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Traditional and Modern Approaches to Infertility Treatment: A Case Study in Tamale Teaching Hospital

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Abstract

In Ghana, infertility is a significant public health and sociocultural concern. Many women seeking treatment navigate between traditional herbal remedies and modern biomedical interventions. This paper explores the interplay of these two paradigms among women receiving infertility care at Tamale Teaching Hospital.

A qualitative descriptive study design was employed, involving in-depth interviews with 15 women diagnosed with infertility. Data were analyzed thematically, focusing on treatment-seeking patterns and perceptions of efficacy between traditional and modern approaches.

Women reported using a range of remedies, including spiritual rituals, herbal mixtures, and low-tech biomedical treatments such as hormone therapy and ovulation stimulation. Few had accessed high-tech options like in vitro fertilization (IVF) due to financial and logistical constraints. Trust in traditional methods often preceded biomedical intervention, although many participants ultimately combined both in their efforts to conceive.

Infertility management in Ghana is situated at the intersection of traditional beliefs and modern medicine. Integrating culturally sensitive reproductive care that acknowledges this duality may improve patient satisfaction and treatment outcomes.

Keywords: infertility, Ghana, traditional medicine, assisted reproductive technology, herbal remedies, reproductive health, and psychosocial management

1. Introduction

Infertility, defined as the inability to conceive after 12 months of regular unprotected intercourse, affects approximately 15% of couples globally(Barrera, Omolaoye et al. 2022). According to the World Health Organization (WHO), an estimated 48.5 million couples worldwide are affected by infertility, with 19.2 million experiencing primary infertility and 29.3 million experiencing secondary infertility (NSABIMANA, NINIHAZWE et al.). Although infertility is a global concern, its prevalence and impact are disproportionately higher in developing countries, particularly in sub-Saharan

Africa. In Ghana, it is estimated that about 15% of women of reproductive age experience infertility, often due to a combination of preventable and unpreventable factors, including untreated infections, sexually transmitted diseases, and postpartum complications(Ofosu-Budu and Hänninen 2021).

Beyond its medical implications, infertility in Ghana carries profound social, emotional, and cultural consequences. Childbearing is considered an essential part of marriage and adult identity. In many Ghanaian communities, a woman's worth and status are closely tied to her ability to bear children. Infertile women often

face social stigmatization, marital instability, and emotional trauma. They may be labeled as cursed or associated with supernatural causes such as witchcraft or ancestral displeasure. These beliefs contribute to the marginalization and psychological burden of affected women, underscoring the need for comprehensive infertility care that addresses both biological and sociocultural dimensions(Okantey, Adomako et al. 2021).

Historically, infertility has been managed through traditional healing systems involving herbal remedies, spiritual consultations, and ritual practices. These methods remain widely used and are often the first recourse for many women due to accessibility, affordability, and cultural familiarity. In recent decades, however, there has been a gradual shift toward biomedical approaches, including hormonal therapy, diagnostic imaging, and assisted reproductive technologies (ART) such as in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI). Despite the promise of modern medicine, many women continue to rely on or integrate traditional remedies alongside biomedical interventions, navigating both systems pluralistically (Khan 2023).

This study aims to explore how women diagnosed with infertility at Tamale Teaching Hospital (TTH) engage with both traditional and modern treatment paradigms. It seeks to understand the motivations behind their choices, the perceived effectiveness of each approach, and the implications for culturally responsive infertility care in Northern Ghana.

2. LITERATURE REVIEW

2.1. Traditional Approaches

In many parts of sub-Saharan Africa, including Ghana, infertility is perceived not only as a biomedical condition but also as a spiritual or social imbalance. Traditional approaches to infertility are deeply embedded in indigenous worldviews, where illness is often attributed to supernatural forces such as ancestral wrath, witchcraft, or broken taboos (Ofosu-Budu and Hänninen 2021). As a result, affected women frequently seek the help of traditional healers, herbalists, and spiritual leaders to address what they believe are metaphysical causes of infertility.

Herbal medicine remains one of the most widespread traditional approaches to treating infertility. Women use various locally prepared herbal concoctions, steam baths, and vaginal infusions made from roots, leaves, and bark, passed down through generations of traditional healers. These treatments are believed to cleanse the reproductive system and restore fertility (McCarthy & Chiu, 2011). In rural Ghana, access to biomedical care is often limited, making herbal therapies the most accessible and culturally acceptable option (Zeng, Rana et al. 2022).

