use of herbal medicines remains the most prevalent practice; studies indicate that many women prefer natural extracts for treating infertility or inducing labour, often perceiving them as safer and more accessible than pharmaceutical drugs.[1, 5, 9] Second, Traditional Birth Attendants (TBAs) remain central figures in maternal care. Despite the technical advantages of modern hospitals, TBAs are frequently preferred because they provide "motherly care," emotional support, cultural familiarity, and spiritual guidance that formal health institutions often lack.[17,26,28] Third, physical manipulations such as abdominal massage and binding are commonly employed to aid foetal positioning and enhance postpartum recovery.[14,16] Finally, dietary taboos and rituals play a significant role in maternal nutrition, where ancestral beliefs dictate food restrictions aimed at ensuring safe delivery and healthy lactation.[16,30]

The integration of traditional health practices into formal healthcare systems has become a growing global health priority. Global health frameworks emphasize the importance of regulating and integrating traditional medicine into national health systems to improve safety,

quality, and access to care.[4] At the national level, Nigeria has increasingly acknowledged the role of traditional medicine in primary healthcare delivery, particularly in underserved communities.[4,8] In Edo State and other parts of Nigeria, initiatives have focused on training TBAs to recognize obstetric danger signs and strengthening referral linkages with formal health facilities, thereby reducing maternal mortality by bridging the gap between indigenous knowledge and orthodox medical care.[17, 26]

Theoretical Framework:

The Andersen Behavioral Model

To understand why women in Egor LGA choose traditional care, the study utilizes the Andersen Behavioral Model of Health Services Utilization. This model suggests that healthcare choices are driven by three distinct clusters of factors:

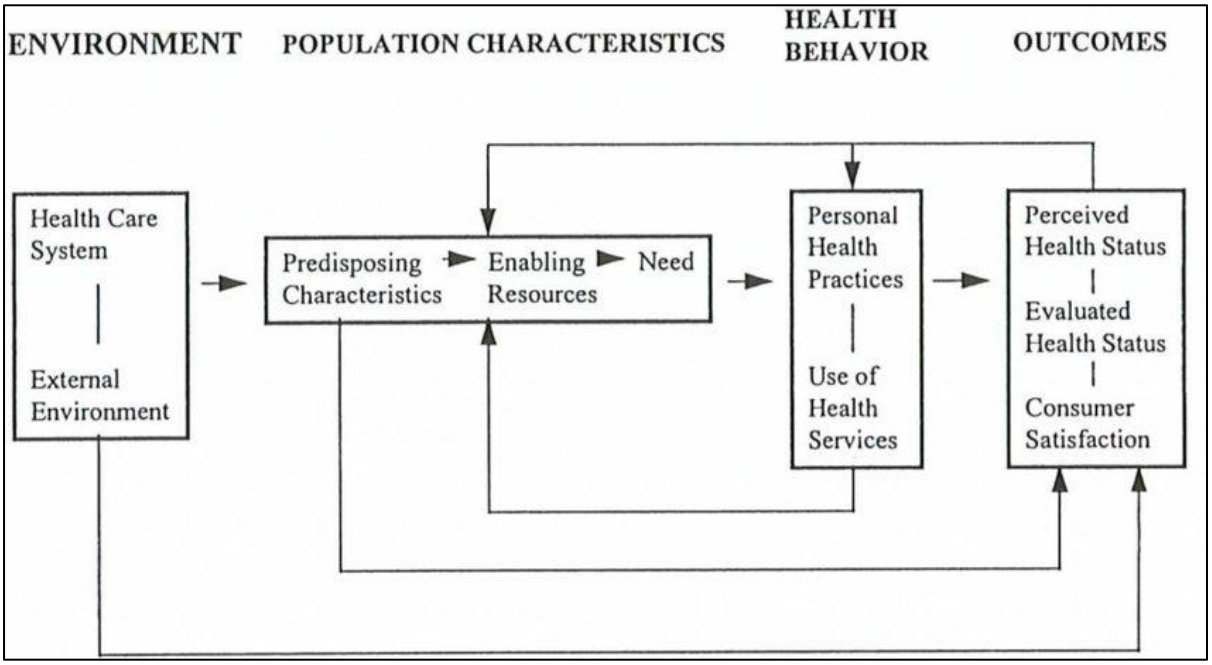

Figure 2.1. The Andersen Behavioural Model of Health Services Use.[38]

1. **Predisposing Factors:** These are the socio-cultural backgrounds, such as age, education, and deep-seated health beliefs, that give a woman a "propensity" toward traditional care. In Benin City's cultural landscape, ancestral knowledge often makes THPs the most socially acceptable choice.

2. **Enabling Factors:** These represent the practical means of access. The physical proximity of TBAs within neighborhoods compared to the distant University of Benin Teaching Hospital (UBTH) combined with the relative affordability and flexible payment terms of herbalists, acts as a powerful facilitator.
3. **Need Factors:** This is the immediate trigger for seeking care. The model emphasizes that a woman's "perceived need," such as the fear of spiritual interference or the social stigma of a Caesarean section, often carries more weight than a clinical "evaluated need," ultimately driving her toward traditional healers for protection and treatment.

Empirical review

2.1 Types of Traditional Health Practices Reported in Women of Reproductive Age

In 2023, a cross-sectional analytical study conducted by Sirichai et al**.** in Bangkok, Thailand, assessed the types of traditional postpartum practices and factors influencing their use among women of reproductive age. Data were collected between September and December 2023 among 485 pregnant women (≥14 weeks gestation) and postpartum women receiving care in four hospitals. The study aimed to investigate women's exposure to and intention to use Thai Traditional Medical Postpartum Care (TMPC) as a key form of traditional practice. Data were collected using a self-administered structured questionnaire, and multivariable logistic regression analysis was employed. The findings revealed that 271 women (55.9%) expressed an intention to use TMPC. The traditional practices identified included herbal compress therapy, breast massage, heat-based therapies, and other indigenous techniques aimed at bodily restoration and relief of postpartum symptoms**.** Women with secondary or vocational education were significantly more likely to report intention to use TMPC (AOR = 3.21; 95% CI: 1.30–7.95), while those with a bachelor's degree or higher also showed increased likelihood (AOR = 4.00; 95% CI: 1.51–10.58). Furthermore, women with sufficient income and savings (AOR = 2.11; 95% CI: 1.05–4.23) and those with prior experience using TMPC (AOR = 2.88; 95% CI: 1.51–5.49) were more inclined to utilize traditional postpartum practices. Psychosocial factors were also influential, as higher subjective norm scores (AOR = 1.98; 95% CI: 1.17–3.36) and perceived behavioral control scores (AOR = 4.04; 95% CI: 2.44–6.69) were positively associated with intention to use TMPC. The strength of the study

lies in its robust analytical approach and adequate sample size, which enhanced the reliability of identifying determinants of traditional practice use. However, the cross-sectional design limits causal interpretation, and reliance on self-reported responses may introduce recall and social desirability bias.[14]

In 2019, a facility-based cross-sectional study conducted assessed the types of traditional and complementary medicine (TCM) practices used during the postpartum period among women of reproductive age in rural Malaysia. The study was carried out between January and April 2019 among 210 postpartum women attending a maternal and child health clinic in Bagan Serai, Perak, Malaysia**.** The objective of the study was to evaluate users' profiles and determine factors associated with the use of TCM during the postpartum period. Data were collected using a self-administered structured questionnaire, and multiple logistic regression analysis was employed to identify predictors of TCM use. The findings revealed that 139 women (66.2%) reported using one or more forms of traditional and complementary medicine during the postpartum period. The most commonly reported traditional practice was postpartum massage, used by 123 women (88.3%)**,** while other practices included the use of herbal-based remedies and traditional tonics. The predominant reason for engaging in these practices was to improve general well-being and enhance physical recovery**,** as reported by 101 women (72.1%)**.** Cultural influence played a major role, with "family belief" recording the highest mean influence score (mean = 3.63). The study further showed that Malay women were significantly more likely to use TCM compared to non-Malays (adjusted OR = 4.52; 95% CI: 1.93–10.59; p = 0.001), and women with low monthly household income also had higher odds of TCM use (adjusted OR = 3.68; 95% CI: 1.24–10.91; p = 0.019). The strength of the study lies in its focus on the relatively under-researched postpartum period and its use of multivariate analysis to identify socio-cultural and economic determinants of traditional practice use. However, the study was limited by its clinic-based setting, which may affect generalizability, and by reliance on self-reported data, which may introduce recall and reporting bias.[15]

In 2021, a cross-sectional ethnobotanical survey conducted by examined the types of traditional practices reported among women of reproductive age in rural northern KwaZulu-Natal, South Africa. The study involved 140 Zulu women aged between 18 and 90 years, who were selected using snowball sampling. Data were collected through face-to-face structured interviews**,** with the aim of documenting traditional dietary taboos and infant care rituals

practiced during pregnancy and the postpartum period. The study revealed that 90 participants (64%) strictly adhered to traditional food taboos during pregnancy. The traditional practices identified included the consumption of specific leafy vegetables believed to enhance fetal strength**,** as reported by 71 women (51%)**,** as well as the avoidance of certain meats and sweet foods for infants, reported by 39 women (28%)**,** to prevent perceived spiritual and physical illnesses. These practices were deeply rooted in cultural beliefs and were passed down through generations, reinforcing their continued use among women of reproductive age. The strength of the study lies in its ethnobotanical approach, which allowed for in-depth documentation of culturally specific traditional practices within a rural African context. However, the study was limited by its relatively small sample size and non-probability sampling technique, which may limit the generalizability of the findings to other populations.[16]

In 2021, a cross-sectional descriptive study in the Bulilima District of Zimbabwe to explore the types of traditional health practices utilized by women during antenatal care. The study involved 50 women of reproductive age who were purposively selected, and data were collected through face-to-face interviews focusing on substances and practices used during pregnancy and childbirth. The findings revealed the use of several highly specific and culturally embedded traditional practices. About 9 women (18%) reported using holy water to induce labor, while 2 women (4%) used ground buffalo horns to manage breech presentations. In addition, 4 women (8%) applied a mixture of soil and urine to the abdomen as a protective measure against witchcraft, and 2 women (4%) reported using elephant dung preparations to control postpartum bleeding. The strength of this study lies in its detailed documentation of culturally specific practices; however, its small sample size limits the generalizability of the findings to a wider population.[11]

In Nigeria, a cross-sectional descriptive study among 200 childbearing women in Ibadan**,** selected using a multi-stage sampling technique, to investigate the utilization of traditional birth attendants (TBAs) and the types of practices they offer. Data were collected using structured questionnaires**.** The study revealed that 144 women (72%**)** had utilized TBAs for maternal care. The major traditional practices identified included manual abdominal manipulation (commonly referred to as womb setting**)** and the use of herbal cleansing concoctions during pregnancy and childbirth. The study further revealed that 139 women (69.4%) resorted to these practices due to fear of medical interventions such as surgery, while

151 women (75.7%) cited the affordability of traditional services compared to orthodox healthcare facilities as a major motivating factor. A key strength of this study is its relatively large sample size and structured methodology; however, reliance on self-reported data may have introduced recall bias. [17]

Similarly, a quantitative descriptive survey conducted in Ifedore Local Government Area of Ondo State, Nigeria, assessed the types of traditional practices and services provided by traditional birth attendants among 100 TBAs and women of reproductive age. Data were collected using structured questionnaires. The findings showed that the most commonly reported services included normal child delivery (97.8%), antenatal care services (81.3%), and traditional infertility treatment (60.0%). The study further identified practices such as the management of perceived "locked" pregnancies and spiritual ailments through herbal infusions and manual physical therapy, underscoring the continued reliance on TBAs for culturally sensitive maternal healthcare. The strength of this study lies in its focus on both providers and users of traditional care; however, its descriptive design limits causal interpretations. [28]

2.2 Providers of Traditional Health Practices among Women of Reproductive Age

The choice of providers of traditional health practices among women of reproductive age is strongly shaped by cultural trust, familial influence, and accessibility to care. In many settings, traditional health services are not delivered by formally trained practitioners but are embedded within household and community structures where experiential knowledge is highly valued.

In 2020, a facility-based cross-sectional study in Nepal to assess the prevalence of herbal medicine use among postpartum women and to identify the key providers and sources of traditional health practices. The study involved 400 postpartum women, and data were collected using structured questionnaires administered during postnatal clinic visits. The findings revealed that traditional health practices were predominantly provided within the family setting rather than by external traditional healers. Specifically, 168 women (41.9%) reported that their mothers-in-law were the primary providers of traditional health advice and herbal remedies, while 160 women (40.1%) received guidance from other relatives, such as mothers, aunts, or elder female family members. This pattern reflects a strong domestic and kinship-based model of traditional healthcare delivery, where authority and trust are rooted in

age, marital hierarchy, and lived experience. A major strength of this study lies in its ability to highlight the informal yet influential role of family members as providers of traditional health practices, which is often underrepresented in formal healthcare research. However, reliance on self-reported data may have introduced recall bias, and the cross-sectional design limits the ability to establish causal relationships. Overall, the study underscores the central role of family-based providers in sustaining and transmitting traditional health practices among women of reproductive age.[24]

In 2025, a cross-sectional analytical study in Mainland China among 264 pregnant and breastfeeding women to identify predictors of the intention to use Traditional Chinese Medicine (TCM) during the perinatal period. Data were collected using structured questionnaires that assessed utilization patterns and sources of TCM care. The findings showed that 99 women (37.5%) reported using TCM during pregnancy or breastfeeding. Unlike informal or family-based provider models observed in other regions, the providers identified in this study were predominantly state-licensed TCM practitioners practicing within formal healthcare facilities. This reflects a distinct global pattern in East Asia, where traditional medicine is institutionally recognized and integrated into the national health system. A major strength of this study is its ability to demonstrate how formal regulation and professionalization shape the role of traditional providers; however, its cross-sectional design limits causal inference.[23]

Within the African region, a cross-sectional multi-centre study among 446 pregnant women attending antenatal clinics in Lusaka Province, Zambia, to identify providers of herbal medicine use during pregnancy. Using interviewer-administered questionnaires, the study revealed that traditional health practices were largely facilitated through social networks rather than formal practitioners. Specifically, 148 women (33.1%) reported receiving herbal knowledge and remedies from family members and friends, while only 50 women (11.1%) obtained such services from professional traditional healers. This finding suggests a “peer-as-provider” model of traditional healthcare delivery, where trust and familiarity outweigh professional specialization. The strength of this study lies in its multi-centre approach, though recall bias remains a possible limitation.[25]

Similarly, a cross-sectional ethnomedical study in the Buikwe District of Central Uganda, focusing on 206 herbalists and traditional birth attendants (TBAs) as providers of maternal traditional health services. Data were collected through structured interviews and direct

documentation of practices. The study identified these practitioners as highly specialized community-based providers of obstetric care. Findings showed that 171 providers (83%) administered plant-based preparations to induce uterine contractions, while 167 providers (81%) offered remedies for the management of postpartum hemorrhage. These providers functioned as primary alternatives to hospital-based obstetric services, particularly in rural communities with limited access to formal healthcare. The study's strength lies in its provider-focused perspective; however, it did not assess maternal outcomes associated with these practices.[27]

Overall, these global and regional studies demonstrate wide variation in the providers of traditional health practices among women of reproductive age, ranging from formally licensed practitioners integrated into national health systems to informal family members, peers, and specialized community-based traditional birth attendants.

In 2021, a community-based cross-sectional study in the Alanamu community, Ilorin, Nigeria, among 212 women of reproductive age to assess their knowledge and utilization of Traditional Birth Attendants (TBAs). Data were collected using semi-structured questionnaires that explored maternal healthcare practices and experiences with TBAs. The study revealed that 153 women (72.2%) identified TBAs as their primary maternal health providers, and 86 women (40.8%) had experienced at least one delivery conducted by a TBA, with 69 women (80.2%) reporting successful outcomes. The key practices included herbal administration, abdominal massage, and home-based delivery services. This study highlights the continued reliance on TBAs as trusted maternal care providers in local Nigerian communities. A major strength of this study is its community-based approach that captures actual utilization patterns; however, its findings may be limited by self-reported data and potential recall bias.[26]

Similarly, a quantitative descriptive survey in Ifedore Local Government Area, Ondo State, Nigeria, involving 100 traditional birth attendants and women of reproductive age. Data collection included structured questionnaires and direct assessment of TBA services. Findings indicated that TBAs provided essential maternal care services, including normal child delivery (98%), antenatal care (81.3%), and infertility treatment (60%). Traditional practices documented involved herbal infusions, manual abdominal therapy ("womb setting"), and home-based management of spiritual or reproductive issues. This study underscores the central role of TBAs in maternal healthcare delivery within local Nigerian settings. Its

strength lies in the combined assessment of providers and clients; however, it did not evaluate the clinical effectiveness of these practices.[28]

In 2024, a cross-sectional descriptive study among 400 childbearing women across Nigeria to investigate the factors influencing the utilization of Traditional Birth Attendants (TBAs). Multi-stage sampling was used to select participants, and data were collected through structured questionnaires that assessed perceptions, experiences, and reasons for TBA use. The study revealed that TBAs were preferred maternal care providers because they offered what women described as "motherly care" and emotional support, aspects often perceived as lacking in formal hospital settings. Additionally, TBAs were found to be accessible, culturally sensitive, and aligned with local beliefs about the spiritual dimensions of childbirth, reinforcing their role as trusted community-based providers. A strength of this study is its large, geographically diverse sample, which enhances generalizability; however, reliance on self-reported data introduces the possibility of recall and social desirability bias.[17]

2.3 Perceived Benefits and Risks of Traditional Health Practices among Women of Reproductive Age

In 2023, a global online survey among 3,130 ethnic Indian women living with Polycystic Ovary Syndrome (PCOS) across multiple countries to assess their use of traditional, complementary, and integrative medicine. Data were collected via structured online questionnaires that explored types of therapies used, perceived benefits, and potential risks. The findings revealed that the primary motivation for using these practices was the perception of "naturalness" and fewer side effects compared to conventional hormonal treatments. Specifically, 1,158 women (37%) reported using Ayurveda, while 1,784 women (57%) engaged in Yoga to manage stress and hormonal imbalance. Despite these perceived benefits, the study highlighted a significant risk: many women did not disclose their use of traditional practices to medical providers, which could result in unmonitored herb-drug interactions. The strength of this study is its large, internationally diverse sample, providing a broad perspective on perceptions of THPs; however, the reliance on self-reported online data may introduce reporting and selection biases.[18]

