

TRADITIONAL HERBAL TREATMENT OF FEMALE INFERTILITY IN IBIBIO CULTURE, NIGERIA

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ABSTRACT

The study examines the issue of female infertility and the prospects of herbal treatment of female infertility in Ibibio culture, Nigeria. The methods and sources of herbs used in treating female infertility as well as make suggestions to improve the prospects of herbal treatment of infertility are examined. The descriptive-survey design was used and data collected through the use of questionnaires, interview and focus group schedules. The data analyzed confirm the prevalence of infertility in Ibibioland which in some cases, is awkwardly perceived as being caused by witchcraft; hormonal imbalance, internal heat, fibroid, and excessive use of contraceptives. The study further shows that through the oral and anal methods, roots, stems, leaves and bark of plants such as *Utimense*; *Mfang Idip Ibaan*, *Asewa*, *Itumo* etc are used in treating female infertility. Despite the reported efficacy, it is further revealed that many people are still skeptical about herbal usage due to unhygienic preparation processes and poor government regulation. The study concludes that the prospects of herbal treatment of female infertility can only be maximized if similar trust given to traditional medicine in Southwest Nigeria is exhibited by Ibibio people, and the regulatory policies in Nigeria are implemented extensively. The study calls for improved synergy between traditional herbal practitioners, pharmacologists and toxicologists to produce safer herbal options for women with infertility problems.

Key words: herbal treatment, female infertility, Ibibio culture

Introduction

This study stemmed from the context of the researcher's experience as a woman and some of the encounters with fellow women suffering from infertility problem. After the researcher's first conception and birth, there was a period of break to allow the body recuperate, however, by the time the researcher was ready to conceive a second child, it became a challenge for conception to take place. After visits to the gynecologist who asked that series of tests be done, the results indicated that there is an issue with the fallopian tube. Despite rigorous evacuation session, conception did not happen after some years. The researcher had to try herbal treatment. It was after the routine intake of some herbal treatment for a period of 4 months that conception and subsequent birth of the second child was made possible.

Another motivation for the study manifested when the researcher met a lady in church during one of the counseling sessions. She was seated next to the researcher with a beautiful set of twins. The researcher was drawn to the twins then conversation ensued. Few minutes into the conversation, one of the twins started throwing up due to a mild fever she had. While she was cleaning the child up, she was speaking in her

mother tongue: *Abasi mbok ku yak nsak aba...* (God please do not allow my enemies to mock me again oh, you know how long it took me before you finally compensated me with these two.) Out of curiosity, the researcher asked her why it took her that long. She then narrated that she had been to so many fertility clinics receiving treatments without result until her encounter with a traditional birth attendant made her a mother of two beautiful children. According to her, the traditional birth attendant said she needed to reposition her womb, so that it can carry babies. She started off by giving her some herbs, which she took for a period of 7 months before she massaged her stomach 3 different times with some cooked herbs. While she was receiving that treatment, conception took place. She did not even finish all the traditional treatments that were recommended before she took in.

Infertility is considered one of the “global public health problems and is also considered one of the unsolved problems of the continuous human race” (Nidal and Abdel, 2019). The World Health Organization (2025) establishes that “infertility affects millions of people – and has an impact on their families and communities. Estimates suggest that approximately one in every six people of reproductive age worldwide experience infertility in their lifetime.” However, scholarship is replete with disclosures that ethnopharmacological investigations have been found to be one of the most reliable tools for the discovery of the natural and semi-synthetic drug. In fact, herbals and other natural products, including their chemical derivatives, represented about 50% of all currently utilized medications worldwide (Atanasov et al. 2015). The usage of plants kingdom by human beings, as a source of medicines, started from the immemorial time for treatment, protection, and prevention of various illnesses. Till recent time, herbals are considered one of the most important branches of traditional medicine. In fact, this kind of medicine plays until now an important role in health care systems, especially in rural areas in developed and developing countries (Soforowa et al, 2013; Towns, 2014; and Licata, 2016).

In addition, the global public interests are in continuous growing toward the use of this type of medicine. In fact, about 80% of people in rural areas of developing countries utilized traditional medicine, since it is available, cheap and has a variety of health benefits (Abdullahi, 2011; WHO, 2013; Moore, Hamza, Berke and Umar 2017). In Ibibio society, the infertility rate among men and women is relatively high with a rate of about 15% in 2016 according to the investigation carried out by the Minders Health Watch Organization (Ukpong, 2019).

In Ibibioland just like many other African societies, womanhood is revered as a symbol of fertility and the earth goddess - *Eka Abasi* that depicts fruitfulness in the process of reproduction, is given the attributes of a woman. A woman is a symbol nurturing and is equated alongside the earth as symbols of fertility. To this end, it is a serious problem when a woman adjudged to be a symbol of fruitfulness cannot conceive. Culturally, the confines of marriage offer the legitimate grounds for procreation as captured by Mbiti (1979), marriage is not completely consummated until the wife has given birth. Ukpong (2007), explains contextually the importance that Ibibio people place on children by asserting that to get a child is the prime objective of marriage. A marriage without children to the Ibibio people is an empty and meaningless union. Ekong (1983) reiterates the stance by positing that the prime purpose of marriage in most African societies is procreation. Among the Ibibio, the bond of marriage becomes strengthened with the arrival of children. Esen (1982) sums that the primary role of the woman in the Ibibio society is to bear children because motherhood is the crown of glory. This notion is constructed in the indigenous gender structure.

Consequently, infertility which is a health condition where a married woman is unable to conceive is a serious problem and a concern to the husband, in-laws and relatives. An infertile woman who is often stigmatized as *Ada* in Ibibio society is an unhappy person. Ekong (1983) hints that infertility or barrenness is regarded as the most heinous curse on an Ibibio woman. She would perform all forms of sacrifices in order to lift the curse and be fertile. Infertility is not peculiar to Ibibio women. However, the condition is designated a global disease according to the World Health Organization (2022) which defines the disease of the male or female reproductive system as a failure to achieve a pregnancy after 12 months or more of regular unprotected sexual intercourse. The body of a woman is expected to release egg from the ovaries and when a man's sperm contact the egg and fertilizes it, conception ensues. When conception does not occur in such situation overtime, a woman is said to be infertile.