Spiritual practices also play a central role in infertility treatment. Many women turn to spiritualists, pastors, or fetish priests for divine intervention. Rituals may include fasting, prayer camps, deliverance services, or libation pouring to appease ancestral spirits. Belief in spiritual blockages or curses is widespread, and success is often attributed to faith and divine will (Chamberlain 2022). In some cases, infertility is perceived as the result of spiritual marriages or covenants that require specific rituals to break.

Traditional religious perspectives further shape how infertility is understood and treated. In Christianity, infertility is often framed within biblical narratives of women like Sarah, Hannah, and Elizabeth, who conceived through divine intervention after long periods of barrenness. Christian women may participate in church vigils or seek prophetic declarations for healing (Vivian 2022). Islam similarly teaches that conception is ultimately determined by Allah's will, with examples such as Zakariya and his wife Ishba in the Quran being invoked as signs of hope and divine timing (Andrews 2023).

In indigenous Ghanaian religions, fertility is linked to harmony with ancestral spirits and natural forces. Infertility may be interpreted as a sign of disfavor or spiritual impurity. Trees believed to house fertility spirits, fertility deities such as "Oboni," and sacred groves are often associated with fertility rituals(Ofosu-Budu and Hänninen 2021). Offerings, sacrifices, and naming children after deities are common practices aimed at ensuring conception and safe childbirth.

These traditional approaches, though varied, underscore a holistic understanding of health where physical, spiritual, and social dimensions are interconnected. Despite a growing awareness of biomedical explanations for infertility, traditional beliefs and remedies remain influential in shaping health-seeking behavior among Ghanaian women.

2.2 Modern Approaches

The modern treatment of infertility is primarily shaped by the medicalization of reproductive health. Medicalization refers to the process by which non-medical issues are redefined as medical problems, often requiring clinical intervention (Kashyap and Tripathi 2025). In the context of infertility, this shift has led to the proliferation of biomedical interventions, diagnostic technologies, and pharmacological solutions aimed at identifying and treating physiological causes of infertility. The growing emphasis on biological causes of infertility has encouraged women to seek medical explanations and treatments, though often without completely abandoning traditional remedies.

Low-technology treatments are the most accessible and commonly used biomedical options in Ghana. These include ovulationstimulating drugs such as clomiphene citrate and therapy letrozole, hormonal to imbalances, and intrauterine insemination (IUI), where sperm is directly introduced into the uterus to enhance the chances of fertilization (Chakravarty 2022). In many public hospitals, these methods form the first line of infertility management due to their relative affordability and simplicity. Patients often undergo ultrasound scans, hormone profiling, and other baseline fertility assessments before receiving these interventions (Penzias, Azziz et al. 2021).

High-technology treatments involve advanced procedures such as in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI). IVF entails fertilizing an egg outside the body and transferring the resulting embryo into the uterus, while ICSI involves the direct injection of a single sperm into an egg to facilitate fertilization (Cavoretto, Candiani et al. 2022). These methods are generally recommended when low-tech interventions have failed or in cases of severe male factor infertility, tubal blockage, or advanced maternal age. The advent of ART has revolutionized infertility treatment globally, with millions of babies born through such methods since the first successful IVF in 1978 (Cavoretto, Candiani et al. 2022).

Despite their promise, high-tech infertility treatments remain largely inaccessible to most women in Ghana. The major barriers include high costs, limited availability, and a shortage of trained personnel. IVF treatments can cost thousands of Ghanaian cedis per cycle, a price well beyond the reach of many couples (Drucker 2023). Additionally, specialized centers offering ART services are mostly located in major urban centers such as Accra and Kumasi, further limiting access for women in rural or underserved regions like Northern Ghana. Even in facilities where such services exist, infrastructural

limitations and insufficient government funding constrain service delivery.

Furthermore, there is often a lack of public awareness and trust in high-tech procedures. Misinformation, fear of side effects, and cultural skepticism about laboratory-assisted conception may deter some women from considering ART. These concerns are compounded by the perception that biomedical approaches focus exclusively on physical treatment and often overlook the emotional and psychosocial dimensions of infertility (Ofosu-Budu and Hänninen 2021).

3. METHODOLOGY

This study adopted a qualitative descriptive design to explore the lived experiences of women managing infertility through traditional and modern treatment approaches. Qualitative descriptive research is particularly suitable for providing straightforward descriptions of phenomena and is ideal when the objective is to gain insights directly from the perspectives of study participants (Lim 2024).