In 2019, a facility-based cross-sectional study among 134 postnatal women who delivered in a tertiary center in Malaysia to examine perceptions of complementary medicine for postpartum health. Data were collected using structured questionnaires that assessed the types

of practices used, perceived benefits, and potential risks. The study found that 117 women (87.3%) believed that traditional practices were effective for physical restoration. Specific practices such as abdominal hot stone application and massage were commonly used, with 97 women (72%) reporting benefits related to improved blood circulation and the perceived "cleansing" of the body. While participants generally considered these practices safe, the study noted a potential risk due to the lack of standardization in herbal dosages, which could affect breastfeeding infants. The strength of the study lies in its focus on women's direct postpartum experiences; however, the small sample size and single-center design limit generalizability.[32]

In 2022, a community-based cross-sectional study among 568 pregnant women in Southwest Ethiopia to assess the prevalence, perceived benefits, and risks of harmful traditional practices. Using systematic random sampling, data were collected through interviewer-administered questionnaires focusing on women's beliefs and experiences with these practices. The study revealed that 414 women (72.9%) perceived benefits in terms of protection from spiritual threats and ensuring correct fetal positioning through abdominal massage. Despite these positive perceptions, the researchers highlighted substantial clinical risks, noting that such practices were associated with adverse outcomes, including premature labor and placental abruption. The strength of this study lies in its large sample size and community-based approach, though self-reported data may introduce recall bias.[20]

In 2018, a secondary analysis of randomized controlled trial data involving 8,219 births in rural Malawi to examine associations between herbal medicine use and pregnancy outcomes. The study focused on women's perceptions of benefits and the actual clinical risks linked to traditional practices. The findings indicated that 2,112 women (25.7%) used the herb *Mwanamphepo* to accelerate labor, reflecting a perceived benefit of faster delivery. However, statistical analysis revealed significant risks, with herbal use associated with a 28% increase in maternal morbidity and a 22% increase in neonatal morbidity or mortality. This study underscores the disparity between women's perceived benefits and the documented clinical hazards of certain traditional health practices. The strength of the study lies in its large sample size and use of rigorous RCT data, although causality is limited by its secondary analysis design.[33]

In 2024, a systematic review and narrative synthesis focusing on African traditional health practices and their public health implications within the Nigerian context. The study analyzed

a wide range of secondary data sources, including published studies, reports, and policy documents, to explore women's perceived benefits and the associated risks of traditional health practices during pregnancy and childbirth. The findings revealed that many women perceived these practices as beneficial mainly for psychosocial reasons, such as providing spiritual comfort and reinforcing a sense of cultural identity and belonging during pregnancy. However, the review also documented serious health risks linked to these practices, including herb–drug toxicity, uterine rupture resulting from the unmonitored use of labor-inducing herbs, and delays in seeking emergency obstetric care. These risks were identified as key contributors to persistently high maternal mortality rates in Nigeria. The strength of this study lies in its comprehensive synthesis of evidence across multiple sources, offering a broad public health perspective; however, its reliance on secondary data limits direct assessment of individual-level outcomes.[4]

In 2022, a qualitative phenomenological study in a rural African setting to explore pregnant women's perceptions of traditional health practices (THPs). The study utilized focus group discussions to capture indigenous beliefs, experiences, and meanings attached to the use of traditional remedies during pregnancy and the neonatal period. The findings revealed that many participants perceived THPs as a superior alternative to orthodox healthcare, particularly for neonatal conditions they believed hospitals could not effectively manage, such as "depressed fontanelles" and the need for spiritual protection of the newborn. Women expressed strong cultural confidence in traditional remedies passed down through generations and administered by trusted community figures. However, alongside these perceived benefits, the study documented notable risks. Participants reported instances where newborns developed wrinkled skin and respiratory distress following maternal ingestion of what were described as "strong" herbal mixtures during pregnancy or shortly after delivery. The strength of this study lies in its in-depth exploration of women's lived experiences and cultural interpretations of health and illness; nevertheless, its qualitative design and limited sample size restrict the generalizability of the findings and do not allow for quantification of clinical outcomes.[30]

2.4 Factors Associated with Traditional Health Practices among Women of Reproductive Age

In 2023, a systematic review examining factors associated with the use of traditional health practices among women of reproductive age across the Eastern Mediterranean region, including Iran, Saudi Arabia, Palestine, and Egypt. The review synthesized evidence from 33 cross-sectional studies with a cumulative sample of over 13,000 women. The objective of the review was to identify consistent socio-demographic and contextual predictors influencing women's reliance on medicinal herbs and other traditional health practices. The findings revealed that rural residence was a strong determinant of THP utilization, with women living in rural settings more likely to consume medicinal herbs than their urban counterparts. Employment status also emerged as a significant factor, as homemakers demonstrated a higher likelihood of using traditional remedies compared to formally employed women. Furthermore, the source of health information played a critical role; women were significantly more inclined to adopt traditional health practices when recommendations originated from family members or friends rather than from trained health professionals. A key strength of this review lies in its broad regional coverage and large aggregated sample size, which enhances the robustness and generalizability of its conclusions. However, the reliance on cross-sectional studies limits causal interpretation of the identified associations.[9]

In 2020, a systematic review and narrative synthesis to explore the factors influencing women's choice of herbal medicine across diverse global settings. The review analyzed 21 primary studies, including both qualitative and quantitative research published between 2000 and 2018. The aim was to identify common motivations underpinning women's reliance on herbal and traditional remedies. The findings revealed that a strong "perceived threat" related to health conditions such as infertility, pregnancy-related discomforts, and chronic reproductive health problems was a major driver of herbal medicine use. Additionally, the review highlighted the perceived failure or inadequacy of conventional medical care as a critical influencing factor, with many women reporting dissatisfaction with hospital-based treatments due to concerns about side effects, invasiveness, or lack of effectiveness. Consequently, traditional remedies were often viewed as safer, more natural, and culturally acceptable alternatives. The strength of this study lies in its integration of evidence from multiple methodological perspectives, providing a comprehensive understanding of women's

motivations; however, variations in study designs and contexts may limit direct comparison of findings across settings.[10]

In 2020, a population-based descriptive cross-sectional study in the Kigoma region of Tanzania to identify factors associated with the use of local herbs during pregnancy and labour among women of reproductive age. The study analysed data from 3,530 women and applied multivariable logistic regression to examine socio-economic and obstetric predictors of herbal medicine use. The findings revealed that women in the lowest household wealth tercile had significantly higher odds of using local herbs compared to wealthier counterparts. In addition, women who had previously delivered at home were more likely to rely on traditional herbal practices during subsequent pregnancies and labour. Importantly, the study established a clear association between herbal medicine use and adverse maternal outcomes, demonstrating that women who used local herbs had a 1.5-fold increased risk of postnatal complications. The strength of this study lies in its large sample size and robust statistical analysis, which strengthens the validity of its conclusions. However, its cross-sectional design limits the ability to infer causality between socio-economic vulnerability, herb use, and postnatal complications.[7]

In 2021, a community-based descriptive cross-sectional study in the Amhara region of Ethiopia to assess cultural malpractices and the factors associated with their use among women of reproductive age. The study involved 845 women who had experienced at least one delivery, with data collected through structured interviews. The findings revealed that educational status was the strongest predictor of engagement in traditional and cultural malpractices. Women who were unable to read and write were 14.35 times more likely to practice harmful traditional methods compared to women with higher levels of education. In addition, rural residence significantly increased the likelihood of reliance on traditional practices, reflecting limited access to formal healthcare services. Lack of antenatal care (ANC) follow-up was also a key contributing factor, as women who did not attend ANC were more likely to depend on unverified traditional methods during pregnancy and childbirth. The strength of this study lies in its large sample size and community-based approach, which enhances the representativeness of the findings; however, the cross-sectional design limits the establishment of causal relationships between the identified factors and the use of traditional practices.[35]

In 2024, a national population-based cross-sectional analytical study across Nigeria to examine factors influencing women's choice of healthcare delivery systems, including reliance on traditional health practices. The study analysed data from 41,821 women using a stratified two-stage cluster sampling technique, ensuring national representativeness across wealth quintiles and geopolitical regions. The findings revealed that socio-economic status and geographic location were the most influential determinants of healthcare choice. Women in the lowest wealth quintiles were significantly more likely to utilize traditional support systems rather than health facility–based services. In addition, strong regional disparities were observed, with women residing in areas characterized by low density of formal health facilities showing a higher preference for traditional care. Spatial mapping further confirmed that poor geographic accessibility to healthcare infrastructure drives dependence on traditional practices. The strength of this study lies in its large sample size and robust national coverage, which enhance generalizability; however, the use of secondary cross-sectional data limits the exploration of individual-level motivations underlying these choices. [8]

In 2025, a facility-based cross-sectional study in the Remo Zone of Ogun State, Nigeria to determine the prevalence and factors associated with the use of self-prescribed herbal medicines among 262 pregnant women attending antenatal clinics in three public health facilities. A multistage sampling technique was used to select participants, and data were gathered through interviewer-assisted structured questionnaires that assessed socio-demographic characteristics, obstetric history, and use of herbal versus orthodox medicines. The study found that 43 women (16.4%) reported use of herbal medicines during pregnancy, with a larger proportion engaging in self-prescription compared to orthodox medications. Multivariable analysis showed that women with high-status occupations were significantly less likely to take herbal medicines compared to those with lower-status jobs (adjusted odds ratio [AOR] = 0.2; 95% CI: 0.1–0.6; p = 0.003), and women with tertiary education had significantly lower odds of using herbal medicines than those with lower education (AOR = 0.3; 95% CI: 0.1–0.6; p = 0.001). These findings highlight that socio-economic status and educational attainment are key determinants of herbal medicine use during pregnancy among women in this Nigerian setting. A major strength of this study is its specific focus on both herbal and self-prescribed orthodox medicine use, providing nuanced insight into traditional practice determinants; however, its facility-based sampling may limit broader generalizability to community populations.[10]

CHAPTER THREE

METHODOLOGY

3.1 Study Area

The study was conducted in Egor Local Government Area (LGA) of Edo State, Nigeria, located in the South–South geopolitical zone of the country. Egor LGA lies within the Edo South Senatorial District and is one of the eighteen Local Government Areas in Edo State. The Local Government Area forms part of the metropolitan area of Benin City, the state capital, making it predominantly urban in structure and population characteristics.

Geographically, Egor Local Government Area occupies an estimated land area of approximately 93 square kilometres. The area is characterized by relatively flat lowland terrain typical of the tropical rainforest region of southern Nigeria. The climate is tropical, with two major seasons rainy and dry seasons accompanied by high humidity and moderate temperatures throughout the year. Vegetation within the area consists mainly of secondary forest growth and urban vegetation resulting from rapid residential and commercial development. The environment is largely urbanized, with expanding settlements, road networks, markets, and institutional establishments.

Administratively, Egor Local Government Area is divided into ten political wards comprising Uselu I, Uselu II, Egor, Uwelu, Okhoro, Oregbeni, Evbareke, Useh, Idogbo, and Oliha, with the administrative headquarters located in Uselu. Major communities within the LGA include Uselu, Uwelu, Idogbo, Okhoro, Oregbeni, Evbareke, Useh, and Oliha, which are interconnected through accessible road networks and share similar urban residential and commercial characteristics.

According to the 2006 National Population Census, Egor LGA had a population of approximately 340,287 people; however, for the purpose of this study, the projected estimated population for 2025/2026 (502,700) was considered in order to reflect current demographic realities and population growth within the area. The population is cosmopolitan in nature, comprising predominantly Edo indigenes alongside other ethnic groups such as Yoruba, Igbo, Hausa, and other minority groups from different parts of Nigeria, largely due to migration associated with urbanization and economic opportunities.

Egor LGA possesses relatively developed social amenities and infrastructure, including public and private primary and secondary schools, tertiary institutions, healthcare facilities such as primary health centres, private hospitals, maternity homes, pharmacies, markets, banking institutions, religious centres, and transportation services. Electricity supply and telecommunication services are generally available, although variations in accessibility exist across communities.

Socio-economically, residents engage mainly in civil service employment, trading, small-scale businesses, artisan work, transportation services, and private sector occupations. Informal economic activities, particularly petty trading and small entrepreneurial ventures, are also common among women within the communities. The urban setting, cultural diversity, and varying socio-economic conditions of Egor Local Government Area made it an appropriate location for studying traditional health practices among women of reproductive age.

Egor Local Government Area is served by several healthcare facilities, including approximately 10 primary health centres, over 30 registered private hospitals and clinics, numerous maternity homes, and faith-based health facilities, making healthcare services relatively accessible to residents. The area also hosts notable educational institutions, including the University of Benin (UNIBEN) and the University of Benin Teaching Hospital (UBTH), in addition to more than 20 public and private secondary schools and several vocational and training institutions.

Given its urban setting, diverse population, high population density, and relatively good access to healthcare and educational facilities, Egor Local Government Area provided an appropriate and relevant setting for assessing traditional health practices among women of reproductive age, as it reflects the interaction between cultural beliefs and modern healthcare utilization in an urban Nigerian context.

3.2. Study Design

The study adopted a descriptive cross-sectional survey design. This design was appropriate for this study as it allowed for the collection of data from the study population at a single point in time. It was effective for describing the characteristics of the population (the types of traditional health practices and their determinants) and examining the association between

various factors (socio-demographics, knowledge, beliefs) and the use of traditional health practices.

3.3. Scope of Study

The study was geographically restricted to the Egor Local Government Area (LGA) of Benin City, Edo State, Nigeria. The study focused strictly on identifying the determinants, providers, specific types, and perceived benefits and risks associated with traditional health practices (THP) utilized by women of reproductive age (WRA). The population of interest was limited to women aged 15 to 49 years (Women of Reproductive Age) who were currently resident in the selected communities within Egor LGA.

3.4 Study Duration

The duration of study lasted for a year, starting in January 2025 till April 2026. The timeline was as follows:

- Conceptualization and initial write up: April to September, 2025
- Materials and methods: September 2025 to February 2026
- Ethical Approval: February to March 2026
- Data collection and results: March to April, 2026
- Discussion and conclusion: April, 2026

3.5. Study Population

The target population for this study was all women of reproductive age (WRA), defined as women between the ages of 15 and 49 years, residing within the Egor Local Government Area of Benin City. The accessible population was the WRA who met the inclusion criteria, which included consent to participate, residence in the selected wards/communities, and being within the specified age range in the specific wards selected for the study.

Inclusion Criteria

Participants were required to meet all of the following conditions to be included in the study:

1. Women aged 15-49 years, representing the reproductive age group.

2. Residents of Egor Local Government Area (LGA) for at least six months prior to the study.

Exclusion Criteria

Participants were excluded from the study if they meet any of the following conditions:

1. Women below 18 years or above 49 years.
2. Women who were non-residents of Egor LGA or have lived in the area for less than six months**.**
3. Women who were critically ill or unable to communicate effectively.

3.6. Sample Size Determination

The sample size for this study was determined using the Cochran formula for estimating proportions in a descriptive cross-sectional study, assuming a 95% confidence level and a 5% margin of error. Given the absence of a known local prevalence rate for the use of traditional health practices among WRA, a conservative prevalence of 50% (0.5) was used to yield the maximum sample size.

$$n = \frac{Z^2.p(1-p)}{e^2}$$

Where:

- n = desired sample size
- Z = standard normal deviate (1.96 at 95% confidence level)
- p = estimated prevalence of the attribute (0.5)
- e = margin of error (0.05)

$$n = \frac{1.96^2 X\ 0.5(1-0.5)}{0.05^2}$$

$$n = \frac{1.96^2 X\ 0.5(1-0.5)}{0.05^2}$$

$$n = \frac{3.8416\ X\ 0.25}{0.0025}$$

$$n \approx 385$$

To account for potential non-response, a 40% non-response rate will be added to the calculated sample size:

40% of 385 ≈ 251

385 + 251 = 636

The total sample size for the study will therefore be 636 women of reproductive age.

3.7 Sampling Technique

A descriptive cross-sectional study design was adopted to assess traditional health practices among women of reproductive age in Egor Local Government Area (LGA), Edo State, Nigeria. Egor Local Government Area was administratively divided into ten wards. Five wards were used for the study. The study population comprise women aged 15–49 years who had resided in the selected communities for at least six months prior to the study.

A **multistage sampling technique** was employed to select respondents for the study. The sampling procedure will be carried out in the following stages:

Stage 1 – Selection of Communities:

From each selected ward, one community was randomly selected using simple random sampling techniques.

Stage 2 – Selection of Enumeration Areas (EAs):

Enumeration areas within the selected communities were obtained from existing administrative listings, and the required number of EAs will be selected proportionate to population size.

Stage 3 – Selection of Households:

Households within each selected enumeration area were chosen using systematic sampling. A sampling interval was calculated by dividing the total number of households by the required sample size.

Stage 4 – Selection of Respondents:

In each selected household, one eligible woman was selected using simple random sampling. Where more than one eligible respondent was present, balloting was used to select one participant.

Rationale for Multistage Sampling

The method enabled effective coverage of a large and geographically dispersed population within Egor LGA.

Random selection at multiple stages improved representativeness of the study population.

The approach enhanced feasibility and logistical management during field data collection.

3.8 Data Management

3.8.1 Method of Data Collection

Data were collected using a structured, interviewer-administered questionnaire designed to capture information on women's utilization of traditional health practices and associated factors. The questionnaire was developed after reviewing relevant literature and national guidelines on maternal health and traditional medicine. Each section of the questionnaire was explained to respondents, and clarifications were provided. Trained research assistants fluent in English and local languages administered the questionnaires face-to-face to reduce literacy-related bias and ensure accuracy.

3.8.2 Tools for Data Collection

The structured questionnaire consisted of five sections aligned with the study objectives:

- **Section A: Socio-demographic characteristics** – age, marital status, residence, designation, educational level, occupation, religion, ethnicity, household income.
- **Section B: Traditional Health Practices utilization and types** – utilized in the past one year, reason for use, source of information and types used.
- **Section C: Traditional Health Practices providers** – primary provider (family, herbalist, TBA, Traditional bone setters), frequency of use, how often are the services utilized and who pays for the services.
- **Section D: Perceived benefits and risks** – effectiveness, safety of use, perceived benefits and side effects.