Moreover, the researcher observes that the result of the recourse to traditional healthcare is evident in women's reliance on trado-spiritual therapy for infertility. The traditional medicine otherwise referred to as indigenous system of healing entails the various traditional therapeutic approaches utilized by the people to treat disease prior to or after exposure to biomedical or orthodox healthcare system. The traditional healthcare system encompasses a wide array of therapeutic approaches to treat ailments. One of these approaches is the herbal treatment. Herbal treatment is a subset of traditional Ibibio healthcare system and it constitute the oldest form of treatment and still the commonest form of treatment in Ibibioland. Ukpong (2007:228) explains that herbal medicine is being used to include “medicament obtained from plants, trees, shrubs, herbs, mineral and animal substances. For many ages, the Ibibio have made use of drugs obtained from the substances enumerated”

The researcher has however observed that herbal treatment forms a significant crux of treatment of women infertility in Ibibioland. With heavy contact between women and Traditional Birth Attendants (*mbia umaan*) for fertility treatment especially in rural areas, it therefore entails that the proclivity for herbal treatment is likely. This is in sync with the opinion of Falodun (2010) who asserts that treatment offered by traditional herbal healers at the primary healthcare level has greatly sustained the Nigerian society before and after colonization. Despite the commonality of herbal treatment of women infertility in Ibibio society, the researcher has identified a gap in literature on the treatment processes. Guiding information of the treatment is difficult to find. Questions bordering on evaluation of the efficacy, standardization and promotion of herbal treatment of women infertility are not empirically answered. Therefore, the study is an empirical attempt to examine the cultural perception of women infertility in Ibibio society as well as examine the viable herbal treatment strategies to tackle women infertility in Ibibio society of Akwa Ibom State.

Statement of the Research Problem

Infertility is a disease that prevents the fecundity of many women and men in the world. Estimates by the World Health Organisation (2022) suggest that between 48 million couples and 186 million individuals live with infertility globally. Based on observation of the researcher, in Ibibio society, there is prevalence of childless women to *Ufok Akam* (prayer houses) in search of *mfri idip* (fruit of the womb) which is an indicator that infertility remains a perennial problem threatening the stability of many marriages and inducing many women to the social stigma of being called *Ada* as well as challenging the culture of lineage continuity which is the primal reason for marriage in Ibibioland. This therefore lends credence to the belief in traditional medicine to solve infertility health challenges among the Ibibio people. This however constitutes one of the principal

elements of the Ibibio indigenous religious worldview. The traditional belief is that the Supreme Being – *Abasi Ibom*, has bestowed in herbs the therapeutic power to tackle various diseases. Patronage of herbal practitioners for solution to female infertility is observably on the increase. Despite the increasing preference and patronage of herbal treatment for female infertility in Ibibioland, traditional knowledge has no documentation strategy for reference purposes. There is also the question of standardization and measurement which has made many to question the efficacy and suitability of the herbal treatment. The current study aimed to collect information about herbal remedies used by local rural traditional healers in Ibibio society for the treatment of infertility in females.

Objectives of the Study

The main objective of this study is to substantially provide empirical-driven information on herbal remedies to infertility in women among the Ibibio people, and specifically to:

- i. examine the indigenous perception about infertility in Ibibioland
- ii. identify herbal treatment approaches used by traditional healers in Ibibio society for the treatment of the problem of female infertility
- iii. assess the efficacy of the herbal remedies to female infertility in Ibibio society

Methodology of the Study

The study adopted the survey and descriptive designs in evaluating the variables of infertility and herbal treatment in Ibibio society. The survey method is a technique of gathering first-hand data by asking sampled respondents who are thought to have the desired data to examine an issue; while the descriptive method enables the researcher to accurately and systematically describe the variables meaningfully to the understanding of the readers. The survey and descriptive methods are apt for a study of this magnitude because it assisted the researcher to synthesize quantitative and qualitative data from the field to provide accurate findings. The mixed method enabled triangulation of secondary and primary data for the study. This triangulation enhanced the reliability and validity of the findings.

The sample size of the study comprised 250 respondents for questionnaires, 13 interviewees who were 7 women who had faced experienced infertility and 6 traditional herbal dealers. The focus group discussion comprised of 5 women who have effectively used herbal treatment of infertility. The sample strategy used were the random and purposive methods. 250 respondents were randomly selected to respond to the questionnaire while the interviewees and focus group discussants were purposively selected.

The data collected from interviewees and focus group discussion were descriptively analyzed while the data from questionnaires were used as supportive data for the thematic analysis. The validity of the research instruments was ensured through expert review while the reliability was enhanced through pilot testing and consistency in data collection procedures. Triangulation across multiple data sources further strengthened the credibility of findings.

Ethical approval was obtained prior to the study. Participants gave informed consent, and confidentiality and anonymity were strictly maintained. Special care was taken to handle sensitive issues related to infertility with cultural sensitivity and respect. In cases where the respondents did not want to reveal certain information, the researcher did not force them to do contrary.

The Area of Study: Ibibio Culture

The Ibibio people occupy the palm belt region in the southeastern part of Nigeria. The area is located in Southeastern Nigeria also known as Coastal Southeastern Nigeria or what is today known as the South South region (Abasiattai, 1987). The Ibibio people share boundaries with their Igbo neighbours in the Northwest hinterland and with the Efik Southeast ward. They also share the south-west coastal boundary with the Okpobo/Ijaw in Rivers State. They are bounded in the northeast by the cluster of Ejagham nation such as the Qua, Efut and Ekoi up to Southern Cameroon (Udo 1983). Prior to the existence of Nigeria as a Nation, the Ibibio people were self-governed group. They became a part of the Eastern Nigeria of Nigeria under British colonial rule. During the Nigerian Civil War, the Eastern region was split into three states. Southeastern State of Nigeria was where the Ibibios were located, one of the original twelve states of Nigeria) after Nigerian independence (Obio-Offiong, 1958). The Efik, Anaang, Oron, Eket and their kith and kin of the Ogoja District, are also members of the Southeastern State. The state (Southeastern State) was later renamed Cross Rivers State and in 1987, the military through decree No.24, carved out Akwa Ibom State from the then Cross Rivers State as a separate State (Abasiattai, 1987).