The study was conducted at Tamale Teaching Hospital (TTH), a major tertiary referral center in Northern Ghana that serves as a hub for reproductive and maternal healthcare. TTH provides a wide range of services, including gynecological consultations, fertility assessments, and assisted conception referrals. Its strategic location and comprehensive healthcare offerings make it an appropriate setting for studying diverse infertility treatment experiences(Ameyaw 2021).

A purposive sampling strategy was employed to recruit 15 women diagnosed with infertility who had sought treatment at TTH. Participants were selected based on their willingness to share their experiences and their use of both traditional and biomedical treatment modalities. Data were collected through in-depth, semi-structured interviews using an interview guide developed to elicit responses about treatment-seeking behavior, perceptions of treatment efficacy, and emotional coping mechanisms.

The interviews were conducted in a private setting within the hospital premises to ensure confidentiality and comfort. Each session lasted between 45 minutes to 1 hour and was audiorecorded with the participants' consent. The interviews were transcribed verbatim and translated into English where necessary. Data were analyzed thematically, following the six-

phase approach outlined by Braun and Clarke (2006), which includes familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report.

Ethical clearance for the study was obtained from the Committee on Human Research, Publications, and Ethics (CHRPE) of the Kwame Nkrumah University of Science and Technology (KNUST). All participants provided informed written consent after the study objectives, confidentiality measures, and their rights were clearly explained to them. Participants were assured of their right to withdraw at any point without any consequences.

The methodological approach adopted in this study was designed to prioritize participant voices and contextual understanding, enabling a rich exploration of the coexistence of traditional and modern infertility treatments in a Ghanaian healthcare context.

4. FINDINGS

4.1. Use of Traditional Remedies

Analysis of participant narratives revealed a strong reliance on traditional remedies as an initial or complementary treatment approach. Many respondents described turning to herbal medicine, spiritual practices, and religious interventions in their efforts to overcome infertility.

Herbal treatments were the most frequently cited traditional intervention. Participants reported using a variety of herbal mixtures prepared by traditional healers or elder women within their communities. These concoctions, often made from roots, leaves, barks, and seeds, were believed to possess cleansing and fertilityenhancing properties. One participant shared, "I was given herbs to boil and drink every morning. I did that for several months because they told me my womb needed cleansing." The use of steam baths and herbal enemas was also reported, based on the belief that these methods would unblock reproductive pathways and remove spiritual impurities (Cavoretto, Candiani et al. 2022). Some women combined oral and topical applications of herbs, using herbal compresses and vaginal inserts that were said to promote ovulation or remove blockages.

Faith healing emerged as a prominent spiritual response to infertility. Several women indicated that they had attended special church services or prayer vigils, or visited prophets and pastors who prayed over them. Some reported receiving

"anointing oils" or "spiritual baths" during church services to enhance their chances of conception. These faith-based interventions were rooted in religious narratives, particularly from Christian teachings, which associate delayed conception with divine timing and reward for faith (Chamberlain 2022). One participant recalled being told by a prophet that "my miracle baby is on the way" and was instructed to fast for seven days while anointing her belly with blessed oil. Another woman said she was encouraged by her church group to continue praying because "Hannah waited long too."

Fasting was another commonly practiced intervention. Some women engaged in prolonged periods of spiritual fasting, often under the guidance of religious leaders or prayer groups. The aim was to "draw closer to God" and seek divine favor in their quest for children. In a few cases, fasting was done in conjunction with spiritual directives, such as avoiding certain foods or abstaining from sexual activity for specific durations. Others combined fasting with midnight prayers and scripture recitations focused on fertility and deliverance.

Spiritual cleansing rituals were also noted, particularly among participants who had consulted traditional priests or spiritualists. These rituals included libation pouring, animal sacrifices, and cleansing with river water or spiritually significant herbs. Some women described undergoing a spiritual "diagnosis" that revealed blockages, curses, or spiritual marriages believed to cause infertility. One participant recounted, "The priest said I had been spiritually married in a dream, and unless I was cleansed, I would never give birth." Such rituals were often intense and required multiple visits to shrines, periods of seclusion, or instructions to perform specific rites at dawn or sunset.

Others were given special beads or charms to wear on their waists or instructed to bury items at the base of a tree to reverse curses. In communities where belief in ancestral spirits is strong, women often sought the intervention of family elders to conduct appeasement rites or offer sacrifices to the ancestors, asking them to "open the womb." These rituals were performed with great seriousness and emotional investment, with many women believing that without spiritual reconciliation, no physical or medical treatment could succeed.