- **Section E: Factors influencing use** – personal, socio-cultural, economic, and health system-related determinants.

3.8.3 Pretesting

The questionnaire was pretested using 10% (64) of the intended sample size within Ovia North East LGA. Observed errors were corrected before full-scale data collection. Pretesting ensured clarity, relevance, comprehensibility, and reliability of the questions.

3.8.4 Data Analysis

Completed questionnaires were checked for accuracy, completeness, and consistency. Data were coded and cleaned**,** then analysed using IBM SPSS version 26.0**.** A p-value < 0.05 was considered statistically significant.

3.8.5 Scoring and Categorization of Variables

To ensure objective measurement of the study variables, a composite scoring system was developed for the key sections of the questionnaire.

Socio-demographics

Age was grouped into several intervals based on the distribution obtained from the questionnaires: 15–18 years, 19–25 years, 26–35 years, 36–45 years, and 46–49 years.

Level of Education

Level 0: No formal education or incomplete primary education

Level 1: Completed primary education or incomplete secondary education

Level 2: Completed secondary education

Level 3: Tertiary education

Monthly Income

Score 1: < ₦70,000

Score 2: ₦70,000 - ₦139,999

Score 3: ₦140,000 - ₦249,999

Score 4: ≥ ₦250,000

Occupation

The modified (ILO's International Labour Organization) classification of occupations (ISCO) dividing skill levels into skill level 0 to 4 was used.[39]

Skill level 0: Unemployed, student, retired

Skill level 1: Unskilled labour

Skill level 2: Clerks, service and sales workers; plant operators

Skill level 3: Technicians and associate professionals

Skill level 4: Professionals, managers

Socio-economic status

Socioeconomic status of respondents was based on a revised scoring system developed in 2021.[40]

The scoring system combined level of education, ILO skill level and monthly income

A total score of 9 was given for socio-economic status:

High socio-economic status: 7-9

Middle socio-economic status: 4-6

Low socio-economic status: 1-3

Household size was categorized as less than or equal to five members and greater than five members in accordance with Nigeria and Demographic Health Survey (NDHS), 2024.[41]

Residence was classified as urban, rural, or peri-urban. Family type was categorized as nuclear or extended, and marriage type as monogamous or polygamous.

PERCEIVED BENEFITS AND RISKS TOWARD THP

Attitude and perception toward THP were assessed using questions in Section D in the questionnaire. Negatively phrased questions were reverse coded for the scoring. Correct responses were given a score of 1 while incorrect responses were given a score of 0. Final scores were converted to percentage (100%). A cut-off of 60% and above was used to categorize the respondents into having positive or negative perception.

A maximum score of 17 was attainable. Respondents with scores ≥60% were assessed to have positive perception of THP while ≤ 60% were assessed to have negative perception of THP.

3.8.6 Data Presentation

Data were presented using prose, frequency tables and statistical reports.

- **Tables:** Summarized quantitative data
- **Charts:** Summarized qualitative data
- **Statistical Reports:** Included p-values, confidence intervals, and effect sizes to support statistical significance.

3.9 Ethical Consideration

Ethical clearance was obtained from the Research and Ethics Committee of the University of Benin Teaching Hospital (UBTH) before data collection.

A cover letter was obtained from the Department of Public Health and Community Medicine, University of Benin. Ethical approval with protocol number ADM/E 22/AVOL. VII/14865491272128 was obtained.

Informed consent was obtained from all participants. Confidentiality and anonymity were maintained throughout, and participants were informed of their right to withdraw at any time without consequences.

3.10 Limitations of The Study

1. Reliance on self-reported information**,** which may be subject to recall bias however time-frame prompts were used to aid memory.
2. Cultural sensitivity and disclosure**:** Discussion of reproductive health and traditional practices may have caused under-reporting due to discomfort however confidentiality of information was assured.
3. Geographic limitation**:** The study was conducted in Egor LGA, and findings may not generalize to areas with different socio-cultural, religious, or economic contexts.

CHAPTER FOUR

A total of 636 respondents participated in the study and the response rate was 100%. The results are presented in the following sections in line with the specific objectives.

SECTION A: Socio-demographic characteristics of respondents

SECTION B: Types of traditional health practices reported and utilized by respondents

SECTION C: Providers of traditional health services among respondents

SECTION D: Perceived benefit and risks associated with the traditional health practices among respondents

SECTION E: Factors associated with traditional health practices among respondents.

SECTION A

SOCIO-DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Table 1: Sociodemographic characteristics of respondents

Variables	Frequency (n = 636)	Percent
Age group (years)		
15 – 25	220	34.6
26 – 35	212	33.3
36 – 45	118	18.6
46 – 49	86	13.5
Mean ± SD 31.0 ± 9.8		
Marital status		
Married	296	46.5
Single	254	39.9
Separated/Divorced	46	7.2
Cohabiting	24	3.8
Widowed	16	2.5
Religion		
Christianity	559	87.9
Islam	53	8.3
African Traditional Religion	24	3.8
Ethnicity		
Bini	240	37.7
Esan	107	16.8
Yoruba	104	16.4
Igbo	94	14.8
Afemai	35	5.5
Ika	22	3.5
Urhobo/Isoko	20	3.1
Ijaw	14	2.2
Type of marriage (n = 296)		
Monogamy	290	98.0
Polygamy	6	2.0
Family type (n = 296)		
Nuclear	203	68.6
Extended	93	31.4
Household size		
≤5	390	61.3
>5	246	38.7
Number of children (n = 404)		
<3	31	7.7
≥3	373	92.3
Designation		
Ugbowo	304	47.8
Uselu 1	116	18.2
Uwelu	98	15.4
Uselu 2	95	15.0
Okhoro	23	3.6

The age distribution showed that a higher proportion of respondents were within the younger reproductive age groups, with 220 (34.6%) aged 15 to 25 years and 212 (33.3%) aged 26–35 years. Respondents aged 36–45 years constituted 118 (18.6%), while those aged 46–49 years accounted for 86 (13.5%).

In terms of marital status, 254 (39.9%) were single, 296 (46.5%) were married, 24 (3.8%) were cohabiting, 46 (7.2%) were separated or divorced, and 16 (2.5%) were widowed.

Most respondents were Christians 559 (87.9%), while 53 (8.3%) were Muslims and 24 (3.8%) practised African Traditional Religion. Regarding ethnicity, Bini respondents were 240 (37.7%), followed by Esan 107 (16.8%), Yoruba 104 (16.4%), Igbo 94 (14.8%), Afemai 35 (5.5%), Ika 22 (3.5%), Urhobo 14 (2.2%), Ijaw 14 (2.2%), and Isoko 6 (0.9%). Most marriages were monogamous 290 (98.0%) and 203 (68.6%) belonged to nuclear families. About 390 (61.3%) had fewer than five household members.

Among respondents who had children, 373 (92.3%) had three or more children, while 31 (7.7%) had fewer than three children. In terms of designation, almost half of the respondents 304 (47.8%) were from Ugbowo. This was followed by Uselu 1 with 116 (18.2%), Uwelu 98 (15.4%), Uselu 2 95 (15.0%), and Okhoro 23 (3.6%).

Table 2: Socioeconomic characteristics of respondents

Variables	Frequency (n = 636)	Percent
Place of residence		
Urban	443	69.7
Rural	97	15.3
Peri-urban	96	15.0
Level of education (respondent)		
No formal education	41	6.4
Primary	22	3.5
Secondary	221	34.7
Tertiary	352	55.4
Respondents' skill level		
Level 0	171	26.9
Level 1	37	5.8
Level 2	320	50.3
Level 3	38	6.0
Level 4	70	11.0
Spouse's level of education (n = 296)		
No formal education	6	2.0
Primary	12	4.1
Secondary	121	40.9
Tertiary	157	53.0
Spouse's skill level (n = 296)		
Level 0	34	11.5
Level 2	213	72.0
Level 3	5	1.7
Level 4	44	14.9
Monthly income (₦)		
<70,000	157	24.7
70,000 – 139,999	130	20.4
140,000 – 249,999	253	39.8
≥250,000	96	15.1
Socio-economic status		
Low	81	12.7
Middle	372	58.5
High	183	28.8

The majority of respondents resided in urban areas 443 (69.7%), with smaller proportions in rural 97 (15.3%) and peri urban areas 96 (15.0%). Most respondents had tertiary education

352 (55.4%), followed by secondary education 221 (34.7%), while few had primary 22 (3.5%) or no formal education 41 (6.4%).

In terms of occupational skill level, half were in skill level two, 320 (50.3%), with notable proportions in level 0, 171 (26.9%) and fewer in levels 1, 3, and 4. Among spouses, the majority had tertiary education 157 (53.0%) and were predominantly in skill level two, 213 (72.0%). Regarding income, most respondents earned ₦140,000 to ₦249,999 253 (39.8%), while fewer earned above ₦250,000 96 (15.1%). Overall, the majority belonged to the middle socioeconomic class 372 (58.5%), followed by the high class 183 (28.8%), with the least in the low class 81 (12.7%).

SECTION B

TYPES OF TRADITIONAL HEALTH PRACTICES REPORTED BY RESPONDENTS

Table 3: Traditional health practices of respondents

Variables	Frequency (n = 636)	Percent
Engaged in a traditional health practice in last 12 months		
Yes	236	37.1
No	400	62.9
Source of information about traditional health practice (n=236) *		
Family	136	57.6
Media (newspaper/radio/TV)	39	16.5
Friends	26	11.0
School	16	6.8
Place of worship	12	5.1
Club	7	3.0
Types of traditional health practice (n=236) *		
Herbal Preparation	209	88.6
Traditional Birth Attendant	69	29.2
Bone setting	67	28.3
Physical/manual therapies	56	23.7
Scarification	54	22.9
Care during pregnancy	33	14.0
Spiritual/ritual healing (e.g. prayer, divination)	28	11.9
Fertility treatment	18	7.6
Body massage	11	4.7
Mind body practices (e.g. yoga, meditation, chanting)	10	4.2
Acupuncture	3	1.3

***Multiple response question**

Findings showed that 236 (37.1%) of respondents had used traditional health practitioner services in the past 12 months, while 400 (62.9%) had not.

Family members were the major source of information 136 (57.6%), followed by media 39 (16.5%), friends 26 (11.0%), school 16 (6.8%), place of worship 12 (5.1%), and clubs 7 (3.0%).

The types of traditional health practices utilised included bone setting 101 (42.8%), physical or manual therapies 56 (23.7%), pregnancy related care 33 (14.0%), fertility treatment 18 (7.6%), body massage 11 (4.7%), mind body practices 10 (4.2%), spiritual healing 4 (1.7%), and acupuncture 3 (1.3%).

Table 4: Types of traditional health practices among respondents

Variables	Frequency (n = 236)	Percent
Reason for recent use of traditional health practice (n=236)		
General illness (e.g. fever)	66	28.0
Bone setting/Injury	63	26.7
Care during pregnancy	51	21.6
Fertility treatment	39	16.5
Spiritual and ritual healing	17	7.2
Used herbal preparations the last 12 months (n=236) *		
Yes	209	88.6
No	27	11.4
Used the services of Traditional Birth Attendant in the last 12 months (n=236) *		
Yes	69	29.2
No	167	70.8
Used the services of a Traditional Bone Setter in the last 12 months (n=236) *		
Yes	67	28.4
No	169	71.6
Used scarification or local Incisions in the last 12 months (n=236) *		
Yes	28	11.9
No	208	88.1
Used spiritual healing or traditional rituals (charms, prayers) in the last 12 months (n=236) *		
Yes	54	22.9
No	182	77.1

***Multiple response questions**

Among users, the main reasons for utilisation included general illness 66 (28.0%), bone setting or injury 63 (26.7%), antenatal or pregnancy care 51 (21.6%), fertility issues 39 (16.5%), and spiritual or ritual needs 17 (7.2%).

A large proportion 209 (88.6%) reported use of herbal preparations within the past year. Additionally, 69 (29.2%) used traditional birth attendants, while 67 (28.4%) used traditional

bone setters. Scarification or incisions were reported by 28 (11.9%), while 54 (22.9%) reported use of spiritual or ritual healing practices.

Table 5: Socio-demographic characteristics and utilization of Tradional Health Practice services

Variables	Utilised THP services		Test statistic	p-value
	Yes (n=236) Freq. (%)	No (n=400) Freq. (%)		
Age group (years)				
15 – 25	34 (15.5)	186 (84.5)	$\chi^2 = 89.225$	**<0.001***
26 – 35	102 (48.1)	110 (51.9)		
36 – 45	42 (35.6)	76 (64.4)		
46 – 49	58 (67.4)	28 (32.6)		
Religion				
Christianity	205 (36.7)	354 (63.3)	$\chi^2 = 14.339$	**0.001***
African Traditional Religion	17 (70.8)	7 (29.2)		
Islam	14 (26.4)	39 (73.6)		
Ethnicity				
Edo non-indigenes	82 (32.3)	172 (67.7)	$\chi^2 = 4.216$	**0.044***
Edo indigenes	154 (40.3)	228 (59.7)		
Marital status				
Never married	50 (18.0)	228 (82.0)	$\chi^2 = 77.374$	**<0.001***
Ever married	186 (52.0)	172 (48.0)		
Marital setting				
Monogamous	128 (44.1)	162 (55.9)	3.650+	0.093
Polygamous	5 (83.3)	1 (16.7)		
Family setting				
Nuclear	82 (40.4)	121 (59.6)	$\chi^2 = 5.378$	**0.024***
Extended	51 (54.8)	42 (45.2)		
Household size				
≤ 5	157 (40.3)	233 (59.7)	$\chi^2 = 4.286$	**0.043***
>5	79 (32.1)	167 (67.9)		
Number of children (n = 404)				
<3	14 (45.2)	17 (54.8)	$\chi^2 = 0.110$	0.852
≥3	180 (48.3)	193 (51.7)		
Place of residence				
Urban	176 (39.7)	267 (60.3)	$\chi^2 = 5.020$	0.082
Rural	33 (34.0)	64 (66.0)		
Peri-urban	27 (28.1)	69 (71.9)		
Socioeconomic status				
Low	21 (25.9)	60 (74.1)	$\chi^2 = 17.440$	**<0.001***
Middle	163 (43.8)	209 (56.2)		
High	52 (28.4)	131 (71.6)		

Statistically significant; +Fisher's Exact Test

The bivariate analysis showed that age, religion, ethnicity, marital status, family setting, household size, and socio-economic status were significantly associated with utilisation of traditional health practitioner services.

Utilisation increased with age, with the highest proportion observed among respondents aged 46 years and above (67.4%) compared to those aged ≤25 years (15.5%) ($p < 0.001$). Religion was also significantly associated with utilisation, with the highest use reported among respondents practising African Traditional Religion (70.8%) compared to Christians (36.7%) and Muslims (26.4%) ($p = 0.001$).

Ethnicity showed a significant association, as Edo indigenes (40.3%) reported higher utilisation compared to non-indigenes (32.3%) ($p = 0.044$). Marital status was strongly associated, with ever married respondents (52.0%) more likely to utilise services compared to those never married (18.0%) ($p < 0.001$).

Family setting was significant, with higher utilisation among respondents from extended families (54.8%) compared to nuclear families (40.4%) ($p = 0.024$). Similarly, respondents from households with fewer than five members (40.3%) had higher utilisation compared to those with larger households (32.1%) ($p = 0.043$).

Socio-economic status was also significantly associated, with the highest utilisation observed among respondents in the middle socio-economic class (43.8%), followed by those in the high (28.4%) and low (25.9%) socio-economic groups ($p < 0.001$).

However, marital setting, number of children, and place of residence were not statistically significantly associated with utilisation of traditional health practitioner services ($p > 0.05$).

Table 6: Predictors of utilisation of Traditional Health Practice services

Variables	β (regression coefficient)	OR	95% C.I. for OR		p-value
			Lower	Upper	
Age group (years)	0.229	1.258	0.790	2.003	0.334
Religion					
Christianity*		1			
Others+	0.960	2.612	1.086	6.283	**0.032**
Ethnicity					
Edo indigenes*		1			
Edo non-indigenes	-0.827	0.437	0.233	0.820	**0.010****
Family setting					
Nuclear*		1			
Extended	0.123	1.131	0.596	2.144	0.707
Household size					
≤ 5	0.591	1.806	0.978	3.335	0.059
> 5*		1			
Number of children (n = 404)					
<3*		1			
≥3	0.198	1.219	0.205	7.261	0.828
Place of residence					
Urban*		1			
Rural	-1.506	0.222	0.091	0.539	**0.001****
Peri-urban	-4.343	0.013	0.002	0.105	**<0.001****
Socioeconomic status					
High*		1			
Low	1.140	3.127	0.878	11.134	0.079
Middle	1.926	6.865	3.498	13.472	**<0.001****

*OR: Odds ratio; CI: Confidence interval; * Reference category; ** $p < 0.05$; +Islam and ATR; $R^2 = 28.4 – 38.0\%$.*

The multivariate logistic regression analysis showed that religion, ethnicity, place of residence, and socio-economic status were significantly associated with the use of traditional health practices.

Respondents who practised religions other than Christianity had higher odds of using traditional health practices compared to Christians (OR = 2.612; 95% CI: 1.086–6.283; p = 0.032). Ethnicity was also significant, as Edo non indigenes were less likely to use traditional health practices compared to Edo indigenes (OR = 0.437; 95% CI: 0.233–0.820; p = 0.010).

Place of residence showed strong associations, with respondents living in rural areas (OR = 0.222; 95% CI: 0.091–0.539; p = 0.001) and peri urban areas (OR = 0.013; 95% CI: 0.002–0.105; p < 0.001) having lower odds of using traditional health practices compared to those in urban areas.

Socio-economic status was also significantly associated, as respondents in the middle socio-economic class were more likely to use traditional health practices compared to those in the high socio-economic class (OR = 6.865; 95% CI: 3.498–13.472; p < 0.001). Although those in the low socio-economic group had higher odds (OR = 3.127), this was not statistically significant (p = 0.079).

Other variables including age, family type, household size, and number of children were not statistically significant predictors of traditional health practice use (p>0.05).