Theoretical Framework

The study is driven by the Indigenous Cultural Responsiveness Theory (ICRT) proposed by Sasakamoose et al (2017). The Indigenous Cultural Responsiveness Theory (ICRT) is a decolonizing model that validates and support indigenous history and inherent rights. Indigenous Cultural Responsiveness Theory adopts three strategies: restoring First Nations community-based health and wellness systems; establishing a middle ground for engagement between mainstream and First Nations systems and worldviews by instituting a mutually beneficial co-existence as the foundational stage for reconciliation and respectful engagement; and transforming mainstream service delivery to become culturally responsive by guiding research that continuously improves the health, education, governance, and policies of Indigenous People. Sasakamoose et al (2017) explain that culturally based healing practices which are regionally specific, offers healing for trauma of colonization and holistically address wellness unlike Western biomedical approaches that focus on the absence of diseases.

The application of the theory helps the researcher to explain that culturally based healing practices that are regionally specific, offers healing for trauma of colonization and holistically address wellness unlike Western biomedical approaches that focus on the absence of diseases. Kalu's (2022) summary of the ICRT indicates that although the theory is developed based on cultural worldview of the peoples of Canada, it thrives on discursive practices and mutual engagement towards meeting the health and wellness needs of all indigenous people. Hence, the adoption of the ICRT is premised on the fact that the theory is interestingly adaptable and can be used as guide to establish how the traditional herbal treatment of the Ibibio people of Nigeria can be used to treat the problem of infertility in women.

Conceptual Clarification

This subsection of the study appraises the concepts of infertility in women and herbal treatment of infertility. The subheads of discussion border on the issue of infertility; women infertility and herbal medicine, traditional treatment of women infertility and herbal therapeutics for women infertility.

Infertility

Infertility, according to the World Health Organization (2020) is a disease that affects the male or female reproductive system and it is explained to be the failure to achieve a pregnancy after one year or more of regular unprotected sexual intercourse. The American Society for Reproductive Medicine (2014) maintain that for a woman aged 35 and older, inability to conceive after 6 months is generally equated as infertility. WHO (2020) statistically indicate that infertility affects millions of people falling within reproductive age worldwide – and has an impact on their families and communities. The estimates are put at between “48 million couples and 186 million individuals living with infertility globally.” The American Society for Reproductive Medicine (2014) explain that infertility affects 10-15% of couples globally making it the commonest disease for people between ages 20-40. When discussing male infertility, emphasis is on the problems related to ejaculation of semen, absence or low sperm count, or abnormal shape and movement of the sperm. Furthermore, in discourses on female reproductive system, infertility hinges on multiple abnormalities of the ovaries, uterus, fallopian tubes, and the endocrine system, among others. WHO (2020) classify infertility into two - primary or secondary. Primary infertility entails when a pregnancy has never been achieved by a person, and secondary infertility is when at least one prior pregnancy has been achieved.

Herbal Therapeutics for Women Infertility

Herbal medicine is a sub-division of traditional healthcare system that is based on the use of medicinal plants to cure ailments. In other words, herbal therapy is the “art or practice of using herbs and herbal preparations to maintain health and to prevent, alleviate, or cure disease” (Merriam-webster, 2023). In addition, Ukpong (2007) explains that herbal therapy involves medicament derived from plants, trees, shrubs, herbs, minerals and animal substances. Okaiyeto and Oguntibeju (2022) acknowledge that the African continent is greatly endowed with plants diversity mainly due to the prevailing climatic condition - this endowment of plants is accompanied by a significant percentage of rural dwellers relying on herbs for treatment based on the conviction of the people that since the ancestors relied on herbal mixtures for their well-being, their safety too is guaranteed. Historically, Ozioma and Chinwe (2019) trace the evolution of herbal medicine to when it was termed as primitive - meaning that traditional herbal medicine has long historical background that can be traced to the Stone Age.

Essentially, the knowledge of herbal treatment is currently sought after due to the resurgent interest and demand for traditional health care services. the study of Okaiyeto and Oguntibeju (2022) highlights the factors giving impetus to reliance on herbal medicine in Africa include the belief of numerous rural dwellers that indigenous practices and treatment of diseases supersede modern or biomedical practices as well as phobia for biomedical options means that the people prefer consulting the gods, diviners or oracles directly or through the tutelary agency of traditional healers for solutions.

Gap in Literature

In Nigeria and Africa generally, studies by Okafor et al (2019); James et al (2018), MacDonald et al (2016), and Li et al (2020) show that fertility issues are often treated using herbal curatives by individuals or recommended by herbal medicine practitioners. This is premised on the traditional conception that herbs are made by God to heal certain ailments. The reviewed studies have extensively shown how herbal treatments

are used in the treatment of female infertility in cultures such as Yoruba; Igbo, Hausa and Temne and Mende of Sierra Leone. The researcher observes that in the catchment area - that is Ibibio culture, peripheral references on articles are made to herbal treatment of infertility despite the common practice. The outstanding study related to herbal treatment of infertility by Erhabor et al (2013) is limited to male infertility in Ifa Nkari in Ini Local Government Area. The situation thus opens up gap which make this study relevant.

Discussion on Herbal Treatment of Female Infertility in Ibibio Culture

The researcher used interview sessions and focus group discussions with traditional herbal practitioner and herbal users respectively to gather data bordering on the perception of female infertility in Ibibio culture, herbs used in treatment and efficacy of the herbal treatment of infertility

Perceptions of and Causes of Infertility in Women in Ibibio

On the perception or attitude of the people towards female infertility, the study revealed that women that are unable to be pregnant or give birth in in Ibibio society are seen as being under a curse. Again, the study indicated the view that women with infertility problem are seen as those who have destroyed their wombs through abortions. Similarly, diverse perceptions are held about the issue of female infertility in Akwa Ibom State. Loveth Okon (FGD, 2024) indicated that the people of Akwa Ibom State are particularly religious people, believing that most infertility cases are due to witchcraft and or works of the devil” and therefore tend to visits churches or spiritual houses for help than consulting medical personnel. This aligns with the study by Essien (2017: p32) who asserts that in the worldview of the people, “spiritual forces particularly witches are largely responsible for ill health, this makes the people in Annangland to frequently visit prayer houses and healing homes to solve the problems.” Idorenyin Akpan (FGD, 2024) explained that one of the causes of infertility in women is women's knowledge of how to go about not getting pregnant when they are not ready to get pregnant. The faithfulness in usage of contraceptives may subsequently result in infertility issue when they are ready for pregnancy. Young single girls take pill and resorts to all manner of methods in a bid to abort pregnancies. This would later work against their ability to conceive when they feel it is the right time.