Overall, the use of traditional remedies was deeply intertwined with participants' cultural and spiritual worldviews. These practices offered

emotional support, community validation, and a sense of control in a context where infertility often brought social exclusion and stigma. Many women expressed hope and optimism when using traditional methods, even when outcomes were not immediate. Traditional treatment also provided a form of social inclusion, as women engaging in these rituals were often surrounded by family and community members who encouraged and supported their efforts. In contrast to the clinical, impersonal environment of hospitals, traditional healing was described as warm, familiar, and spiritually comforting.

4.2. Use of Modern Treatments

Participants in this study reported varying degrees of engagement with biomedical infertility treatments. While traditional methods were often the first course of action, nearly all participants had at some point sought care at Tamale Teaching Hospital (TTH) or other biomedical facilities.

The most commonly reported modern treatments included hormonal therapies and ovulation-stimulating drugs. Participants described being prescribed medications such as clomiphene citrate (commonly known as Clomid), which is used to induce ovulation in women with irregular cycles. One participant explained, "The doctor said I was not ovulating properly, so I was given tablets to help me release eggs every month." Another mentioned, "I was put on injections to help my hormones because the tests showed they were low." These hormone-based treatments were often perceived as more scientific and effective, particularly when accompanied by detailed monitoring.

Vitamin and nutritional supplements were also widely used as part of biomedical infertility care. Many women reported receiving folic acid, multivitamins, fertility-boosting and supplements such as vitamin E and Bcomplex(Vitagliano, Petre et al. 2021). These were often prescribed in combination with fertility drugs and were perceived as helpful in "strengthening the womb" or "preparing the body." One woman shared, "They told me my blood level was low, so I was given vitamins to help make my body stronger for pregnancy." participants acknowledged supplements alone were not curative, they viewed them as important components of a broader biomedical strategy.

Participants also described undergoing several diagnostic tests, which they regarded with mixed

feelings. Some found the tests reassuring and empowering, as they provided concrete explanations for their fertility challenges. "After the scan, they told me my tubes were blocked, so I knew why I wasn't getting pregnant," one respondent said. Others, however, expressed frustration with the repeated testing cycles. "They kept asking me to do different tests, but nothing changed. It was like I was just wasting money and time," another woman explained.

Despite the relative accessibility of low-tech biomedical interventions, access to advanced assisted reproductive technologies (ART), such as in vitro fertilization (IVF), was rare among the participants. Only one participant in the study reported having been referred for IVF, and even then, the procedure was never carried out due to high costs. "They said I needed IVF, but when we heard the price, we gave up. We don't even earn that much in a year," she lamented. Others shared similar sentiments, noting that while ART represented hope, it was largely a luxury beyond their financial means.

Mistrust and misinformation about ART were also prevalent. Some participants expressed concerns about side effects or questioned the naturalness of lab-assisted conception. One woman remarked, "I've heard those test-tube babies have problems. I prefer to wait for God's time." Religious convictions and cultural narratives about destiny and divine timing further influenced women's willingness to consider ART.

Nevertheless, many women valued the structure, follow-up care, and perceived professionalism of biomedical treatment. They appreciated the attention to physiological details and felt reassured by the competence of healthcare workers. "Even though it hasn't worked for me yet, I feel more confident when I go to the hospital because they explain things to me," said one participant.

The findings highlight the contrast between the relatively widespread use of low-tech treatments and the significant inaccessibility of ART, reflecting both systemic barriers and cultural perceptions. Biomedical care was often pursued concurrently with traditional practices, suggesting a pragmatic approach among women seeking to maximize their chances of conception. dual engagement underscores This importance of integrated, culturally sensitive infertility care that accommodates both scientific and spiritual needs.

4.3. Integration of Both Approaches

A major theme that emerged from the interviews was the widespread integration of traditional and biomedical treatment approaches. Most participants did not perceive these systems as mutually exclusive but rather as complementary pathways that could be engaged sequentially or concurrently depending on individual circumstances.

Sequential use of both systems was common. Many women initially sought traditional remedies, such as herbal mixtures or spiritual rituals, believing these were more culturally appropriate and spiritually aligned. Only after prolonged, unsuccessful attempts did they turn to biomedical facilities for diagnosis and treatment. One participant said, "I went to different herbalists and prayed a lot, but after three years with no results, I decided to go to the hospital." This pattern reflects a pragmatic approach in which traditional remedies serve as the first line of hope, while biomedical treatments act as a backup when initial efforts fail.