Table 7: Socio-demographic characteristics of respondents and utilization of THP services for general illness

Variables	Utilised THP services for general illness		Test statistic	p-value
	Yes (n=66) Freq. (%)	No (n=170) Freq. (%)		
Age group (years)				
15 – 25	22 (64.7)	12 (35.3)	$\chi^2 = 27.685$	**<0.001***
26 – 35	19 (18.6)	83 (81.4)		
36 – 45	11 (26.2)	31 (73.8)		
46 – 49	14 (24.1)	44 (75.9)		
Religion				
Christianity	54 (26.3)	151 (73.7)	5.345+	0.068
African Traditional Religion	9 (52.9)	8 (47.1)		
Islam	3 (21.4)	11 (78.6)		
Ethnicity				
Edo non-indigenes	30 (36.6)	52 (63.4)	$\chi^2 = 4.634$	**0.034***
Edo indigenes	36 (23.4)	118 (76.6)		
Marital status				
Never married	26 (52.0)	24 (48.0)	$\chi^2 = 18.191$	**<0.001***
Ever married	40 (21.5)	146 (78.5)		
Marital setting				
Monogamous	27 (21.1)	101 (78.9)	1.323+	0.583
Polygamous	0 (0.0)	5 (100.0)		
Family setting				
Nuclear	14 (17.1)	68 (82.9)	$\chi^2 = 1.377$	0.272
Extended	13 (25.5)	38 (74.5)		
Household size				
≤ 5	43 (27.4)	114 (72.6)	$\chi^2 = 0.078$	0.878
>5	23 (29.1)	56 (70.9)		
Number of children (n = 404)				
<3	4 (28.6)	10 (71.4)	0.197+	0.744
≥3	42 (23.3)	138 (76.7)		
Place of residence				
Urban	62 (35.2)	114 (64.8)	$\chi^2 = 18.600$	**<0.001***
Rural	1 (3.0)	32 (97.0)		
Peri-urban	3 (11.1)	24 (88.9)		
Socio-economic status				
Low	8 (38.1)	13 (61.9)	$\chi^2 = 7.393$	**0.025***
Middle	51 (31.3)	112 (68.7)		
High	7 (13.5)	45 (86.5)		

Statistically significant; +Fisher's Exact Test

Age was found to have a statistically significant association with the utilisation of THP services for general illness ($p < 0.001$). Those in the age bracket 15–25, 22 (64.7%), were

found to have a higher utilisation compared to those in the 26–35 age bracket, 19 (18.6%), the 36–45 age bracket, 11 (26.2%), and the 46–49 age bracket, 14 (24.1%).

Ethnicity was found to have a statistically significant association with the utilisation of THP services for general illness ($p = 0.034$). Those identifying as Edo non-indigenes, 30 (36.6%), were found to have a higher utilisation compared to Edo indigenes, 36 (23.4%).

Marital status was found to have a statistically significant association with the utilisation of THP services for general illness ($p < 0.001$). Those who were never married, 26 (52.0%), were found to have a higher utilisation compared to those who were ever married, 40 (21.5%).

Place of residence was found to have a statistically significant association with the utilisation of THP services for general illness ($p < 0.001$). Those living in urban areas, 62 (35.2%), were found to have a higher utilisation compared to those in rural areas, 1 (3.0%), and peri-urban areas, 3 (11.1%).

Socioeconomic status was found to have a statistically significant association with the utilisation of THP services for general illness ($p = 0.025$). Those in the low socioeconomic category, 8 (38.1%), were found to have a higher utilisation compared to those in the middle socioeconomic category, 51 (31.3%), and the high socioeconomic category, 7 (13.5%).

Other variables, including religion ($p = 0.068$), marital setting ($p = 0.583$), family setting ($p = 0.272$), household size ($p = 0.878$), and number of children ($p = 0.744$), were not statistically significant.

Table 8: Predictors of utilisation of THP services for general illness

Variables	β (regression coefficient)	OR	95% C.I. for OR		p-value
			Lower	Upper	
Age group (years)	0.032	1.033	0.384	2.779	0.949
Religion					
Christianity*		1			
Others+	1.119	3.062	0.831	11.276	0.093
Ethnicity					
Edo indigenes*		1			
Edo non-indigenes	0.756	2.130	0.728	6.229	0.167
Family setting					
Nuclear*		1			
Extended	1.006	2.734	0.918	8.144	0.071
Household size					
>5*		1			
≤5	0.620	1.859	0.623	5.549	0.267
Socioeconomic status					
High*		1			
Low	3.540	34.458	2.614	454.284	**0.007****
Middle	3.336	28.093	2.954	267.154	**0.004****

*OR: Odds ratio; CI: Confidence interval; * Reference category; ** $p < 0.05$; +Islam and ATR; $R^2 = 17.8 – 28.0\%$.*

Socioeconomic status was a significant predictor of utilisation of THP services for general illness, with respondents in the low socioeconomic class (OR = 34.458, 95% CI: 2.614–454.284, p = 0.007) and middle socioeconomic class (OR = 28.093, 95% CI: 2.954–267.154, p = 0.004) having significantly higher odds of utilisation compared to those in the high socioeconomic class.

Age group was not a significant predictor of utilisation (OR = 1.033, 95% CI: 0.384–2.779, p = 0.949).

Religion was not significant, although respondents practising other religions had higher odds compared to Christians (OR = 3.062, 95% CI: 0.831–11.276, p = 0.093).

Ethnicity was not significant (OR = 2.130, 95% CI: 0.728–6.229, p = 0.167).

Family setting was not significant, though respondents from extended families had higher odds compared to those from nuclear families (OR = 2.734, 95% CI: 0.918–8.144, p = 0.071). Household size was also not a significant predictor of utilisation (OR = 1.859, 95% CI: 0.623–5.549, p = 0.267).

Table 9: Socio-demographic characteristics of respondents and utilization of THP services for bone setting

Variables	Utilised THP services for bone setting		Test statistic	p-value
	Yes (n=63) Freq. (%)	No (n=173) Freq. (%)		
Age group (years)				
15 – 25	1 (2.9)	33 (97.1)	$\chi^2 = 52.145$	**<0.001***
26 – 35	50 (49.0)	52 (51.0)		
36 – 45	0 (0.0)	42 (100.0)		
46 – 49	12 (20.7)	46 (79.3)		
Religion				
Christianity	62 (30.2)	143 (69.8)	$\chi^2 = 10.245$	**0.006***
African Traditional Religion	0 (0.0)	17 (100.0)		
Islam	1 (7.1)	13 (92.9)		
Ethnicity				
Edo non-indigenes	18 (22.0)	64 (78.0)	$\chi^2 = 1.445$	0.280
Edo indigenes	45 (29.2)	109 (70.8)		
Marital status				
Never married	4 (8.0)	46 (92.0)	$\chi^2 = 11.331$	**0.001***
Ever married	59 (31.7)	127 (68.3)		
Marital setting				
Monogamous	46 (35.9)	82 (64.1)	$\chi^2 = 0.535$	0.656
Polygamous	1 (20.0)	4 (80.0)		
Family setting				
Nuclear	38 (46.3)	44 (53.7)	$\chi^2 = 11.330$	**0.001***
Extended	9 (17.6)	42 (82.4)		
Household size				
≤5	45 (28.7)	112 (71.3)	$\chi^2 = 0.928$	0.355
>5	18 (22.8)	61 (77.2)		
Number of children (n = 404)				
<3	1 (7.1)	13 (92.9)	$\chi^2 = 3.596$	0.070
≥3	56 (31.1)	124 (68.9)		
Place of residence				
Urban	49 (27.8)	127 (72.2)	$\chi^2 = 11.645$	**0.003***
Rural	2 (6.1)	31 (93.9)		
Peri-urban	12 (44.4)	15 (55.6)		
Socioeconomic status				
Low	1 (4.8)	20 (95.2)	$\chi^2 = 31.056$	**<0.001***
Middle	61 (37.4)	102 (62.6)		
High	1 (1.9)	51 (98.1)		

Statistically significant; +Fisher's Exact Test

Age was found to have a statistically significant association with the utilisation of THP services for bone setting ($p < 0.001$). Those in the age bracket 26–35, 50 (49.0%), were found

to have a higher utilisation compared to those in the 15–25 age bracket, 1 (2.9%), the 36–45 age bracket, 0 (0.0%), and the 46–49 age bracket, 12 (20.7%).

Religion was found to have a statistically significant association with the utilisation of THP services for bone setting ($p = 0.006$). Those identifying as Christian, 62 (30.2%), were found to have a higher utilisation compared to those practicing African Traditional Religion, 0 (0.0%), and Islam, 1 (7.1%).

Marital status was found to have a statistically significant association with the utilisation of THP services for bone setting ($p = 0.001$). Those who were ever married, 59 (31.7%), were found to have a higher utilisation compared to those who were never married, 4 (8.0%).

Family setting was found to have a statistically significant association with the utilisation of THP services for bone setting ($p = 0.001$). Those in a nuclear family setting, 38 (46.3%), were found to have a higher utilisation compared to those in extended family settings, 9 (17.6%).

Place of residence was found to have a statistically significant association with the utilisation of THP services for bone setting ($p = 0.003$). Those living in peri-urban areas, 12 (44.4%), were found to have a higher utilisation compared to those in urban areas, 49 (27.8%), and rural areas, 2 (6.1%).

Socioeconomic status was found to have a statistically significant association with the utilisation of THP services for bone setting ($p < 0.001$). Those in the middle socioeconomic category, 61 (37.4%), were found to have a higher utilisation compared to those in the low socioeconomic category, 1 (4.8%), and the high socioeconomic category, 1 (1.9%).

Other variables, including ethnicity ($p = 0.280$), marital setting ($p = 0.656$), household size ($p = 0.355$), and number of children ($p = 0.070$), were not statistically significant.

Table 10: Predictors of utilisation of THP services for bone setting

Variables	β (regression coefficient)	OR	95% C.I. for OR		p-value
			Lower	Upper	
Age group (years)	-1.408	0.245	0.057	1.054	0.059
Religion					
Christianity*					
Others+	-2.932	0.053	0.005	0.524	**0.012****
Ethnicity					
Edo indigenes*					
Edo non-indigenes	-0.986	0.373	0.119	1.170	0.091
Family setting					
Nuclear*					
Extended	-1.358	0.257	0.083	0.798	**0.019****
Household size					
≤5	0.882	2.416	0.866	6.742	0.092
>5*					
Socioeconomic status					
High*					
Low	3.132	22.919	0.960	547.016	0.053
Middle	3.240	25.537	2.828	230.588	**0.004****

*OR: Odds ratio; CI: Confidence interval; * Reference category; ** $p < 0.05$; +Islam and ATR; $R^2 = 39.6 – 54.4\%$.*

Religion was a significant predictor of utilisation of traditional health practitioner (THP) services for bone setting, with respondents practising other religions having lower odds compared to Christians (OR = 0.053, 95% CI: 0.005–0.524, p = 0.012).

Family setting was also a significant predictor, with respondents from extended families having lower odds of utilisation compared to those from nuclear families (OR = 0.257, 95% CI: 0.083–0.798, p = 0.019).

Socioeconomic status was significant for respondents in the middle socioeconomic class, who had higher odds of utilisation compared to those in the high socioeconomic class (OR = 25.537, 95% CI: 2.828–230.588, p = 0.004).

Age group, ethnicity, household size, and low socioeconomic status were not significant predictors of utilisation of THP services for bone setting (p > 0.05).

Table 11: Socio-demographic characteristics of respondents and utilization of THP services for pregnancy care

Variables	Utilised THP services for pregnancy care		Test statistic	p-value
	Yes (n=51) Freq. (%)	No (n=185) Freq. (%)		
Age group (years)				
15 – 25	3 (8.8)	31 (91.2)	$\chi^2 = 18.938$	**<0.001***
26 – 35	18 (17.6)	84 (82.4)		
36 – 45	6 (14.3)	36 (85.7)		
46 – 49	24 (41.4)	34 (58.6)		
Religion				
Christianity	40 (19.5)	165 (80.5)	$\chi^2 = 4.874$	0.073
African Traditional Religion	6 (42.9)	8 (57.1)		
Islam	5 (29.4)	12 (70.6)		
Ethnicity				
Edo non-indigenes	13 (15.9)	69 (84.1)	$\chi^2 = 2.458$	0.136
Edo indigenes	38 (24.7)	116 (75.3)		
Marital status				
Never married	4 (8.0)	46 (92.0)	$\chi^2 = 6.937$	**0.011***
Ever married	47 (25.3)	139 (74.7)		
Marital setting				
Monogamous	23 (18.0)	105 (82.0)	$\chi^2 = 1.530$	0.236
Polygamous	2 (40.0)	3 (60.0)		
Family setting				
Nuclear	16 (19.5)	66 (80.5)	$\chi^2 = 0.072$	0.824
Extended	9 (17.6)	42 (82.4)		
Household size				
≤5	38 (24.2)	119 (75.8)	$\chi^2 = 1.862$	0.185
>5	13 (16.5)	66 (83.5)		
Number of children (n = 404)				
<3	4 (28.6)	10 (71.4)	$\chi^2 = 0.041$	>0.999
≥3	47 (26.1)	133 (73.9)		
Place of residence				
Urban	21 (11.9)	155 (88.1)	$\chi^2 = 74.155$	**<0.001***
Rural	26 (78.8)	7 (21.2)		
Peri-urban	4 (14.8)	23 (85.2)		
Socioeconomic status				
Low	4 (19.0)	17 (81.0)	$\chi^2 = 0.149$	0.936
Middle	35 (21.5)	128 (78.5)		
High	12 (23.1)	40 (76.9)		

Statistically significant; +Fisher's Exact Test

Most respondents did not utilise traditional health practitioner (THP) services for pregnancy care, 185 (78.4%), while 51 (21.6%) reported utilisation.

Utilisation was significantly associated with age ($p < 0.001$), with the highest use observed among respondents aged 46–49 years, 24 (41.4%).

Marital status was also significantly associated ($p = 0.011$), with higher utilisation among ever married respondents, 47 (25.3%), compared to those never married, 4 (8.0%).

Place of residence showed a significant association ($p < 0.001$), with markedly higher utilisation among rural residents, 26 (78.8%), compared to urban, 21 (11.9%), and peri-urban residents, 4 (14.8%).

Religion, ethnicity, marital setting, family setting, household size, number of children, and socioeconomic status were not significantly associated with utilisation ($p > 0.05$).

Table 12: Predictors of utilisation of THP services for pregnancy care

Variables	β (regression coefficient)	OR	95% C.I. for OR		p-value
			Lower	Upper	
Age group (years)	-1.270	0.281	0.098	0.805	**0.018****
Religion					
Christianity*		1			
Others+	2.952	19.147	4.647	78.900	**<0.001****
Ethnicity					
Edo indigenes*		1			
Edo non-indigenes	-0.198	0.820	0.271	2.484	0.726
Family setting					
Nuclear*		1			
Extended	-0.203	0.816	0.270	2.472	0.720
Household size					
≤5	-1.234	0.291	0.098	0.869	**0.027****
>5*		1			
Socioeconomic status					
High*		1			
Low	-2.522	0.080	0.006	1.002	0.050
Middle	-1.527	0.217	0.057	0.830	**0.026****

*OR: Odds ratio; CI: Confidence interval; * Reference category; ** $p < 0.05$; +Islam and ATR; $R^2 = 18.7 – 30.2\%$.*

Age was a significant predictor of utilisation of traditional health practitioner (THP) services for pregnancy care, with increasing age associated with lower odds of utilisation (OR = 0.281, 95% CI: 0.098–0.805, p = 0.018).

Religion was a strong predictor, with respondents practising other religions having markedly higher odds of utilisation compared to Christians (OR = 19.147, 95% CI: 4.647–78.900, p < 0.001).

Household size was significant, with respondents from households with ≤5 members having lower odds of utilisation compared to those with >5 members (OR = 0.291, 95% CI: 0.098–0.869, p = 0.027).

Socioeconomic status was also significant, with respondents in the middle socioeconomic class showing lower odds of utilisation compared to those in the high class (OR = 0.217, 95% CI: 0.057–0.830, p = 0.026).

Ethnicity and family setting were not significant predictors of utilisation of THP services for pregnancy care (p > 0.05).

Table 13: Socio-demographic characteristics of respondents and utilization of THP services for fertility treatment

Variables	Utilised THP services for fertility treatment		Test statistic	p-value
	Yes (n=39) Freq. (%)	No (n=197) Freq. (%)		
Age group (years)				
15 - 25	2 (5.1)	32 (16.2)	$\chi^2 = 54.320$	**< 0.001***
26 – 35	9 (23.1)	93 (47.2)		
36 – 45	23 (59.0)	19 (9.6)		
46 – 49	5 (12.8)	53 (26.9)		
Religion				
Christianity	35 (89.7)	170 (86.3)	$\chi^2 = 0.375$	0.829
African Traditional Religion	2 (5.1)	15 (7.6)		
Islam	2 (5.1)	12 (6.1)		
Ethnicity				
Edo non-indigenes	17 (43.6)	65 (33.0)	$\chi^2 = 1.612$	0.204
Edo indigenes	22 (56.4)	132 (67.0)		
Marital status				
Never married	8 (20.5)	42 (21.3)	$\chi^2 = 0.013$	0.910
Ever married	31 (79.5)	155 (78.7)		
Marital setting				
Monogamous	26 (92.9)	102 (97.1)	$\chi^2 = 1.122$	0.289
Polygamous	2 (7.1)	3 (2.9)		
Family setting				
Nuclear	11 (39.3)	71 (67.6)	$\chi^2 = 7.506$	**0.006***
Extended	17 (60.7)	34 (32.4)		
Household size				
≤5	24 (61.5)	133 (67.5)	$\chi^2 = 0.522$	0.470
>5	15 (38.5)	64 (32.5)		
Number of children (n = 404)				
<3	2 (7.4)	12 (7.2)	$\chi^2 = 0.002$	0.967
≥3	25 (92.6)	155 (92.8)		
Place of residence				
Urban	32 (82.1)	144 (73.1)	$\chi^2 = 3.048$	0.218
Rural	2 (5.1)	31 (15.7)		
Peri-urban	5 (12.8)	22 (11.2)		
Socioeconomic status				
Low	4 (10.3)	17 (8.6)	$\chi^2 = 56.645$	**< 0.001***
Middle	9 (23.1)	154 (78.2)		
High	26 (66.7)	26 (13.2)		

Statistically significant; +Fisher's Exact Test

Age was found to have a statistically significant association with the utilisation of THP services for fertility treatment ($p < 0.001$). Those in the age bracket 36–45, 23 (59.0%), were found to have a higher utilisation compared to those in the 15–25 age bracket, 2 (5.1%), the 26–35 age bracket, 9 (23.1%), and the 46–49 age bracket, 5 (12.8%).