A different focus group discussant who did asked to remain Anonymous (FGD, 2024) – as requested by the respondent, explained that in her case, insinuations are made that she is unable to have babies due to her “bad behavior” some people were supportive while others perceived her as one who is not worth being married. Johnny Imoh (Pers. Comm.) highlighted that his experiences with women suffering from infertility problem give him insight into some of the views people have about them. The respondent explained that some women complained of being “accused of selling their womb to the devil for money” by the in-laws while others cite that they are always accused of suffering from infertility due to their past reckless lifestyle.

On the causes of infertility in women, several factors or condition are identified, Arit Edet (Pers. Comm.) (2nd February, 2024) explained that the influx of women into her traditional home gives insight to the belief that infertility is common in Akwa Ibom State. The cause of the situation being attributed to internal heat, and failure of some couples to complete cultural marriage rites. Arit Edet (Pers. Comm.) accounted that internal heat is one of the resultant effects of women's dietary routines that incorporate junk foods without frequent detoxification. On how internal heat affects women fertility, the interviewee explained that a man's semen cannot fertilize a womb that has internal heat because the heat in the womb negatively affects the sperm

cells thereby hindering their ability to fertilize the eggs during a woman's fertile period.

On the second cause of infertility in women, Arit Edet (Pers. Comm.) (2nd February, 2023) explained that in Ibibio culture for instance, there are certain rites to be observed prior to consummation of a marriage, however, there is the tendency for the woman to experience infertility if these rites are not carried out. Arit Edet (Pers. Comm) recounted that she had a patient that is from Uyo but based in Lagos. The patient had been married for many years without conceiving, during the time of consultation, it was discovered that she had not given a goat and other traditional rites to her late father. This is traditionally referred to as “Uyook Ebot Ette” the patient was advised to complete the traditional rites of which she did. After the traditional rites were done, she conceived after 7 months.

Furthermore, Affiong Sunday (Pers. Comm.) (5th march, 2024) affirmed that infertility in women is a common health challenge to women everywhere just as in Akwa Ibom State and she traced the cause of the health condition to hormonal imbalance and fibroid. She explained that many women she has treated of infertility were diagnosed of fibroid and hormonal imbalance. Hormonal imbalance in women usually alters a women's cycle thereby making it difficult for women to track their ovulation and fertile period. On the other hand, Affiong Sunday (Pers. Comm.) (5th march, 2024) explained that fibroid is one of the health problems that affect a woman's womb thereby preventing the process of reproduction. Additionally, where the cervix of a woman is closed, such woman will experience difficulty getting pregnant.

Similarly, Andino Etim. (Pers. Comm.) 26th February, 2024) explained that most of the women diagnosed of internal heat and fibroid are often treated of the root cause before in treating the infertility - he has to either treat the internal heat and fibroid or refer the patients to the hospital if the fibroid is at a critical stage. Moreover, Johnny Imoh (Pers. Comm.) (25th February, 2024) indicated the causes of infertility in women to be age factor, change effect diet, social life, infection, improper abortion process and consistent usage of contraceptive. He also pointed out that hormonal imbalance often leads to menstrual disorder that ultimately disrupt the fertile circle of a woman. On age, the interviewee opined that woman above the ages of 35 are more likely to have issues conceiving due to their body adjustment. Johnny (Pers. Comm.) reiterated that the female folks within the age range of 17-29 are less likely to experience the problem of infertility because their bodies are at the most fertile period of their life span. It thus means that as a woman advances in age, her chances of being fertile become less likely.

Climate effect such as global warming is also identified as a factor causing infertility in women while diet-specifically the intake of junk foods and certain soft drinks such as *zobo* affects female infertility. The chemical components of most of the junks eaten affect the reproduction hormones in both men and women. Moreover, the interviewee maintained that improper abortion often result in remnant of blood clot in the womb where this is the case, conception will be difficult to achieve when needed. The last cause of infertility in women mentioned by Johnny Imoh (Pers. Comm.) (26th February, 2024) is intake of contraceptives (pills or concoction) and oil from condoms. The interviewee explained that it takes month to flush out chemicals of a post-pill from the body – however, in situation where a woman is certainly having sex and taking the pills or other traditional concoction, such woman would need years to purge her body of the residue of contraception in order to become pregnant. Again, the lubricant on condoms when absorb into a woman's body can fight against her reproductive health.

Furthermore, data from the focus group discussion reveal some of the causes of infertility in women to include blocked tube, hormonal imbalance, infection, native abortion and the belief in spiritual husband (Loveth Okon, FGD, 2024). In addition, Idoreyin Akpan (FGD, 2024) maintained that in some cases, when a woman struggles with infertility, it is due to the low sperm count of the husband. Quoting Idoreyin Akpan (FGD, 2024), “the men may have low sperm count, and they may not know about it and all the blame is pushed to the woman. Some women are fertile but multiple fibroid or cystic ovaries which may also prevent the pregnancies. The men can also have major or minor blockages in the genitalia which will prevent their partner from getting pregnant. In the above stated cases, infertility treatments of women whether traditional or orthodox will certainly not work.”

Ndifreke Uko (FGD, 2024) explained that some women are unable to have babies because they have destroyed their wombs through abortion. Some people have difficulties because of their family background that is infertility can be hereditary. Idoreyin Akpan (FGD, 2024) was of the opinion that infection is the major cause of infertility. When infection is accumulated in the body, it thus affects the necessary cells that aid reproduction, so the treatment of infection should be done at least after 4 months because all women have infection, at least the one in the body called yeast.

The findings of the study agree in a great way with earlier studies carried out by Soladoye et al (2014), Agomuo and Samuel (2004) and Liewellyn-Jones (1998). Agomuo and Samuel (2004) cite that menstrual disorder constitutes the commonest causal factor of female infertility; Liewellyn-Jones (1998) traces the causes to Leukorrhoea and menopause while Soladoye et al (2014) assert that faulty ovaries and uterus, high level of sexually transmitted diseases or infections specifically gonorrhoea and chlamydia are identified to be major causal factors female infertility. On the impact of age on infertility, Johnny Imoh (Pers. Comm.) had explained that age constitute a common cause of infertility, this assertion is in line with the study of Etuk (2009) who points out that women are mostly fertile during their 20s, however, their ability to be fertile ebbs after many of them reach the age of 30. Etuk (2009) identified that 40% of infertility cases within Africa are attributed to some factors in the health of men, 40% due to female factors while 15% emanate as a result of factors in both husband and wife and the remaining 5% attributed to no causes established during medical examination.