Family setting was found to have a statistically significant association with the utilisation of THP services for fertility treatment ($p = 0.006$). Those in an extended family setting, 17 (60.7%), were found to have a higher utilisation compared to those in nuclear family settings, 11 (39.3%).

Socioeconomic status was found to have a statistically significant association with the utilisation of THP services for fertility treatment ($p < 0.001$). Those in the high socioeconomic category, 26 (66.7%), were found to have a higher utilisation compared to those in the low socioeconomic category, 4 (10.3%), and the middle socioeconomic category, 9 (23.1%).

Other variables, including religion ($p = 0.829$), ethnicity ($p = 0.204$), marital status ($p = 0.910$), marital setting ($p = 0.289$), household size ($p = 0.470$), number of children ($p = 0.967$), and place of residence ($p = 0.218$), were not statistically significant.

Table 14: Predictors of utilisation of THP services for fertility treatment

Variables	β (regression coefficient)	OR	95% C.I. for OR		p-value
			Lower	Upper	
Age group (years)	2.280	9.774	2.308	41.399	**0.002****
Religion					
Christianity*		1			
Others+	-5.867	0.003	0.000	0.095	**0.001****
Ethnicity					
Edo indigenes*		1			
Edo non-indigenes	0.981	2.668	0.418	17.017	0.299
Family setting					
Nuclear*		1			
Extended	1.267	3.549	0.719	17.510	0.120
Household size					
≤ 5	-1.929	0.145	0.019	1.131	0.065
> 5*		1			
Socioeconomic status					
High*		1			
Low	-2.358	0.095	0.007	1.360	0.083
Middle	-4.284	0.014	0.002	0.121	**<0.001****

*OR: Odds ratio; CI: Confidence interval; * Reference category; ** $p < 0.05$; +Islam and ATR; $R^2 = 48.6 – 75.6\%$.*

Age was a significant predictor of utilisation of traditional health practitioner (THP) services for fertility treatment (OR = 9.774, 95% CI: 2.308–41.399, p = 0.002).

Religion was also a significant predictor, with respondents practising other religions having markedly lower odds compared to Christians (OR = 0.003, 95% CI: 0.000–0.095, p = 0.001).

Socioeconomic status was significant for respondents in the middle socioeconomic class, who had lower odds of utilisation compared to those in the high socioeconomic class (OR = 0.014, 95% CI: 0.002–0.121, p < 0.001).

Ethnicity, family setting, household size, and low socioeconomic status were not significant predictors of utilisation of THP services for fertility treatment (p > 0.05).

Table 15: Socio-demographic characteristics of respondents and utilization of THP services
spiritual healing

Variables	Utilised THP services for spiritual healing		Test statistic	p-value
	Yes (n=17) Freq. (%)	No (n=219) Freq. (%)		
Age group (years)				
15 – 25	6 (17.6)	28 (82.4)	$\chi^2 = 6.546$	0.087
26 – 35	6 (5.9)	96 (94.1)		
36 – 45	2 (4.8)	40 (95.2)		
46 – 49	3 (5.2)	55 (94.8)		
Religion				
Christianity	14 (6.8)	191 (93.2)	$\chi^2 = 1.138$	0.756
African Traditional Religion	1 (5.9)	16 (94.1)		
Islam	2 (14.3)	12 (85.7)		
Ethnicity				
Edo non-indigenes	4 (4.9)	78 (95.1)	$\chi^2 = 1.017$	0.430
Edo indigenes	13 (8.4)	141 (91.6)		
Marital status				
Never married	8 (16.0)	42 (84.0)	$\chi^2 = 7.344$	**0.012***
Ever married	9 (4.8)	177 (95.2)		
Marital setting				
Monogamous	6 (4.7)	122 (95.3)	$\chi^2 = 0.245$	>0.999
Polygamous	0 (0.0)	5 (100.0)		
Family setting				
Nuclear	3 (3.7)	79 (96.3)	$\chi^2 = 0.361$	0.675
Extended	3 (5.9)	48 (94.1)		
Household size				
≤ 5	7 (4.5)	150 (95.5)	$\chi^2 = 5.286$	**0.031***
> 5	10 (12.7)	69 (87.3)		
Number of children (n = 404)				
<3	3 (21.4)	11 (78.6)	$\chi^2 = 5.235$	0.056
≥3	10 (5.6)	170 (94.4)		
Place of residence				
Urban	12 (6.8)	164 (93.2)	$\chi^2 = 0.720$	0.697
Rural	2 (6.1)	31 (93.9)		
Peri-urban	3 (11.1)	24 (88.9)		
Socioeconomic status				
Low	4 (19.0)	17 (81.0)	$\chi^2 = 7.933$	**0.020***
Middle	7 (4.3)	156 (95.7)		
High	6 (11.5)	46 (88.5)		

Statistically significant; +Fisher's Exact Test

Marital status was significantly associated with utilisation ($p = 0.012$), with higher use among respondents who were never married, 8 (16.0%), compared to those ever married, 9 (4.8%).

Household size was also significantly associated ($p = 0.031$), with higher utilisation among respondents from households with more than five members, 10 (12.7%), compared to those with five or fewer members, 7 (4.5%).

Socioeconomic status showed a significant association ($p = 0.020$), with the highest utilisation observed among respondents in the low socioeconomic class, 4 (19.0%), compared to middle, 7 (4.3%), and high socioeconomic groups, 6 (11.5%).

Age group, religion, ethnicity, marital setting, family setting, number of children, and place of residence were not significantly associated with utilisation ($p > 0.05$).

Table 16: Predictors of utilisation of THP services for spiritual healing

Variables	β (regression coefficient)	OR	95% C.I. for OR		p-value
			Lower	Upper	
Age group (years)	1.082	2.950	0.528	16.492	0.218
Religion					
Christianity*		1			
Others+	-0.759	0.468	0.036	6.133	0.563
Ethnicity					
Edo indigenes*		1			
Edo non-indigenes	-1.152	0.316	0.031	3.229	0.331
Family setting					
Nuclear*		1			
Extended	-0.020	0.980	0.159	6.036	0.982
Household size					
≤ 5	0.227	1.255	0.187	8.450	0.815
> 5*		1			
Socioeconomic status					
High*		1			
Low	0.342	1.408	0.089	22.239	0.808
Middle	-0.619	0.539	0.060	4.842	0.581

*OR: Odds ratio; CI: Confidence interval; * Reference category; ** $p < 0.05$; +Islam and ATR; $R^2 = 3.8 – 12.3\%$.*

None of the variables were significant predictors of utilisation of traditional health practitioner (THP) services for spiritual healing ($p > 0.05$).

Age was not a significant predictor (OR = 2.950, 95% CI: 0.528–16.492, p = 0.218). Religion was not significant, with respondents practising other religions having lower odds compared to Christians (OR = 0.468, 95% CI: 0.036–6.133, p = 0.563).

Ethnicity was not significant, with Edo non-indigenes having lower odds compared to Edo indigenes (OR = 0.316, 95% CI: 0.031–3.229, p = 0.331). Family setting was also not significant, although respondents from extended families having similar odds compared to those from nuclear families (OR = 0.980, 95% CI: 0.159–6.036, p = 0.982).

Household size was not significant, however, respondents from households with ≤5 members having slightly higher odds compared to those with >5 members (OR = 1.255, 95% CI: 0.187–8.450, p = 0.815).

Socioeconomic status was not significant, with respondents in the low (OR = 1.408, 95% CI: 0.089–22.239, p = 0.808) and middle (OR = 0.539, 95% CI: 0.060–4.842, p = 0.581) socioeconomic classes showing no significant difference compared to those in the high socioeconomic class.

SECTION C

PROVIDERS OF TRADITIONAL HEALTH SERVICES AMONG RESPONDENTS

Table 17: Providers of traditional health services among respondents

Variables	Frequency (n = 236)	Percent
Primary provider of THP services		
Traditional Birth Attendant	104	44.1
Herbalist/Native Doctor	63	26.7
Religious Leader/Spiritualist	23	9.7
Family Member	20	8.5
Traditional Bone Setter	26	11.0
Advice is received from TBA		
Rarely	83	35.2
Never	26	11.0
Occasionally	35	14.8
Very often	92	39.0
Advice is received from herbalist/native doctor		
Never	38	16.1
Occasionally	109	46.2
Very often	40	16.9
Rarely	49	20.8
Payment for THP Services		
Self	126	53.4
Husband/Partner	73	30.9
Friend	1	0.4
Service is free	7	3.0
Other family member	29	12.3
Perception of Cost of THP Services		
Affordable	168	71.2
Cheap	30	12.7
Expensive	33	14.0

The results show that Traditional Birth Attendants 104 (44.1%) were the most commonly consulted providers of traditional health services, followed by herbalists or native doctors 63 (26.7%). Smaller proportions of respondents reported consulting traditional bone setters 26 (11.0%), religious leaders or spiritualists 23 (9.7%), and family members 20 (8.5%).

Regarding frequency of consultation, a considerable proportion of respondents reported receiving advice from TBAs very often 92 (39.0%) and rarely 83 (35.2%), while fewer reported occasional 35 (14.8%) or no contact 26 (11.0%). In contrast, consultation with

herbalists or native doctors was most commonly occasional 109 (46.2%), followed by rarely 49 (20.8%), with similar proportions reporting very often 40 (16.9%) and never 38 (16.1%).

Decision making for payment of THP services was largely self-driven 126 (53.4%), with a substantial proportion also influenced by husbands or partners 73 (30.9%). Contributions from other family members 29 (12.3%) were less common, while very few reported payments by friends 1 (0.4%) or accessing free services 7 (3.0%).

In terms of cost perception, the majority of respondents considered THP services affordable 168 (71.2%), while smaller proportions perceived them as expensive 33 (14.0%) or cheap 30 (12.7%).

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SECTION D

PERCEIVED BENEFIT AND RISKS ASSOCIATED WITH THE TRADITIONAL HEALTH PRACTICES AMONG RESPONDENTS

Table 18a: Perceived benefits and risks associated with the Traditional Health Practices among respondents

Variables	Frequency (n = 636)	Percent
Traditional medicine is more effective than modern medicine for certain illnesses		
No, it is less effective	306	48.1
Yes, often more effective	176	27.7
Yes, always more effective	103	16.2
No difference	51	8.0
Perceived safety of THPs		
Safe	316	49.7
Unsafe	205	32.2
Very safe	75	11.8
Very unsafe	40	6.3
Traditional Health Practices		
Beneficial	313	49.2
Harmful	206	32.4
Harmless	117	18.4
Harmful THPs		
Scarification/Incisions	351	55.2
Herbal Concoctions/Mixtures	197	31.0
Spiritual/Ritual Harm	78	12.3
Early marriage	10	1.6
Beneficial THPs		
Traditional bone setting	198	31.4
Body massage	175	27.7
Herbs for infections/malaria	150	23.8
Maternity care	88	13.9
Cultural diets	20	3.2
THPs offer quicker recovery than modern medicine		
Strongly agree	25	3.9
Agree	188	29.6
Neutral	215	33.8
Disagree	82	12.9
Strongly disagree	126	19.8

Less than half of the respondents 306 (48.1%) indicated that traditional health practices are less effective compared to modern medical care. However, a considerable proportion still expressed confidence in their effectiveness, as 176 (27.7%) reported that traditional health practices are often more effective, while 103 (16.2%) believed they are always more effective.

A smaller proportion 51 (8.0%) reported that there is no difference between traditional and modern healthcare services.

Regarding safety, 316 (49.7%) of respondents perceived traditional health practices as safe, while 205 (32.2%) considered them unsafe. Additionally, 75 (11.8%) regarded them as very safe, whereas 40 (6.3%) perceived them as very unsafe.

Concerning general outcomes of traditional health practices, nearly half of the respondents 313 (49.2%) considered them beneficial. However, 206 (32.4%) believed they are harmful, while 117 (18.4%) perceived them as harmless.

Scarification or incisions was the most frequently reported harmful practice, cited by 351 (55.2%) respondents. This was followed by herbal concoctions or mixtures 197 (31.0%), spiritual or ritual harm 78 (12.3%), and early marriage 10 (1.6%).

Traditional bone setting was the most commonly cited beneficial THP service, reported by 198 (31.4%), followed by body massage or manual therapy 175 (27.7%), herbs for infections such as malaria 150 (23.8%), traditional birth attendant or maternity care 88 (13.9%), and cultural dietary practices 20 (3.2%).

Table 18b: Perceived benefits and risks associated with the Traditional Health Practices among respondents

Variables	Frequency (236)	Percent
Experienced a serious negative side effect or complication from using THP		
Yes	44	18.6
No	192	81.4
Complication (n=44)		
Stillbirth	17	38.6
Infection	11	25.0
Bleeding	9	20.5
Disability	7	15.9
Complication required admission to a health facility (n=44)		
Yes	34	77.3
No	10	22.7
Treatment facility (n=34)		
Health centre	23	67.6
Hospital	11	32.4

Forty-four (18.6%) respondents reported experiencing serious adverse effects following the use of traditional health practitioners (THPs), while 192 (81.4%) reported no such experience.

Among those who experienced complications (n = 44), stillbirth was the most frequently reported outcome 17 (38.6%), followed by infection 11 (25.0%), bleeding 9 (20.5%), and disability 7 (15.9%).

Of the respondents who experienced complications, 34 (77.3%) required admission to a health facility, while 10 (22.7%) did not require admission.

Regarding place of care, most of those admitted were managed in health centres 23 (67.6%), while 11 (32.4%) received care in hospitals.

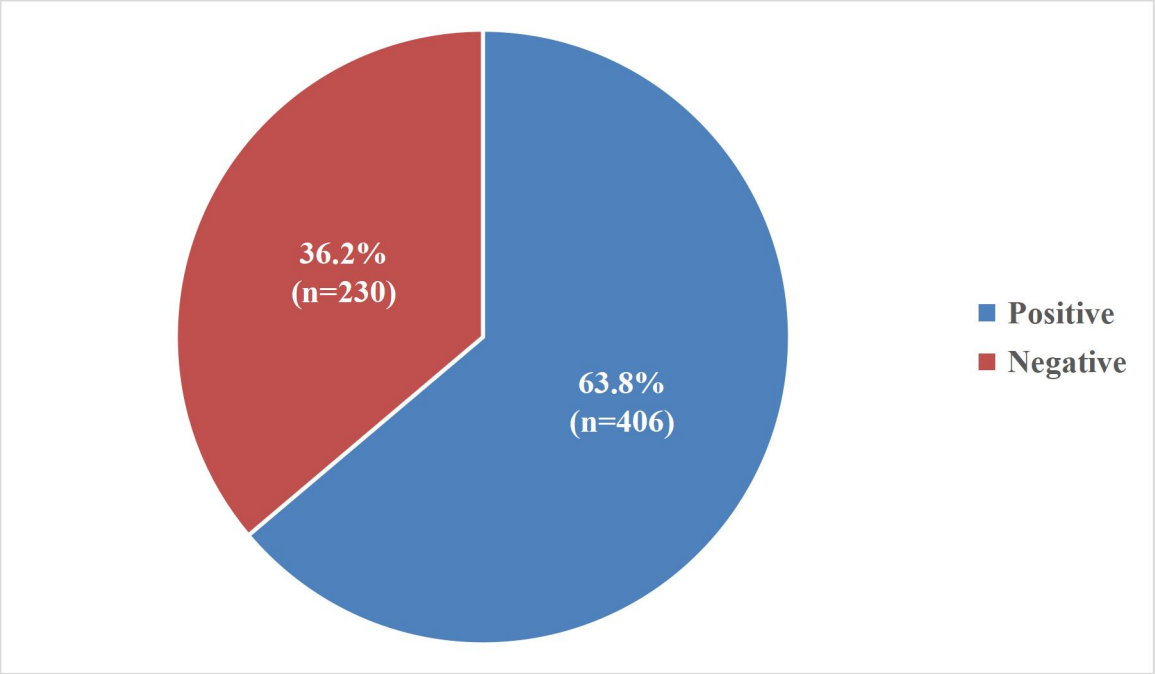

Figure 1: Respondents' perception of Traditional Health Practices

Majority of respondents, 406 (63.8%) had a positive perception towards Traditional Health Practice, while 230 (36.2%) had a negative perception.

Table 19: Socio-demographic characteristics and respondents' perception of Tradition Health Practices

Variables	Perception		Test statistic	p-value
	Positive (n=406) Freq. (%)	Negative (n=230) Freq. (%)		
Age group (years)				
15 – 25	137 (62.3)	83 (37.7)	$\chi^2 = 34.797$	**<0.001***
26 – 35	144 (67.9)	68 (32.1)		
36 – 45	53 (44.9)	65 (55.1)		
46 – 49	72 (83.7)	14 (16.3)		
Religion				
Christianity	367 (65.7)	192 (34.3)	$\chi^2 = 18.882$	**<0.001***
African Traditional Religion	19 (79.2)	5 (20.8)		
Islam	20 (37.7)	33 (62.3)		
Ethnicity				
Edo non-indigenes	153 (60.2)	101 (39.8)	$\chi^2 = 2.374$	0.130
Edo indigenes	253 (66.2)	129 (33.8)		
Marital status				
Never married	170 (61.2)	108 (38.8)	$\chi^2 = 1.543$	0.244
Ever married	236 (65.9)	122 (34.1)		
Marital setting				
Monogamous	173 (59.7)	117 (40.3)	1.375+	0.408
Polygamous	5 (83.3)	1 (16.7)		
Family setting				
Nuclear	103 (50.7)	100 (49.3)	$\chi^2 = 23.795$	**<0.001***
Extended	75 (80.6)	18 (19.4)		
Household size				
≤5	237 (60.8)	153 (39.2)	$\chi^2 = 4.109$	0.051
>5	169 (68.7)	77 (31.3)		
Number of children (n = 404)				
<3	24 (77.4)	7 (22.6)	$\chi^2 = 1.221$	0.319
≥3	253 (67.8)	120 (32.2)		
Place of residence				
Urban	315 (71.1)	128 (28.9)	$\chi^2 = 35.906$	**<0.001***
Rural	51 (52.6)	46 (47.4)		
Peri-urban	40 (41.7)	56 (58.3)		
Socioeconomic status				
Low	61 (75.3)	20 (24.7)	$\chi^2 = 14.060$	**0.001***
Middle	247 (66.4)	125 (33.6)		
High	98 (53.6)	85 (46.4)		
Utilised THP services				
Yes	225 (95.3)	11 (4.7)	$\chi^2 = 161.309$	**<0.001***
No	181 (45.3)	219 (54.8)		

Statistically significant; +Fisher's Exact Test.

The bivariate analysis showed that several socio-demographic variables were significantly associated with perception of traditional health practices.

Age group was significantly associated with perception ($p < 0.001$), with respondents aged 26–35 years showing a higher proportion of positive perception (67.9%), while those aged 36–45 years had the lowest proportion of positive perception (44.9%).

Religion was also significantly associated with perception ($p < 0.001$). Respondents practising African Traditional Religion recorded the highest positive perception (79.2%), followed by Christians (65.7%), while Muslims had the lowest positive perception (37.7%).

Family setting showed a significant association ($p < 0.001$), with respondents from extended families reporting higher positive perception (80.6%) compared to those from nuclear families (50.7%).

Place of residence was significantly associated with perception ($p < 0.001$). Urban residents had the highest positive perception (71.1%), followed by rural residents (52.6%), while peri-urban residents had the lowest (41.7%).

Socioeconomic status was also significant ($p = 0.001$), with respondents in the low socioeconomic category showing higher positive perception (75.3%) compared to middle (66.4%) and high (53.6%) categories.

Utilisation of traditional health practices showed a very strong association with perception ($p < 0.001$), with users of traditional health practices reporting overwhelmingly higher positive perception (95.3%) compared to non-users (45.3%).

However, ethnicity ($p = 0.130$), marital status ($p = 0.244$), marital setting ($p = 0.408$), household size ($p = 0.051$), and number of children ($p = 0.319$) were not significantly associated with perception of traditional health practices.

Table 20: Predictors of positive perception toward Traditional Health Practices among respondents

Variables	β (regression coefficient)	OR	95% C.I. for OR		p-value
			Lower	Upper	
Age group (years)	-0.519	0.595	0.344	1.028	0.063
Religion					
Christianity*		1			
Others+	-1.911	0.148	0.043	0.513	**0.003****
Ethnicity					
Edo indigenes*		1			
Edo non-indigenes	-0.077	0.926	0.402	2.135	0.857
Marital setting					
Monogamy*		1			
Polygamy	-0.971	0.379	0.018	7.801	0.529
Family setting					
Nuclear*		1			
Extended	1.724	5.606	2.271	13.835	**<0.001****
Household size					
≤ 5	-0.847	0.429	0.187	0.983	**0.045****
>5*		1			
Number of children (n = 404)					
<3*		1			
≥3	-0.267	0.765	0.106	5.531	0.791
Place of residence					
Urban*		1			
Rural	-2.160	0.115	0.029	0.454	**0.002****
Peri-urban	-1.824	0.161	0.042	0.617	**0.008****
Socioeconomic status					
High*		1			
Low	2.861	17.476	2.493	122.504	**0.004****
Middle	0.606	1.833	0.786	4.272	0.161
Utilised THP services					
Yes*		**1**			
No	-3.965	0.019	0.006	0.063	**<0.001****

*OR: Odds ratio; CI: Confidence interval; * Reference category; ** $p < 0.05$; +Islam and ATR; $R^2 = 49.9 – 68.0\%$.*

The multivariate logistic regression analysis showed that several socio-demographic factors significantly predicted positive perception of traditional health practices.

Religion was a significant predictor, with respondents in the "other religions" category having significantly lower odds of positive perception compared to Christians (OR = 0.148, 95% CI: 0.043–0.513, p = 0.003).

Family setting was also significant; respondents from extended families were more likely to have a positive perception compared to those from nuclear families (OR = 5.606, 95% CI: 2.271–13.835, $p < 0.001$).

Household size was significantly associated with perception, as respondents from households with fewer than five members had lower odds of positive perception compared to those with larger households (OR = 0.429, 95% CI: 0.187–0.983, $p = 0.045$).

Place of residence was also significant, with rural (OR = 0.115, 95% CI: 0.029–0.454, $p = 0.002$) and peri urban respondents (OR = 0.161, 95% CI: 0.042–0.617, $p = 0.008$) showing significantly lower odds of positive perception compared to urban residents.

Socioeconomic status showed mixed effects; respondents in the low socioeconomic category were significantly more likely to have a positive perception compared to those in the high category (OR = 17.476, 95% CI: 2.493–122.504, $p = 0.004$), while the middle category was not statistically significant (OR = 1.833, 95% CI: 0.786–4.272, $p = 0.161$).

Finally, utilisation of traditional health practices was a strong predictor, with non users having significantly lower odds of positive perception compared to users (OR = 0.019, 95% CI: 0.006–0.063, $p < 0.001$).

Age, ethnicity, marital type, and number of children were not statistically significant predictors in the model.

SECTION E

FACTORS ASSOCIATED WITH TRADITIONAL HEALTH PRACTICES

Table 21: Factors associated with traditional health practices among respondents

	n = 636 Freq. (%)				
Variables	**SA**	**A**	**N**	**D**	**SD**
I use THP because modern hospitals are too far away from my home	52 (8.2)	96 (15.1)	78 (12.3)	265 (41.7)	145 (22.8)
I find modern hospital services too expensive compared to THP	98 (15.4)	218 (34.3)	111 (17.5)	116 (18.2)	93 (14.6)
My cultural beliefs require me to use traditional healing methods	15 (2.4)	157 (24.7)	101 (15.9)	175 (27.5)	188 (29.6)
My decision to use THP is mainly influenced by my family members or spouse	50 (7.9)	191 (30.0)	89 (14.0)	143 (22.5)	163 (25.6)
I believe traditional methods treat the spiritual cause of illness, which hospitals ignore	51 (8.0)	186 (29.2)	110 (17.3)	128 (20.1)	161 (25.3)
I use THP because I lack trust in the quality of care provided at modern health facilities	28 (4.4)	52 (8.2)	102 (16.0)	276 (43.4)	178 (28.0)
I prefer traditional healers because they spend more time with me than hospital staff	38 (6.0)	176 (27.7)	78 (12.3)	176 (27.7)	168 (26.4)
The long waiting time at the clinic/hospital makes me choose THP instead	118 (18.6)	139 (21.9)	63 (9.9)	146 (23.0)	170 (26.7)

SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree.

For the statement on distance to health facilities, 265 (41.7%) of respondents disagreed and 145 (22.8%) strongly disagreed that modern hospitals are too far from their homes. In contrast, 96 (15.1%) agreed and 52 (8.2%) strongly agreed, while 78 (12.3%) were neutral.

Regarding cost, 218 (34.3%) agreed and 98 (15.4%) strongly agreed that modern hospital services are more expensive compared to traditional health practices. However, 116 (18.2%) disagreed, 93 (14.6%) strongly disagreed, and 111 (17.5%) were neutral.

For cultural beliefs, 157 (24.7%) agreed and 15 (2.4%) strongly agreed that cultural beliefs require the use of traditional healing methods, while 175 (27.5%) disagreed, 188 (29.6%) strongly disagreed, and 101 (15.9%) were neutral.

On family influence, 191 (30.0%) agreed and 50 (7.9%) strongly agreed that their decision to use traditional health practices is influenced by family members or spouse. In contrast, 143 (22.5%) disagreed, 163 (25.6%) strongly disagreed, and 89 (14.0%) were neutral.

For spiritual beliefs, 186 (29.2%) agreed and 51 (8.0%) strongly agreed that traditional methods treat spiritual causes of illness ignored by hospitals. However, 128 (20.1%) disagreed, 161 (25.3%) strongly disagreed, and 110 (17.3%) were neutral.

On trust in modern healthcare, 276 (43.4%) disagreed and 178 (28.0%) strongly disagreed that they use traditional health practitioners due to lack of trust in modern healthcare services. Meanwhile, 52 (8.2%) agreed, 28 (4.4%) strongly agreed, and 102 (16.0%) were neutral.

Regarding waiting time at health facilities, 176 (27.7%) agreed and 38 (6.0%) strongly agreed that they prefer traditional health practitioners because they spend more time with patients. In contrast, 176 (27.7%) disagreed, 168 (26.4%) strongly disagreed, and 78 (12.3%) were neutral.

For long waiting time in hospitals, 139 (21.9%) agreed and 118 (18.6%) strongly agreed that it influences their choice of traditional health practitioners, while 146 (23.0%) disagreed, 170 (26.7%) strongly disagreed, and 63 (9.9%) were neutral.

CHAPTER FIVE

DISCUSSION

Over a third of respondents had utilised traditional health practices within the preceding 12 months, indicating that such practices remain an important component of health-seeking behaviour within the study population. Among users, herbal preparations were by far the most commonly utilised practice, followed by traditional birth attendant services, bone setting, physical or manual therapies, and spiritual or ritual healing. Scarification and invasive procedures were also reported, though at lower levels with family members emerging as the predominant source of information, highlighting the strong role of intergenerational knowledge transfer and informal social networks in shaping utilisation patterns.

The predominance of herbal preparations in the present study is consistent with findings from Thailand, Malaysia, South Africa, and Nigeria, where herbal therapies and indigenous remedies constituted major forms of traditional healthcare utilised by women of reproductive age.[14–17] In Thailand, high utilisation of herbal compress therapy and other indigenous postpartum practices was reported among women attending hospitals, including herbal compresses, massage therapies, and heat based interventions aimed at postpartum recovery.[14] Similarly, a study done in Malaysia documented widespread use of herbal remedies and traditional tonics during the postpartum period, while another study done in rural KwaZulu Natal, South Africa highlighted the continued use of culturally prescribed herbal and dietary practices during pregnancy and postpartum care.[15,16] These similarities may be attributable to the enduring cultural acceptance of traditional health practices, as well as their perceived effectiveness for common ailments, affordability, and accessibility within low-and-middle-income settings where traditional medicine remains closely integrated with everyday life.

The high utilisation of traditional birth attendant services and manual therapies observed in the present study is also comparable to findings from Ibadan in Oyo State and Ondo State, Nigeria, where traditional birth attendants were widely patronised for antenatal care, childbirth, infertility treatment, and manual abdominal therapies.[17,28] This may reflect shared sociocultural beliefs regarding pregnancy, childbirth, and women's reproductive health within many African communities. The presence of spiritual and ritual healing practices, though less common, indicates that culturally and spiritually oriented health interventions remain part of the routine healthcare. Similar findings have been reported in Zimbabwe,

where women utilised holy water, ritual substances, and culturally symbolic materials during pregnancy and childbirth.[11] These practices are often rooted in indigenous belief systems that interpret illness and reproductive health outcomes through spiritual or supernatural frameworks. However, the relatively lower prevalence of such practices in the present study may suggest gradual shifts in health behaviour, possibly influenced by increased exposure to biomedical information, urbanisation, and health education campaigns.

The coexistence of beneficial and harmful traditional practices presents significant health risks within the study population. Unsafe practices such as scarification, invasive ritual procedures, and unregulated herbal preparations can result in wound infections, transmission of blood borne pathogens, toxic or hepatotoxic effects, and delayed presentation to appropriate biomedical care. These risks are particularly of concern in conditions that require prompt medical intervention, such as severe infections, pregnancy and childbirth complications, fractures, and other serious injuries. In such situations, reliance on unsafe traditional practices or delays in seeking appropriate hospital care may lead to worsening of the condition, development of complications, prolonged illness, or even avoidable deaths.[42,43]

To reduce the risks associated with unsafe traditional practices, relevant health agencies such as the Federal Ministry of Health and Social Welfare, NAFDAC, and the National Primary Health Care Development Agency should improve on existing routine monitoring of herbal products as well as community health education on the dangers of scarification, unsafe invasive procedures, and delayed hospital treatment. In addition, more attention should also be given to identifying communities where these practices are common and providing regular, culturally appropriate awareness campaigns through primary healthcare centres, community leaders, and local media.

The findings on providers of traditional health services indicate that care within the study population is mainly delivered through a combination of formalised traditional practitioners and informal community-based actors, with Traditional Birth Attendants emerging as the most commonly utilised providers. This reflects their sustained role in maternal and reproductive healthcare within community settings and aligns with findings from studies conducted in Ondo State, Nigeria and Uganda, where pregnancy related care, childbirth services, infertility management, and other reproductive health needs constituted major reasons for the utilisation of traditional providers, particularly TBAs.[27,28] Herbalists or native doctors also constituted a major provider group, highlighting the continued reliance on

indigenous plant-based therapies for the management of common illnesses. In comparison, traditional bone setters, religious leaders or spiritualists, and family members were less commonly patronized.

The predominance of Traditional Birth Attendants (TBAs) as key providers in this study is consistent with findings from other studies done in Kwara, Ondo and Uganda. In the community-based studies in Kwara and Ondo States, TBAs were widely patronised for antenatal care, delivery services, infertility management, and manual abdominal therapies, often serving as first point of contact for maternal health needs.[26,28] Similarly, in Uganda, TBAs were identified as highly specialised community-based providers offering plant-based remedies for uterine contraction and postpartum haemorrhage management, reinforcing their central role in rural obstetric care.[27] These similarities reflect the integration of TBAs within community health systems in many low resource settings, where cultural acceptability, perceived emotional support, affordability, and accessibility contribute to sustained utilisation. However, continued reliance on TBAs for pregnancy and childbirth related conditions may contribute to delays in seeking skilled obstetric care and increase the risk of preventable maternal complications such as postpartum haemorrhage, uterine rupture, sepsis, and obstetric fistula, as well as neonatal complications including birth asphyxia, neonatal sepsis, and preventable neonatal mortality.

In contrast to the role of herbalists or native doctors observed in this study which reflected a more defined provider structure, a Zambian study revealed that traditional health practices were largely provided and utilised through informal social networks, with family members and friends serving as the primary sources of herbal knowledge and remedies.[25] This suggests a more organised but non-institutionalised form of traditional healthcare delivery which may be due to variations in the level of visibility and organisation of traditional medicine within the respective settings, where some communities have more established and identifiable traditional practitioners, while others rely predominantly on kinship-based knowledge transfer in the absence of clearly recognised providers. Nevertheless, both settings highlight the continued reliance on indigenous knowledge systems and the persistence of traditional medicine outside formally regulated structures.

In addition, The limited utilisation of family members and spiritual leaders as direct providers in the present study contrasts with findings from Nepal, where mothers-in-law and other female relatives were identified as primary providers of postpartum traditional advice and

health remedies.[24] This difference may reflect variations in household structure, cultural authority dynamics, and the degree to which traditional knowledge is confined within kinship systems as opposed to being externalised to specialised practitioners such as TBAs and herbalists. The reliance on unskilled providers such as TBAs, family members, and friends for healthcare increases the risk of inappropriate or delayed management of health conditions, leading to late presentation to formal healthcare facilities, missed opportunities for timely referral, and progression of otherwise preventable or manageable conditions such as postpartum haemorrhage, obstructed labour, puerperal sepsis, and complications from untreated infections or traumatic injuries.

Utilisation of traditional health services was predominantly financed through out-of-pocket household expenditure, with most respondents reporting self-payment. This was followed by financial support from spouses or partners, while assistance from other family members was less commonly reported. This pattern reflects the central role of the household in healthcare financing and decision making within the study setting, where health seeking behaviour is largely determined at the family level rather than through formal insurance or institutional support mechanisms. This finding is similar to that of other studies conducted previously in Uganda and Malaysia, where traditional health service utilisation was also predominantly financed through out-of-pocket household expenditure.[24,27] In the Ugandan study, traditional health services provided by herbalists and traditional birth attendants were accessed directly by clients without insurance coverage or formal financial protection mechanisms, suggesting reliance on personal or household resources to meet the cost of care.[27] Similarly, the Malaysian study revealed that traditional and complementary medicine use among postpartum women was largely self-financed, with users paying directly for services such as traditional massage and herbal therapies, and with household income significantly influencing utilisation patterns.[24] These findings may be likely due to the fact that traditional health services are not integrated into formal health insurance systems, combined with household income constraints and the continued reliance on culturally acceptable, community based providers that require direct payment at point of care. This may contribute to progressive household impoverishment, particularly where care seeking is recurrent or prolonged. This risk is compounded by the potential for delayed presentation to formal health facilities, especially in conditions requiring timely intervention such as infections, obstetric complications, or trauma. In such cases, initial expenditure on traditional care may be followed by substantially higher costs associated with managing preventable complications

within formal health systems, thereby creating a dual financial burden. Over time, this pattern reinforces inequities in access to timely and effective care, with disproportionate effects on households of lower and middle socioeconomic status who are more likely to rely on cost driven care pathways.[44,45]

Mitigating the financial and health risks associated with reliance on traditional health services requires a combined focus on financial protection, improved access to formal care, and earlier care seeking behaviour. Expanding effective health insurance coverage and reducing out of pocket costs for primary and emergency services can lessen the economic incentive to rely on informal providers as a first point of care. This should be complemented by strengthening accessible and responsive primary healthcare services, particularly at community level, to reduce delays in seeking appropriate treatment for common conditions. In addition, targeted community-based health education, delivered through trusted household and social structures, can improve recognition of danger signs and encourage early presentation to formal facilities. Where traditional providers remain a first contact point, establishing structured referral linkages to formal health services can help minimise harmful delays, reduce complications, and ultimately prevent the dual financial burden of paying for both initial traditional care and subsequent management of avoidable complications.

Most respondents had a positive perception of traditional health practices. Although almost half still believed traditional medicine was less effective than modern medicine, a substantial proportion reported that it was more effective for specific conditions. reflects a selective, experience-driven evaluation of traditional health practices, where perceived effectiveness is condition specific. This is similar to findings reported in a study done in Malaysia, where postpartum women expressed strong confidence in traditional practices such as massage and heat therapy for physical recovery, while still recognising the need for biomedical care in more severe or complicated conditions.[32] This similarity may be explained by the strong cultural legitimisation of traditional practices in both settings, where long standing use, intergenerational transmission, and community endorsement reinforce perceptions of safety despite limited formal evaluation of clinical effectiveness.