The study has shown how cultural narratives in Ibibio land sometimes place the burden of infertility on women. It is important to note that there are emerging evidences that in most cases, when a woman cannot conceive, it is as a result of male factors. According to Ahmad *et al* (2024), male factors for infertility constitute about 30% of reported infertility cases. These factors often manifest in forms of low sperm count; poor sperm motility, absence of sperm in ejaculate, blockage of the ducts and etc. In addition, WHO (2025) affirms that male factors also contribute to female infertility. This study therefore acknowledges infertility as being a shared reproductive challenge instead of a one-sided issue in entirety. This means that one needs to approach the issue from a balanced perspective and not pushing a gender-biased narrative or perception. Some of the traditional herbal healers interviewed acknowledged that male factors can be the reason for female infertility but such positions are mostly not considered in public discourse thereby promoting female-based stigma. Addressing this imbalance is essential for reducing stigma and promoting inclusive reproductive health interventions.

Herbal Treatment Approaches used by Traditional Healers

During the field work, it is established that the herbal dealers alluded to deriving their knowledge of herbal medicine from experience personal to them, inherited from parents or grandparents. This knowledge enables them identify herbs that have the elements that can cure health conditions such as infertility. When these herbs are identified, various methods are applied in the process of preparation and administration of the treatment to patients. Johnny Imoh (Pers. Comm.) mentioned that extraction through squeezing while Andino (Pers. Comm.) maintained that in most cases, he soaks the herbs in cold or hot water for a certain period of time.

On the methods of administration, the commonest methods identified by the interviewees was enema – *Ukebe*. Enema, referred as *ukebe* in Ibibio culture is a rectal method of administering treatment that is very common in traditional healthcare delivery in Ibibioland. Studies have shown that enema is not new to African due to the fact that the “earliest recorded use was by the Egyptians to treat diseases of the anus such as piles they were also used as an alternative means of introducing nutrients into the body.” (Royal Pharmaceutical Society, 2023) since the 1700s, the Royal Pharmaceutical Society (2023) explains that the primary essence of using enema has been to clear the bowels using water-based solution.

Data from the questionnaire indicate the major forms or approaches used by traditional herbal healers to administer treatment for infertility in women are the oral and enema (*ukebe*) approaches. Andino Etim (Pers. Comm.); Peter Akpan (Pers. Comm.), Arit Edet (Pers. Comm.) and Affiong Sunday (Pers. Comm.) all agreed to using the two approaches often.

However, the study revealed that in some cases, herbal healers adopt the extra approaches of offering traditional prayers, sacrifices and “spiritual bathing” to treat infertility problem in women. Here, Andino Etim (Pers. Comm.) clarified that the healing power of herbs is traced to the Supreme Being hence, the divine has to be brought into the treatment. Earlier study by scholars such as Mbiti (1979), Quarcopoom (1983) and Ukpong (2007) have confirmed this inseparable relationship between traditional medicine and the divine forces. The study by Ozioma and Akaka (2021) offers more clarifications into the element of the divine approach to herbal treatment. Herbal treatment approaches include the use of divination, oral interviews and other spiritual perspectives such as spiritual protection, sacrifices, spiritual cleansing, appeasing the gods/ancestors, libation and invocation. Through divination, the information about an individual or the reasons for the infertility is obtained. Through this approach, the healer is able to obtain knowledge of how to treat or which herbs to use in the treatment from spiritual forces such as Supreme Being or ancestors who were traditional healers.

Furthermore, on the spiritual approaches, Ozioma and Okaka (2021) explain that in cases where the cause of the health condition is mysterious power, spiritual bath or the use of talisman is recommended to expel the unknown forces. Sometimes, sacrifices are offered to appease the spirit. This situation was cited by Arit Edet (Pers. Comm.) that in cases where cultural rites were not properly or completely done, the effect will be inability of the woman to conceive until the rites or sacrifices are done to appease the ancestors. Additionally, Ozioma and Okaka (2021) explain that in some cases, rituals are performed to consecrate the herbs and make it potent for treatment. Very frequent, libation is done by the herbal practitioner followed by reciting of words and chanting. The essence of the libation is to offer supplication to the gods, ancestors or the Supreme Being and requesting them to intercede or heal a patient. Again, the study of Essien (2017) confirms

that there is a dependence on healing homes and religious specialist to diagnose diseases using religious and metaphysical lenses and treatment is often done applying the “traditional mystical principle and practice of *nkukut* – a subjective form of divination, prognostication, prophesy, oracular consultation or clairvoyance.”

Many participants in the agreed that herbs are often used in the treatment of infertility in women. The finding confirms the finding of Solidoye et al (2014) that seventy-five plant species belonging to 41 families were reported as being useful in the treatment of female infertility in South Western Nigeria” while Jaradat and Zaid (2019) identified 31 plants are used in the West Bank area of Palestine.

According to Johnny Imoh (Per. Comm.), the leaves, root, stem or bark of *Itumo* (*Newbouldia*) is proven to be effective in the treatment of hormonal imbalance. The method of preparation being to grind it into powder form then to be taken as tea. The dosage being 1 teaspoonful into tea cup. Additionally, Arit Etim (Pers. Comm.) explained that the leaves of *Utemense* can be mixed with *ndom* (white clay) and eggs with I cup of water and taken rectally as enema. This treatment is given where the cause of the infertility is identified as being internal heat. In some cases, Arit Etim (Pers. Comm.) explains that the juice from the stem of plantain and be mixed with *Ndom* and egg with one cup of water to be taken rectally as enema. Other herbal treatment for infertility that she usually administers come in oral form:

- i. Mixture of Milk with a plant referred to as “hospital-too-far” to be taken early in the morning
- ii. *Edem-idodot* (to be taken as enema)
- iii. *Ntoro ikwod* (to be taken as enema)
- iv. *Udod Efik* – (to be Taken as enema)