Most respondents perceived traditional health practices as generally safe and beneficial, likely reflecting their long-standing cultural acceptance, widespread community use, and easy accessibility within the study setting. This favourable perception was particularly evident in the high reliance on traditional birth attendants, herbalists, and other community based

traditional care providers. However, respondents also demonstrated some degree of risk awareness, as practices such as scarification and the use of unregulated herbal mixtures were commonly identified as harmful, while bone setting, body massage, and herbal remedies for common illnesses were more often regarded as beneficial.

In addition, many respondents remained uncertain about whether traditional practices resulted in quicker recovery compared with orthodox care, suggesting ambivalence when the effectiveness of both systems is directly compared. This indicates that respondents did not perceive traditional health practices as uniformly safe or harmful, but rather differentiated between practices based on perceived usefulness, familiarity, and associated risk. Similar perceptions have been reported in studies conducted in Ghana and Nigeria, where traditional practices considered culturally familiar, less invasive, or useful for common ailments were viewed more favourably despite awareness of potential risks associated with some remedies and procedures.[9,10] This uncertainty may promote selective and inconsistent use of traditional and orthodox care, with individuals switching between both systems without clear guidance. This can delay appropriate treatment, fragment care seeking, and undermine adherence to medical instructions, thereby increasing the risk of avoidable complications in conditions requiring timely medical intervention such as obstetric emergencies, severe infections, fractures, and other acute conditions.

However, this contrasts with findings from Southwest Ethiopia, where a broader range of traditional practices, including abdominal massage and herbal ingestion during pregnancy, were widely perceived as beneficial with less critical appraisal of potential risks.[20] The difference may be explained by variations in health education exposure and greater interaction with formal healthcare services in the present study setting, which may have contributed to better risk awareness and more selective appraisal of traditional practices.

The coexistence of perceived benefits and harms suggests that respondents may continue to use traditional health practices even when aware of potential risks, potentially resulting in delayed presentation to formal health facilities, progression of otherwise preventable complications, and increased morbidity in conditions requiring prompt intervention such as infections, obstetric emergencies, and traumatic injuries. In such circumstances, initial reliance on traditional care may reduce the window for effective treatment and worsen clinical outcomes before patients eventually present to orthodox services.[45,46]

To address this, targeted risk communication should be coordinated by the Federal and State Ministries of Health with a focus on sustained behaviour change at community level through structured, repeated engagement rather than one off messaging. Health education should clearly distinguish harmful practices such as scarification and unregulated herbal preparations from relatively safer culturally accepted practices such as massage therapy, while also addressing misconceptions about the comparative effectiveness of traditional and orthodox care. Implementation should be driven by frontline primary healthcare workers, particularly community health extension workers, supported by other trusted community level influencers to improve reach, trust, and uptake. In addition, these stakeholders should lead the existing structured community-based programmes to strengthen early recognition of danger signs in pregnancy, infections, and traumatic conditions, with emphasis on prompt referral and timely presentation to formal health facilities to prevent progression to severe complications.

Cost, social influence, and prior experience with traditional care were important determinants of utilisation of traditional health services, while physical distance to health facilities and distrust of modern healthcare played comparatively minor roles. The finding that most respondents did not perceive distance as a barrier suggests that geographical accessibility is no longer a major constraint in this setting, likely reflecting improved distribution of health facilities within the study area. Similar findings were reported in a study done in Tanzania[48] which revealed low income, previous home delivery, and limited antenatal care attendance as determinants of traditional health practice utilisation. However, prior habitual use was not shown to be an important determinant, suggesting that reliance in that setting was driven more by socio-economic limitations and restricted engagement with formal maternal healthcare services than by behavioural reinforcement from previous exposure. Similarly, a national survey conducted in Nigeria revealed that socioeconomic status and regional disparities were more important drivers of reliance on traditional health services, while physical accessibility was mainly influential in poorly served regions with limited health facility density.[8] These barriers may increase the likelihood of delayed presentation to formal health services, progression of otherwise manageable conditions, and reliance on unregulated interventions. In turn, this may lead to preventable complications, poorer clinical outcomes, prolonged illness episodes, and higher risk of severe disease presentations that require more intensive and costly management at later stages of care.

Furthermore, perceived cost of modern healthcare emerged as a dominant driver, with respondents consistently reporting that orthodox services were more expensive, alongside

higher utilisation and a more favourable perception among respondents in lower and middle socioeconomic groups. Similar patterns have been reported in Tanzania,[4,8] where women in lower wealth quintiles were significantly more likely to use traditional herbal remedies, largely due to affordability concerns and prior home delivery experiences, suggesting that in resource constrained settings, financial barriers not only influence the decision to seek care but also affects the timing of care utilisation, often resulting in incomplete or disrupted utilisation of formal healthcare services. Consequently, this may result in delayed initiation of appropriate therapy, increased likelihood of presenting at advanced stages of illness requiring more complex and resource intensive management with higher morbidity and mortality.

Many respondents also reported that their use of traditional health practices was influenced by spouses, family members, or household consensus, while extended family structure and larger household size were associated with higher utilisation and more positive perceptions, reflecting the strong role of collective decision making within extended family systems. Similar findings were reported in a multi-country review from the Eastern Mediterranean region,[9] where recommendations from family members and friends were identified as predictors of herbal medicine use than advice from health professionals. This reflects the continued dominance of family centred health decision making in many low and middle income settings, where trust is often placed in familial experience rather than formal medical authority, which may delay timely presentation to formal healthcare services, reinforce the use of unregulated or inappropriate traditional remedies, and reduce adherence to medical advice. This increases the risk of disease progression, preventable complications, morbidity and mortality especially in cases where timely intervention is important.

Religious and belief systems further reinforced utilisation patterns, particularly the perception that traditional health practices address spiritual causes of illness not managed within formal healthcare. This is similar to findings from a systematic review conducted across multiple countries which revealed that perceived health threats and culturally defined illness explanations are major drivers of traditional medicine use.[10] The similarities may be explained by shared reproductive health concerns, persistent cultural beliefs about illness causation, perceived limitations in orthodox care for certain conditions, and similar economic constraints that make traditional remedies a more accessible and familiar first line option.

The continued reliance on traditional health practices may result in delayed presentation to formal health facilities for conditions requiring timely and evidence-based intervention such

as infections, obstetric emergencies, and traumatic injuries. Consequently, preventable complications including poor maternal and neonatal outcomes, infections, disability, toxic reactions from herbal preparations, and increased morbidity and mortality may occur.[46-48] The predominance of out-of-pocket financing for traditional care may also contribute to financial strain among lower and middle socioeconomic households, particularly where complications eventually require costly hospital based treatment.[44,47] In addition, this pattern may increase pressure on secondary and tertiary healthcare facilities, as conditions that could have been managed earlier at primary healthcare level may later present in more severe forms requiring emergency care, specialised intervention, prolonged hospitalisation, and greater healthcare resources.

Although ongoing initiatives by the National Health Insurance Authority and the National Primary Health Care Development Agency already target affordability, access, and service delivery, the continued reliance on traditional health services indicates persistent gaps in implementation, population coverage, and community engagement. There is therefore a need to strengthen financial risk protection under the National Health Insurance Authority by expanding coverage to informal sector workers and improving grassroots level enrolment to reduce out of pocket expenditure that drives alternative care seeking, which may otherwise result in delayed presentation to formal healthcare providers, progression of otherwise manageable conditions to severe stages, increased risk of preventable complications, and higher likelihood of poor clinical outcomes including prolonged illness, disability, and avoidable mortality due to late initiation of appropriate treatment.

In addition, primary healthcare revitalisation efforts led by the National Primary Health Care Development Agency should be further reinforced through the expansion of functional primary health centres, improved deployment of community health extension workers, and scaling up of integrated maternal and child health services to provide accessible and acceptable first contact care. Health education strategies should also be broadened beyond individual targeting to actively involve spouses, family members, and community leaders, whose influence plays a critical role in household health decision making and utilisation patterns, thereby improving early care seeking and reducing reliance on informal providers. Within this framework, the Basic Health Care Provision Fund should be should be improved on as a frontline financing and implementation tool by ensuring sustained funding of PHC facilities, improving availability of essential medicines, diagnostics, and emergency care

supplies, and supporting outreach and community based services. Effective utilization of this fund would directly improve service delivery and quality at primary care level, reducing dependence on informal and traditional providers, and minimize avoidable complications arising from delayed or inappropriate initial care.

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CONCLUSION

Respondents utilised a range of traditional health practices, mainly herbal remedies and traditional birth attendant services, while bone setting, manual therapies, and spiritual healing were less common and invasive practices such as scarification were least used.

Traditional health services were mainly provided by traditional birth attendants and herbalists, with bone setters, spiritual healers, and family members playing more occasional or supportive roles.

Most respondents had a positive perception of traditional health practices, although they also recognised potential risks associated with certain practices, with prior experience being the strongest influence on these perceptions.

The use of traditional health practices was associated with affordability, family and social influence, cultural and spiritual beliefs, socioeconomic status, religion, and household structure, with minimal influence from physical access to health facilities or distrust of modern healthcare services.

RECOMMENDATIONS

To the Federal Ministry of Health and Social Welfare and NPHCDA

1. Integrate structured counselling on traditional health practices into routine antenatal, postnatal, family planning, and immunisation services delivered at primary healthcare facilities within the next 18 months using trained Community Health Extension Workers, nurses, and midwives.
2. Strengthen grassroots enrolment of informal sector workers and low income households into existing health insurance schemes through ward level mobilisation and community registration campaigns to reduce out-of-pocket healthcare expenditure driving reliance on informal traditional care.
3. Support State Primary Health Care Development Agencies to improve utilisation and monitoring of Basic Health Care Provision Fund resources for essential medicines, maternal health services, emergency care supplies, and community outreach activities within the next two years.

To Edo State Ministry of Health

1. Conduct periodic community assessments to identify areas with high utilisation of unsafe traditional health practices and implement targeted interventions within affected local government areas within the next 12 months.
2. Expand existing public awareness campaigns through local radio stations, market outreaches, religious gatherings, and community meetings conducted in local languages within one year to improve awareness of the risks associated with unsafe traditional practices and delayed healthcare seeking.
3. Improve functionality of primary healthcare facilities in underserved communities through better staffing, regular supply of essential medicines and maternal health commodities, and strengthened emergency referral systems within the next 18 months.
4. Strengthen accountability and monitoring mechanisms for utilisation of Basic Health Care Provision Fund resources within primary healthcare facilities through quarterly supervisory visits and performance reviews beginning within the next fiscal year.

To Primary Health Care Facilities

1. Integrate routine screening for utilisation of traditional health practices into antenatal, postnatal, outpatient, and family planning consultations within the next six months to support early identification of harmful practices and provision of appropriate counselling.
2. Conduct regular household and community sensitisation sessions on danger signs during pregnancy, severe infections, fractures, and other conditions requiring prompt medical care through Community Health Extension Workers and nurses at least quarterly.
3. Ensure effective utilisation of resources provided through the Basic Health Care Provision Fund to improve availability of essential medicines, maternal and child health services, emergency care supplies, and outreach activities beginning from the next fiscal year.

To Non-Governmental Organisations (NGOs) and Development partners

1. Support expansion of community based health education programmes through advocacy campaigns, educational materials, and grassroots mobilisation activities targeted at women of reproductive age in high burden communities within the next 12 months.
2. Support capacity building of traditional birth attendants and herbal practitioners on safe practice, recognition of danger signs, and timely referral to primary healthcare facilities.
3. Support development of culturally appropriate behaviour change communication materials in local languages to improve awareness and reduce harmful practices within the next 12 months.

To Traditional Health Practitioners and Associations

1. Participate in structured collaboration programmes with primary healthcare facilities within 12 months focused on referral of high-risk cases and discouragement of invasive or harmful practices such as scarification.
2. Establish internal monitoring mechanisms to discourage harmful invasive practices such as scarification and unsafe ritual procedures among their members.

To Households and Community Leaders

1. Engage in early health seeking behaviour by prioritising timely use of formal healthcare services for conditions requiring urgent attention.
2. Support community level sensitisation efforts by reinforcing accurate information on risks associated with unsafe traditional practices during community and religious gatherings.
3. Community leaders should encourage establishment of community-based health emergency savings groups among households to reduce financial delays associated with accessing formal healthcare services during emergencies within 12 months.

CONTRIBUTION TO KNOWLEDGE

This study provides context-specific and locally relevant evidence on the use of traditional health practices among women of reproductive age in Egor Local Government Area, Benin City, Edo State. By providing empirical data from this setting, it fills an important gap in subnational evidence and offers insights that are directly relevant for local health planning and intervention. The findings confirm that traditional health practice use remains substantial within an urban Nigerian population, while also showing a pattern of predominance of non-invasive practices such as herbal remedies and traditional birth attendant services, alongside a comparatively lower use of more harmful invasive procedures.

The study advances existing knowledge by demonstrating that utilisation of traditional health services in this context is not primarily driven by poor physical access or distrust of modern healthcare, but rather by affordability, household level decision making, and culturally embedded belief systems. This shifts the explanatory focus from access related barriers alone to a more comprehensive understanding that incorporates socioeconomic and sociocultural influences. It further highlights the central role of family structures and intergenerational influence in shaping both utilisation and perception, reinforcing the importance of collective health decision making within households.

In addition, the study identifies prior utilisation as the strongest predictor of positive perception, highlighting the reinforcing relationship between experience and continued use of traditional health practices. The coexistence of perceived benefits and recognised risks, including the continued use of unsafe practices despite awareness of potential harm, provides a more detailed understanding of health seeking behaviour as one that is shaped by both experiential and belief-driven factors.

Finally, the findings contribute to public health knowledge by emphasising the need to reposition primary healthcare systems as not only providers of clinical services but also as culturally responsive platforms for community engagement. This highlights the importance of integrating social, cultural, and behavioural considerations into health system strengthening efforts, particularly at the primary care level, to improve utilisation of safe and effective healthcare services in similar settings.

POLICY IMPLICATIONS

The findings of this study have important implications for health policy in Nigeria, particularly in the context of strengthening primary healthcare and improving maternal and general health outcomes. The clear influence of affordability on the utilisation of traditional health services highlights persistent gaps in financial protection within the health system. Although mechanisms such as the Basic Health Care Provision Fund and the National Health Insurance Authority have been established to reduce out of pocket expenditure, the continued perception of modern healthcare as expensive suggests that coverage remains insufficient in scope, depth, or awareness. Policy efforts should therefore prioritise expanding effective coverage of essential maternal and primary healthcare services, ensuring that enrolment translates into real access at the point of care. This includes eliminating hidden costs, ensuring availability of essential drugs and services at primary health centres, and strengthening accountability mechanisms to prevent informal payments that may discourage utilisation.

The prominent role of household and social influence in shaping health-seeking behaviour indicates that current policy approaches, which are often individual centred, may not be fully aligned with how decisions are made in practice. Health policies and programmes should be redesigned to explicitly incorporate household and community level engagement strategies. This requires institutionalising community-based health education within primary healthcare systems, with structured involvement of spouses, older family members, and other key influencers in routine outreach activities. The National Primary Health Care Development Agency and State Primary Health Care Development Agencies should integrate family-centred communication models into existing programmes, ensuring that health education addresses not only medical information but also prevailing cultural beliefs and social norms that influence care-seeking.

Belief systems, particularly the perception that traditional practices address spiritual dimensions of illness, highlight the need for culturally responsive health policy. Rather than adopting purely medical or exclusionary approaches, policies should support culturally sensitive health communication that acknowledges these beliefs while promoting safe and evidence-based practices. This includes developing context-appropriate risk communication strategies that clearly differentiate between conditions that can be managed with supportive or complementary practices and those that require urgent medical intervention. Training of

primary healthcare workers, especially community health extension workers, should therefore include competencies in culturally informed communication, negotiation, and community engagement.

The findings also reveal that health system inefficiencies, particularly long waiting times and service delivery challenges, contribute to the continued use of traditional health services. This points to the need for policy on improving quality of care alongside access. Strengthening primary healthcare should go beyond infrastructure expansion to include optimisation of service delivery processes, workforce distribution, and patient flow management. Policies should enforce standards for respectful and patient-centred care, reduce waiting times through task-shifting and better scheduling systems, and ensure consistent availability of trained personnel and essential commodities. Improving the client experience at primary health centres is essential for building trust and encouraging sustained utilisation.

The persistence of potentially harmful practices such as scarification and unregulated herbal use, despite some level of risk awareness, calls for a more robust regulatory and public health response. Agencies such as the Federal Ministry of Health and Social Welfare and the National Agency for Food and Drug Administration and Control should strengthen surveillance and regulation of herbal products, ensuring quality control, safety testing, and enforcement against unsafe practices. However, enforcement alone is unlikely to be sufficient. Policies should incorporate harm reduction approaches that combine regulation with community education, focusing on discouraging high-risk practices while promoting safer alternatives and early referral to formal care.

Given the central role of traditional practitioners, particularly traditional birth attendants and herbalists, in community level care, policy frameworks should move towards structured and clearly defined engagement rather than exclusion. Collaboration should be limited to safe, non-invasive areas such as health promotion, identification of danger signs, and referral support. Establishing formal referral linkages between traditional practitioners and primary healthcare facilities can help reduce delays in accessing appropriate care. At the same time, policies must avoid legitimising high-risk practices by ensuring that engagement does not extend to endorsement or certification of unsafe procedures.

The observed pattern of reliance on out-of-pocket expenditure for both traditional and formal care highlights broader issues of health system financing and equity. Policy reforms should aim to strengthen financial risk protection mechanisms, particularly for lower and middle

socioeconomic groups who are most affected by cost barriers. Expanding subsidised maternal and emergency services, improving the efficiency of insurance schemes, and ensuring equitable distribution of resources across urban, peri-urban, and rural areas are essential steps toward reducing financial driven health seeking disparities.

Finally, the findings reinforce the need for better integration between community-based and facility-based care within Nigeria's health system. Primary health centres should be repositioned as both service delivery points and community engagement hubs, serving as the interface between households and the formal health system. This requires coordinated policy action across federal, state, and local levels to ensure that programmes are not only well designed but also effectively implemented, monitored, and adapted to local contexts. Strengthening data systems at the primary care level to capture patterns of traditional health practice use and referral pathways will further support evidence-based policy making and improve responsiveness to community needs.