Furthermore, Affiong Sunday (Pers. Comm.) explained that in some cases, she administers enema that is a mixture of “Blue Stones and the leaves of *Awak Mmong*. Johnny Imoh (Pers. Comm.) cited that the root of *Nkanika Ikot* (*Uvaria Chamae*) can be boiled or cooked and taken as tea to correct hormonal imbalance. The same method is applicable to *Eto Cedar* (*Entandrophrayma Utile*) which can be used to treat male and female infertility. Other herbal treatment that are often administered to infertile patients include:

- i. Asewa root to be boiled/cooked drink or fermented with dry gin to be taken morning and evening
- ii. Mbri-inyong Ntokeyen (*Cleome Viscose*) to be chewed to increase fertility level
- iii. Itumo (bark, stem or root) to be taken as tea (1 teaspoon into hot water to be taken first thing in the morning and last before going to bed in the evening) to treat menstrual disorder and shrink tumor or correct imbalance
- iv. Ikpan (Melon Cake) to be chewed to boost fertility level of men and women
- v. Hand therapy using olive oil to repositioning of the womb (Uneke Idip)
- vi. Intake of water melon and cucumber as supplements helps in boosting a woman fertility level
- vii. Mfang idip ibaan can be taken as tea or taken rectally as enema (ukebe).

Table 1: Sources of Herbs used in the Treatment of Female Infertility in Ibibio

S/N	Local Name	Botanical Name	Part used	Means of administration	Function
i.	Ntodikot	Solenostemon Monostachyus	Leaves	Enema	Treat internal heat that prevent conception
ii.	Iso-nsekeyen	Peperomia Pellucid	Leaves	Enema	Treat internal heat that prevent conception
iii.	Utimense	Emilia Sonchifolia	Leaves	Enema	Treat internal heat that prevent conception
iv.	Udod Efik	Sida Acuta	Leaves	Enema	Treat internal heat that prevent conception
v.	Eto Cedar	Entandrophray ma Utile	Roots	Oral and Enema	increase fertility level
vi.	Nkanika-ikot	Uvaria Chamae	Roots	Oral	hormonal imbalance
vii.	Mbrinyong Ntokeyen	Cleome Viscose	Leaves	Oral	increase fertility level
viii.	Asewa	Picalima Nitida	Roots	Oral	increase fertility level
ix.	Utinewa	Crestis Ferruginea	Roots	Enema	Cleansing womb
x.	Itumo	Newbouldia	Leaves or bark	Oral as tea	treat menstrual disorder or correct imbalance
Xi	Eto Olive	Olea Europaea	Oil	Hand therapy	Hand therapy to repositioning of the womb
Xii	Cucumber	Cucumis sativus	Fruits	Oral	increase fertility level
xii.	Mmong Ndubo Ukom	Plantain Stem Juicy	Juice	Enema	Cleansing womb

Source: Field Survey (2024)

Figures: Specimen of Herbs used in Treatment of Female Infertility in Ibibio Culture



Figure 1: Cleome Viscose
(Nkanika Ikot)



Figure 2: Crestis Ferruginea
(Utinewa)



Figure 3: Entandrophragma Utile
(Eto Cedar)



Figure 4: Newbouldia (Itumo)



Figure 5: Peperomia Pellucida
(Iso-nsekeyen)



Figure 6: Emilia Sonchifolia
(Utimense)



Figure 7: Cleome Viscose
(Mbrinyong Ntokeyen)



Figure 8: Sida Acuta (Udod Efik)



Figure 9: Euphoria Hirta
(Mfang Idip Ibaan)



Figure 10: Solenostemon Monostachyus
(Ntodikwod)



Figure 11: Olive



Figure 12: Cucumber
(Cucumis sativus)

Efficacy of Herbal Treatment of Female Infertility in Ibibio Culture

Numerous evidences and clinical studies have established the efficacy of herbs in the treatment of the issue of infertility in women across the world. Many herbs are empirically tested and confirmed to have the curative power to regulate issues such as hormonal imbalance disrupted ovulation identified as the major causes of female infertility. Herbs generally have the potency to enhance the reproductive well-being or health of men and women. This subsection of the study discusses the efficacy of traditional herbal treatments used in treating female infertility in Akwa Ibom State. Again, a significant number of the participants were of the opinion that the use of herbs has been effective in treating infertility. The participants reported knowing at least 3 out of 5 users of herbal treatment for infertility who have been able to conceive and have babies. This thus justify the assertion that herbal treatment has the potency to cure the challenge of female infertility. The implication of the findings here confirms the potency of herbal treatment in treating ailment.

However, data from the interviews and focus group discussion conducted indicate further how effective herbal treatment of female infertility is in Akwa Ibom State. Johnny Imoh (Pers. Comm.) explained that over the years of administering herbal treatment, he has recorded great successes and would use that as indicator to submit that herbal treatment of infertility, where adhered to the rudiments, is very effective. Samuel Akpan (Pers. Comm.) hinted that herbal therapies used complementarily with orthodox medicine has enabled him bring to existence over 48 babies throughout his two decades of practice. Furthermore, Anonymous (Pers. Comm.) explained that she has achieved success rate of 80 out of 100 cases of infertility treated; while Affiong Sunday (Pers. Comm.) maintained that 6 of every 10 patients she has treated have been able to conceive and give birth. Arit Etim (Pers. Comm.) maintained that with a complementary method of herbal treatment and referrals to the hospital, she has achieved a significant success rate of administering treatment to women with infertility issues.

There is great level of dichotomy concerning the efficacy or reliability of herbs for treatment of health conditions over the years. People around the world either subscribe to the healing power of herbs or dismiss its therapeutic power. However, Ozioma and Okaka (2021) argue that the curative power of herbs is validated empirically through scientific investigations that questions the “active chemistry of the plants.” The therapeutic ability of herbs is traced to the availability of complex chemical inherent in the various parts of plants. Specifically, Ozioma and Okaka (2021) explain that the chemical components or phytochemicals present in herbs or plants that enforce their therapeutic effects are “alkaloids, glycosides, tannins, acids, coumarins, sterols, phenols, etc.”

Elite IVF (2023) explains that throughout history, particular herbs have been used to improve fertility in men and women. The agency further cites those herbs such as chasteberry otherwise called vitex as well as red clover have all been used over the years “to promote hormonal balance in women, enhancing their chances of successful conception.” Additionally, Elite IVF (2023) adds that herbs such as cinnamon has inherent component that is antioxidants in nature, this when taken by a woman, can “promote healthy blood flow to the uterus, helping maintain uterine health and support a healthy pregnancy. By incorporating more cinnamon into your diet, you may improve your chances of conceiving naturally and enjoy optimal reproductive health.” The Evening Primrose oil is also recommended by Elite IVF (2023) as natural remedy for infertility. It is believed that over the centuries, women have been using the plant-based oil that has high deposit of “omega-3 and omega-6 fatty acids, which are critical nutrients for female reproductive health. These fatty acids may help balance hormone levels in the body and promote ovulation, making it an effective treatment for women struggling to conceive.” Hyun et al (2024) establish that “herbal medicine is beneficial for treating infertility and increasing pregnancy rates Herbal medicine also outperformed the other treatment regarding pregnancy success rate.”

The efficacy of herbal treatment for infertility thus makes it viable option for many women. Kaadaaga et al (2014) “higher prevalence of herbal medicine use by women who were married and those who had never conceived. However, women who were less than 30 years of age and those who were less educated were less likely to use herbal medicines. Women who are educated are more likely to have some income that they use to pay for herbal medical treatment. Several studies have showed that older women, who are better-educated and employed with high incomes, are more likely to use” traditional herbal medicine to treat infertility.

Loveth Okon (FGD, 2024);

After 7 years of marriage, to conceive was very challenging. My husband and I conducted series of fertility tests and the results showed we were ok. I was menstruating normally and was confident of my ovulation but the pregnancy was not forthcoming. Pressure was much from my husband's people and I myself was never comfortable. A colleague of mine at work recommended that I try traditional option and referred me to a traditional birth attendant at Itam who after examining my stomach identified chronic heat as the cause of my inability to conceive. She gave me herbal mixture to drink for 2 weeks and also some herbs to use for enema. The treatment spanned for 6 weeks and 4 months after, I had my first issue and now I have a son to call my own.

The Researcher's experience;

After I had my first child, by the time I was ready to start another journey for my second child, conception became a challenge. I had to visit my gynecologist, who then ask me to run some test and scan. The results showed that I had issues with my tubes. After a rigorous evacuation session, conception didn't still take place after some years. I had to try herbal. It was after I religiously took some herbal treatment for a period of 4 months. I noticed I had missed my period. And that was how my second child was born.

Anonymous (FGD, 2024),

My husband and I started living together immediately after my secondary school in 1998. He was unable to see my family for the traditional marriage rites and we lived together from that 1998. Throughout those years, until 2009, I had issues getting pregnant. When I attended a prayer meeting in one fellowship at Obio Imo Street in Uyo, I received a revelation that I should ask my husband to finish up my marriage rites; and I was subjected to some herbal treatment by the woman. My husband and I were able to finish the marital rites before March 2009 and before September that year, I became pregnant. Today, I have a 14-year-old son. Although I tried many options when I had no child, but I know that the herbal treatment I got during that period contributed to my ability to be pregnant and have a child.

Empirical and clinical studies abound capturing the various measures in the world to curb the ravaging effect of female infertility in the world through herbal treatment. Emerging technologies classified as Assisted Reproductive Technology (ART) also abound to help women with the issue of infertility to be reproductive. However, study by Kee et al (2022), has shown that the “success rate of ART in treatment of infertility is only approximately 9 – 28%”. The percentage stand in contrast with the study area – Korea. Other studies reviewed so far in the study point to the potency of traditional medicine when it comes to managing female infertility. The study by Akbaribazm et al (2021) clearly shows that plants studied have potency to increase the fertility chances in women. Certain plants or herbs are endowed with the power to amplify the “hypothalamic – pituitary – gonadal axis (HPA axis) as well as lead to the interaction with the estrogen receptors”. At another level, the study by Akbaribazm et al (2021) indicate that certain herbs have the power to hinder some reproductive transmitted infections or bacterial infections or hypersensitivity disorders as well as regulate ovulation of women by offering the needed nutritional values.

Furthermore, the studies by Shaw (2020) and that of Barnes et al (2000) justify that many herbs are capable of producing certain compounds that encourage estrogenic activities in human beings and animals. The studies indicate that compounds such as genistein, biochanin A and daidzein have strong relationship with estrogen receptor. Additionally, Park et al (2018) cite that herb contain polyphenolic compounds that hinders breast tumors by blocking the “pathways for insulin-like growth factor”.

Kashani and Akhondzadeh (2017) maintain that techniques such as “in vitro fertilization IVF or surrogacy” are expensive and cannot be afforded by many women struggling with the challenge of infertility. Hence, many women have been identified to resort to using natural and herbal treatments to fight the root cause of their infertility thereby enhancing their chances of getting pregnant. According to Kashani and Akhondzadeh, (2017), the use of herbal remedies for the treatment of infertility is not a new invention – the use

of herbal remedies has been a long-practiced art. The use of herbal remedies for female infertility is traced to as far back as 200 AD.

The usage of herbal remedies for infertility is due to the understanding that there are special plants through which their extracts can have positive impact on reproductive organs of men and women, improve the hormonal system and their sex drive. The belief widely held is that herbal medicine can address root causes of female infertility ranging from irregular menstruation, hormonal imbalance as well as erectile dysfunction in the case of men and the motility of sperm. Plants such as Indian ginseng, pomegranate, cinnamon, chaste berry, dates and mac Root, are identified by Kashani and Akhondzadeh (2017) as being often used for the treatment of female infertility with high success rate.

The findings of the study as presented indicate the high level of effectiveness of herbal treatments for female infertility by the users and herbal dealers. However, it is essential to provide critically examination of such perceived efficacy within broader scientific and sociocultural contexts. Much of the reported success is based on self-reported outcomes, which may undoubtedly be influenced by placebo effects, confirmation bias and cultural expectations. The Ibibio society just like other African societies, conceive healing as being holistic – that is encompassing psychological, spiritual, and physical dimensions. Hence, the efficacy attributed to herbal remedies of infertility in the area extensively indicate divine manifestation, community support, psychosocial reassurance, and not exclusively pharmacological efficacy. This calls for caution instead of dismissing the findings as being subjective. Notwithstanding, the absence of clinical studies to validate the efficacy of the traditional methods in Ibibio society should not lead to outright dismissal of the effectiveness of herbal treatment. These findings further open up gap for clinical studies with peculiarity on the Ibibio situation.