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APPENDIX 1

INFORMED CONSENT FORM

Dear respondent, we are 600L students at the school of Medicine, University of Benin, Benin city. We are conducting a study on **determinants of traditional health practices among women of reproductive age in Egor Local Government Area, Edo State**. This study is being carried out for academic purposes in partial fulfillment of the requirements for the award of a degree. You have been selected to participate because you are a woman within the reproductive age group living in this community. The information you provide will help improve understanding of traditional health practices and contribute to better health planning and service delivery. Your participation in this study is **voluntary**. You are free to refuse participation or withdraw at any time without any penalty or loss of benefits. All information provided will be treated with **strict confidentiality** and will be used strictly for research purposes only. Your name will not be written anywhere on this questionnaire. Kindly answer the questions honestly. There are no right or wrong answers.

Thank you for your cooperation.

I have been informed about the purpose of this study and understand what my participation involves.

- I understand that participation is voluntary.
- I understand that my responses will remain confidential.
- I understand that I can withdraw at any time without consequences.
- I agree to participate in this study.

Participant's Consent

( ) I agree to participate
( ) I do not agree to participate

Participant Signature/Thumbprint: _____

Date: _____

Interviewer's Name: _____

Interviewer's Signature: _____

APPENDIX II

PROPOSED QUESTIONNAIRE

DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE

UNIVERSITY OF BENIN

DETERMINANTS OF TRADITIONAL HEALTH PRACTICES AMONG WOMEN OF REPRODUCTIVE AGE IN EGOR LOCAL GOVERNMENT AREA, EDO STATE

Instructions: Answer the following questions by ticking (√) in the appropriate box:

SECTION A: DEMOGRAPHIC INFORMATION

1. Age: (as at last birthday)_____
2. Marital Status: ( ) Single ( ) Married ( ) Co-habiting ( ) Separated/Divorced ( ) Widowed
3. Level of Education: ( ) No formal education ( ) Primary School ( ) Secondary School ( ) Tertiary Education
4. Level of Education of spouse : ( ) No formal education ( ) Primary School ( ) Secondary School ( ) Tertiary Education
5. Occupation: ( ) Unemployed/Student ( ) Trading/Self-Employed ( ) Civil Servant/Formal Employment ( ) Other (Specify: _____)
6. Occupation of spouse: ( ) Unemployed/Student ( ) Trading/Self-Employed ( ) Civil Servant/Formal Employment ( ) Other (Specify: _____)
7. Religion: ( ) Christianity ( ) Islam ( ) African Traditional Religion ( ) Others
8. Ethnicity: _____
9. Monthly Income: _____
10. Residence: ( ) Urban ( ) Rural ( ) Peri-urban
11. Designation: _____
12. Household size: _____
13. Family type: ( )Nuclear ( ) Extended
14. Marriage type: ( )Monogamy ( ) Polygamy
15. Number of children: _____

SECTION B: TRADITIONAL HEALTH PRACTICES(THP) UTILIZATION AND TYPES (Objectives 1 & 2)

1. In the past 12 months, have you used any Traditional Health Practice (THP)? ( ) Yes (Go to Q2) ( ) No (Go to Section C)
2. For which of the following reasons did you use THP most recently? ( ) Pregnancy/Maternity Care ( ) Fertility/Infertility Issues ( ) General Illness (e.g., fever) ( ) Spiritual/Mental Issue ( ) Bone Setting/Injury ( ) General wellness ( ) Others (specify) _____
3. What are the different types of THP you are aware of? (Tick all that apply) ( ) Herbal preparation ( ) physical/ manual therapies ( ) bone setting ( ) Traditional birth attendant ( ) care during pregnancy ( ) fertility treatment ( ) body massage ( ) scarification ( ) acupuncture ( ) mind-body practices such as yoga, meditation, chanting ( ) spiritual and ritual healing such as prayer, divination, use of ritual ( ) others (specify) _____
4. Source of information about THP ( ) Family ( ) school ( ) place of worship ( ) Club ( ) family ( ) school ( ) friends ( ) television ( ) Radio ( ) Newspaper/Magazine ( )Internet ( ) Others (specify)_____
5. Did you use Herbal Preparations (teas, mixtures, rubs) in the last 12 months? ( ) Yes ( ) No
6. Did you use Traditional Birth Attendant (TBA) Services in the last 12 months? ( ) Yes ( ) No
7. Did you use Traditional Bone Setter (TBS) Services in the last 12 months? ( ) Yes ( ) No
8. Did you use Scarification or Local Incisions (cuts with medicine) in the last 12 months? ( ) Yes ( ) No
9. Did you use Spiritual Healing or Traditional Rituals (charms, prayers) in the last 12 months? ( ) Yes ( ) No
10. Please specify other traditional health services utilized in the last 12 months _____

SECTION C: TRADITIONAL HEALTH PRACTICES PROVIDERS

1. Which of these persons do you consider your primary provider of THP? ( ) Traditional Birth Attendant (TBA) ( ) Herbalist/Native Doctor ( ) Traditional Bone Setter (TBS) ( ) Family Member ( ) Religious Leader/Spiritualist
2. How often do you receive health advice from a Traditional Birth Attendant (TBA)? ( ) Very Often ( ) Occasionally ( ) Rarely ( ) Never
3. How often do you receive health advice from a Herbalist/Native Doctor? ( ) Very Often ( ) Occasionally ( ) Rarely ( ) Never
4. When you use THP, who usually pays for the service? ( ) Myself ( ) Husband/Partner ( ) Other Family Member ( ) Friend/Community ( ) The service is free
5. The fee for THP services are ( ) expensive ( ) affordable ( ) cheap ( ) free

SECTION D: PERCEIVED BENEFITS AND RISKS

1. Do you believe traditional medicine is more effective than modern medicine for certain illnesses? ( ) Yes, always more effective ( ) Yes, often more effective ( ) No, it is less effective ( ) No difference
2. How would you rate the safety of Traditional Health Practices? ( ) Very Safe ( ) Safe ( ) Unsafe ( ) Very Unsafe
3. THP are ( ) Harmful ( ) Beneficial ( ) Harmless ( ) Others (specify) _____
4. List examples of harmful THP

   _____

   _____

5. List examples of beneficial THP

   _____

   _____

6. List examples of harmless THP

   _____

   _____

7. Do you believe THP offers quicker recovery than modern medicine? ( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree
8. Have you ever personally experienced a serious negative side effect or complication from using THP? ( ) Yes (Go to Q5) ( ) No (Go to Section E)
9. What kind of side effect or complication did you experience? ( ) Infection ( ) Disability ( ) Stillbirth ( ) Bleeding ( ) others (specify) _____
10. If you answered **Yes** to Q4, was the complication severe enough to require hospital treatment? ( ) Yes ( ) No
11. Which heath facility did you access? ( ) Health centre ( ) Maternity clinic ( ) Hospital ( ) Others (specify)_____

SECTION E: FACTORS ASSOCIATED WITH TRADITIONAL HEALTH PRACTICES USE

Rate your degree of agreement with each question using the scale as follows: **5 = Strongly Agree, 4 = Agree, 3 = Neutral, 2 = Disagree, 1 = Strongly Disagree**

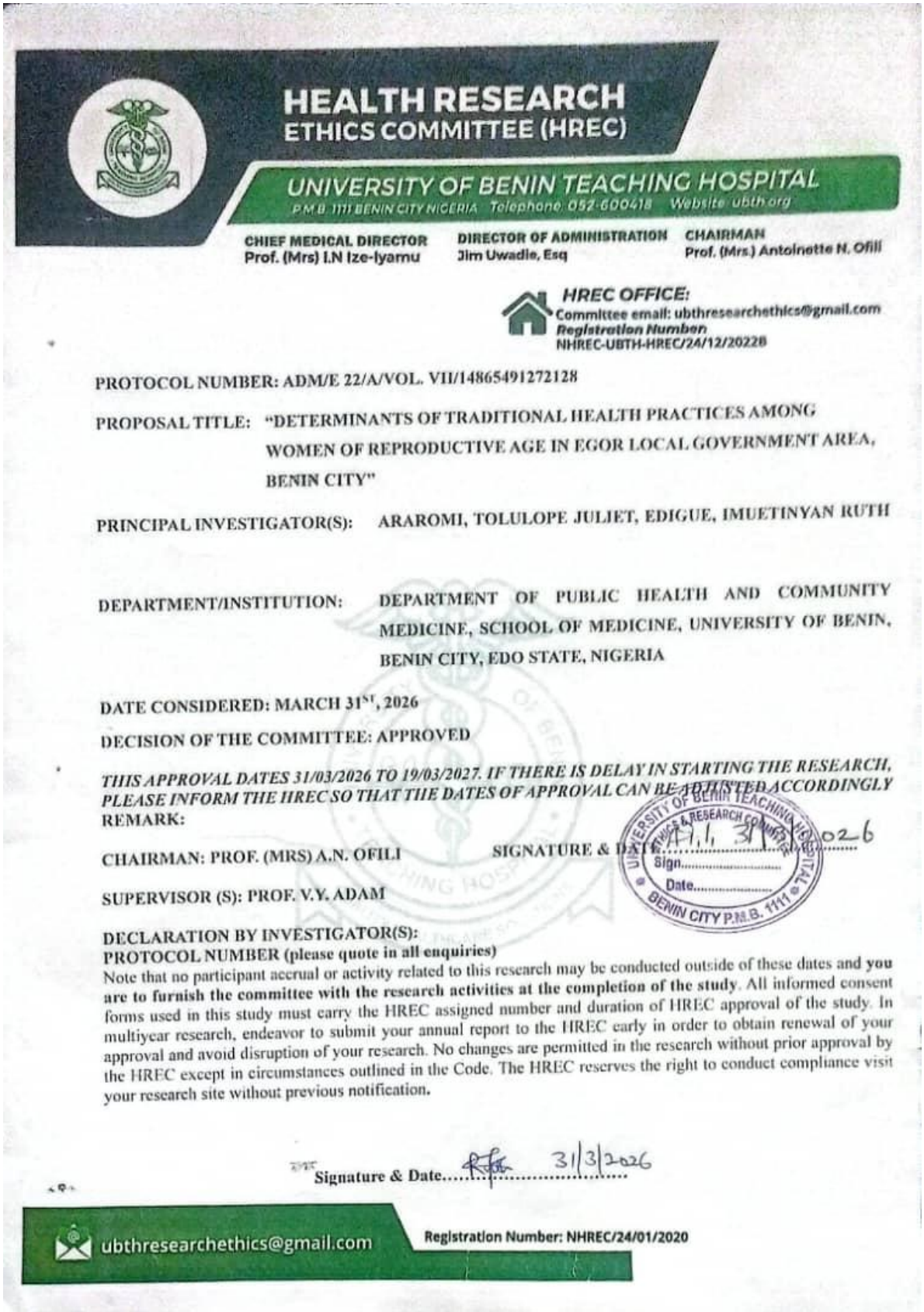
S/N	Question	SA (5)	A (4)	N (3)	D (2)	SD (1)
1	I use THP because modern hospitals are too far away from my home. (Accessibility)					
2	I find modern hospital services too expensive compared to THP. (Economic)					
3	My cultural beliefs require me to use traditional healing methods. (Cultural Beliefs)					
4	My decision to use THP is mainly influenced by my family members or spouse. (Social Influence)					

5	I believe traditional methods treat the spiritual cause of illness, which hospitals ignore. (Beliefs/Aetiology)					
6	I use THP because I lack trust in the quality of care provided at modern health facilities. (Trust/Confidence)					
7	I prefer traditional healers because they spend more time with me than hospital staff. (Quality of Interaction)					
8	The long waiting time at the clinic/hospital makes me choose THP instead. (Time/Efficiency)					

End of Questionnaire. *Thank you for your valuable time.*

APPENDIX III

ETHICAL CLEARANCE FORM



HEALTH RESEARCH ETHICS COMMITTEE (HREC)

UNIVERSITY OF BENIN TEACHING HOSPITAL

P.M.B. 1111 BENIN CITY NIGERIA Telephone: 052-600418 Website: ubth.org

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Registration Number
NHREC-UBTH-HREC/24/12/20228

PROTOCOL NUMBER: ADM/E 22/A/VOL. VII/14865491272128

PROPOSAL TITLE: "DETERMINANTS OF TRADITIONAL HEALTH PRACTICES AMONG WOMEN OF REPRODUCTIVE AGE IN EGOR LOCAL GOVERNMENT AREA, BENIN CITY"

PRINCIPAL INVESTIGATOR(S): ARAROMI, TOLULOPE JULIET, EDIGUE, IMUETINYAN RUTH

DEPARTMENT/INSTITUTION: DEPARTMENT OF PUBLIC HEALTH AND COMMUNITY MEDICINE, SCHOOL OF MEDICINE, UNIVERSITY OF BENIN, BENIN CITY, EDO STATE, NIGERIA

DATE CONSIDERED: MARCH 31ST, 2026

DECISION OF THE COMMITTEE: APPROVED

THIS APPROVAL DATES 31/03/2026 TO 19/03/2027. IF THERE IS DELAY IN STARTING THE RESEARCH, PLEASE INFORM THE HREC SO THAT THE DATES OF APPROVAL CAN BE ADJUSTED ACCORDINGLY

REMARK:

CHAIRMAN: PROF. (MRS) A.N. OFILI SIGNATURE & DATE: 31/3/2026

UNIVERSITY OF BENIN TEACHING HOSPITAL ETHICS & RESEARCH COMMITTEE Sign..... Date..... BENIN CITY P.M.B. 1111

SUPERVISOR (S): PROF. V.Y. ADAM

DECLARATION BY INVESTIGATOR(S):

PROTOCOL NUMBER (please quote in all enquiries)

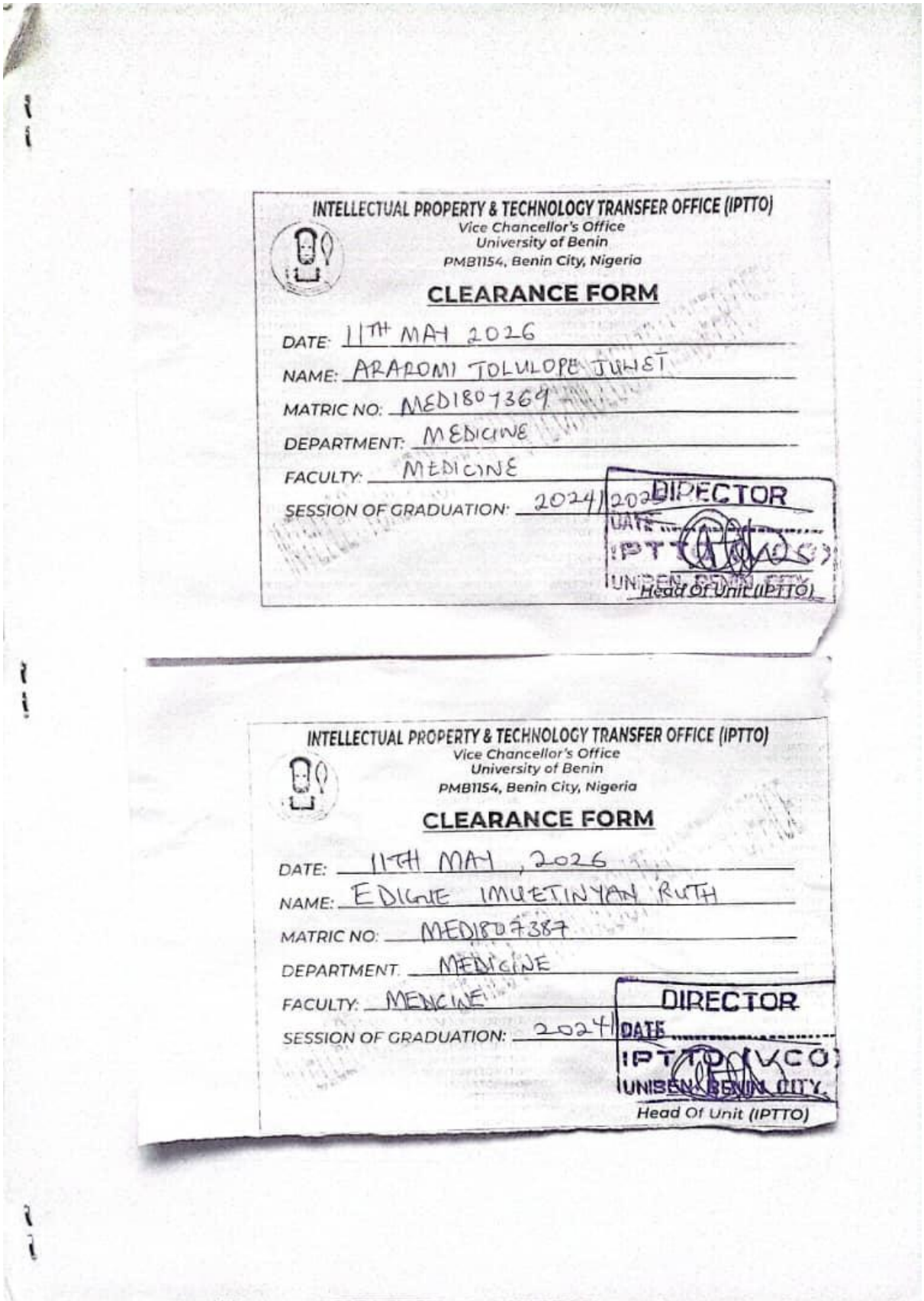
Note that no participant accrual or activity related to this research may be conducted outside of these dates and **you are to furnish the committee with the research activities at the completion of the study**. All informed consent forms used in this study must carry the HREC assigned number and duration of HREC approval of the study. In multiyear research, endeavor to submit your annual report to the HREC early in order to obtain renewal of your approval and avoid disruption of your research. No changes are permitted in the research without prior approval by the HREC except in circumstances outlined in the Code. The HREC reserves the right to conduct compliance visit your research site without previous notification.

Signature & Date..... 31/3/2026

ubthresearchethics@gmail.com Registration Number: NHREC/24/01/2020

APPENDIX IV

PLAGIARISM TEST



INTELLECTUAL PROPERTY & TECHNOLOGY TRANSFER OFFICE (IPTTO)
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CLEARANCE FORM

DATE: 11TH MAY 2026
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FACULTY: MEDICINE
SESSION OF GRADUATION: 2024/2025

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INTELLECTUAL PROPERTY & TECHNOLOGY TRANSFER OFFICE (IPTTO)
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