Summary of Findings

Based on the analyzed and describe data collected from the field, the following findings are reached:

- i. Infertility remains a prevalent challenge among women in Ibibioland. The prevalence of female infertility is majorly seen as a spiritual problem. In many cases, infertile women are seen as being under a curse while witchcraft power is also pointed to as a causal factor. In other cases, women with infertility issue are regarded as those who has destroyed their wombs through series of abortion. Data from interviews and focus group discussions reveal that infertility in women is caused by conditions such as fibroid, blocked ovaries or tubes, chronic internal heat, intakes of excessive junks, persistent use of contraceptives and low sperm count on the part of the husband. Some of the participants in the study suggested that long-term use of modern contraceptive pills can encourage infertility. However, this view is scientifically contentious. There are some biomedical studies that argue that contraceptives have some level of effects on fertility which is temporary, however, normal reproductive function often resume after discontinuation of the usage. To this end, the findings in this study should be grasped as beliefs within the area of the study instead of a generally established medical stance.
- ii. The study confirms that there is increased usage of herbal treatment for infertility in Ibibioland. The herbal practitioners interviewed cited that there is increased patronage of herbal treatment of infertility. It is also discovered that multiple methods such as oral and rectal administration are adopted by herbal healers. These methods often incorporate spiritual strategies such as traditional prayers, sacrifices and spiritual bathing to ensure holistic healing of female infertility. The use of the spiritual approaches alongside herbal administration is connected to the belief that the knowledge of and healing power of herbs is from the Supreme Being. Hence, it is difficult to separate herbal treatment of infertility from traditional religious rituals. The findings here correlate with the theory used in the study.

The findings here agree with the driving theory of the study. The principles of Indigenous Cultural Responsiveness Theory (ICRT) used stresses the essentiality of contextualizing knowledge based on the cultural area or frameworks. In Ibibio culture, infertility is not merely seen as a biomedical

condition, the perception goes beyond that to the level of a phenomenon conditioned by social, spiritual, social, and moral interpretations. To this end, herbal treatment practices for infertility mirrors a cultural-based responsive system that integrates spiritual interventions such as sacrifices and prayers with physical remedies. This shows the level to which the indigenous epistemologies of the people determine health-seeking behavior as well as reinforcing the importance of cultural-based approaches in understanding reproductive health.

- iii. The sources of herbs used in the treatment of female of infertility in Ibibioland are roots, leaves, stem/bark, fruits and juice or water from plants as well as oil. The study identifies plants such as *Utimense*; *Ntodikwot*, *Itumo*, *Asewa*, *Nkanika-ikot*, *Udot Efik*, *Mfang Idip Ibaan*, *Iso-Ntoeyen*, *Ikpan*, *Cucumber* and *Utinewa* are used to treat diagnosed causes of female infertility.
- iv. Herbal treatment of female infertility is believed to be very effective. One of the herbal practitioners interviewed cited that about 80 of 100 patients she treated have pregnant with babies. The researcher affirms too based on her experience that herbal treatment of infertility is very effective
- v. Identified challenges affecting herbal treatment of infertility are unhygienic preparation, skepticism of the people about the efficacy of herbal treatment; poor regulation policies and implementation by the government, lack of equipment for procession and preservation of herbs as well as adherence to dosage and guidelines for herbal usage by the patronizers

Conclusion

The study has examined the use of herbal treatment of female infertility in Ibibio society with special attention given to the perception of infertility, herbs used in the treatment as well as the efficacy of herbal treatment of infertility in women. Based on the findings of the study, the researcher therefore has the background to conclude that infertility in women still remains a challenge that on great attention is given to in policies and researches in Akwa Ibom State. women that are faced with the challenge of infertility in Akwa Ibom State find themselves in a state of psychological restlessness and struggling with stigma. The labeling of infertile women as *Ada* and the realization that by most of these women that their place in the marital home is not secured due to inability to have children exposes them to experiment or try diverse forms of treatment of which herbal treatment constitute one of these various forms of treatment.

The prevalence of female infertility has led to increased patronage of herbal treatment, however, with poor standardization of herbal medicine and usage, women with the issue of infertility are exposed to great level of risk. The observed unprofessional handling of herbal treatment of infertility during the field study indicates negligence and mismanagement of the health sub-sector that has the potential of offering sustainable and viable supplementary solution to reproductive healthcare delivery. The issue secrecy in divulging knowledge of herbal medicine and inability of the traditional healers to document traditional herbal knowledge as regards treatment of infertility constitutes another serious issue that needs serious attention of all stakeholders. The researcher shares the opinion that the achievement in herbal treatment of ailments in South West Nigeria, China and India can be achieved in Akwa Ibom State if there are collaborative efforts

Recommendations

Based on the findings of the study, the researcher recommends that:

- i. since one of the major causes of infertility is identified as life's choices and decisions such as the usage of contraceptives and abortions during the period of singlehood, there is need for parents and teachers to emphasize and cultivate into teenagers the value of sexual purity that is traditional to Ibibio culture. Youth-based non-governmental organizations in Akwa Ibom State should develop more outreaches and talks for young people in order to educate them more on the effect of untreated sexually transmitted infections; contraceptives and abortions on reproductive health
- ii. Nigerian Society for Clinical Pharmacology and Therapeutics as well as Society of Basic and Clinical Toxicology Nigeria (SBCTN) should mandate members to collaborate with traditional herbal

practitioners in Akwa Ibom State to research, test and confirm the mechanism of actions and pharmacological efficacy of the plants identified in the study as herbs used in treating female infertility

- iii. The National Agency for Food, Drugs Administration and Control (NAFDAC) should review the 2023 guidelines for registration of herbal remedies/dietary supplements made in Nigeria. The guidelines contain steps that many traditional herbal practitioners do not have knowledge about. The guidelines should take into consideration the peculiarities of many traditional herbal dealers who do not have the knowledge of using the laboratories for testing and do not trust enough to give out their “secret of trade” to third party
- iv. The Federal Government of Nigeria and NAFDAC should revisit the Traditional Medicine Policy for Nigeria 2007 and NAFDAC Act CAPN1 (LFN) 2004, which call for regulation and standardization of traditional medicine in Nigeria. More attention should be channeled into training; licensing and monitoring of herbal healthcare delivery
- v. Akwa Ibom State Primary Healthcare Development Agency should be used as the first point of incorporation of traditional medicine into the healthcare delivery system of the State by training and placing herbal practitioners in the various primary healthcare centers in the State.

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