Conversely, some women reported starting with biomedical care but later turning to traditional practices when they experienced delays, side effects, or disappointments in clinical outcomes. For example, one woman said, "After two years of injections and scans without a child, I decided to see a prophet. I felt maybe it was a spiritual issue." Others alternated between both systems depending on advice from family members, church leaders, or traditional healers. These transitions were often driven by emotional fatigue, perceived medical failure, or religious beliefs.

Concurrent use of both traditional and modern treatments was also frequently reported. Several women combined spiritual practices like prayer, fasting, and the use of anointing oils with hospital visits and prescribed medications. Some disclosed that while they were taking ovulation-stimulating drugs, they were also using herbal tonics to "balance their hormones" or attending healing crusades. This dual engagement was not seen as contradictory but as holistic — targeting both physical and spiritual causes of infertility simultaneously (Chamberlain 2022).

Cultural and emotional drivers played a critical role in these decisions. In Ghanaian society, infertility is often interpreted through a spiritual or moral lens, where childlessness is attributed to curses, broken taboos, or ancestral displeasure(Adjei 2023). Therefore, addressing

infertility through prayer or traditional rites was not only a treatment approach but also a way of aligning with communal expectations and moral obligations. Many participants described traditional and religious practices as comforting and empowering, providing emotional support that clinical environments sometimes lacked.

The decision to seek biomedical intervention often came with emotional conflict. Some women reported internal struggles over abandoning traditional beliefs, while others feared judgment from their families or spiritual mentors. However, the desire for motherhood often overrode these tensions. As one woman put it, "I didn't care where the help came from, I just wanted to be a mother."

Notably, participants who integrated both systems expressed a greater sense of control over their infertility journey. They believed that combining efforts — medically and spiritually — increased their chances of success. This strategy reflects the pluralistic health-seeking behaviors that are common in many parts of Africa, where diverse healing systems coexist and are accessed fluidly based on perceived need and belief (Taylor 2024).

5. DISCUSSION

5.1. Cultural Significance of Infertility

Infertility in the Ghanaian context transcends biomedical definitions and enters deeply into cultural, spiritual, and communal domains. The cultural significance of fertility is rooted in the central role of childbearing in marriage, lineage continuity, and social identity. In many Ghanaian societies, especially in the northern regions, a woman's ability to conceive is often seen as a key determinant of her worth and status. Marriage is traditionally regarded as incomplete without children, and procreation is viewed as both a personal fulfillment and a communal responsibility(Maponya 2021).

This cultural framing creates intense pressure on women to bear children shortly after marriage. Women who experience delays or are unable to conceive are often subjected to stigma, emotional abuse, and social isolation. They may be labeled as cursed, barren, or spiritually unclean. In extreme cases, women have reported being divorced or their husbands taking additional wives in pursuit of children. The shame associated with infertility can be so profound that some women avoid social gatherings or relocate to avoid community scrutiny (Nugin-Dean 2023).

The cultural weight of infertility is further amplified by traditional religious beliefs that link fertility to ancestral approval or spiritual purity. In this worldview, infertility is not merely a physical issue but a sign of moral or spiritual transgression. As such, it must be addressed through rituals, offerings, or divine intervention. Women often internalize these beliefs, which can intensify emotional distress and reduce trust in biomedical explanations that do not acknowledge spiritual causation (Nugin-Dean 2023).

This complex cultural landscape significantly influences how women seek treatment. The findings of this study revealed that many participants initially pursued traditional remedies because these aligned with their cultural understanding of infertility. Even when biomedical care was introduced, it was often complemented by spiritual practices or traditional rituals, reflecting an integrated belief system where both science and spirituality coexist.

Moreover, infertility is not solely a private concern; it has social consequences that extend to the entire family and lineage. Extended families, especially mothers-in-law, often exert pressure on couples, particularly on women, to seek immediate solutions. In this communal framework, infertility is not just a woman's problem but a collective failure to continue the family line. This perception can exacerbate the emotional toll of infertility and influence treatment decisions.

Addressing infertility in such a context requires culturally sensitive healthcare that validates local belief systems while providing evidence-based treatment. Health professionals must understand the social dynamics surrounding infertility and recognize the legitimacy of patients' cultural worldviews. Failure to do so may result in poor adherence to treatment, delayed care-seeking, or complete withdrawal from biomedical systems.

Ultimately, any effective approach to infertility in Ghana must engage with the cultural significance of the condition. This includes not only treating the biological causes but also acknowledging and addressing the social and emotional dimensions of infertility within the cultural framework that shapes women's lives.

5.2. Barriers to Accessing ART

Despite the availability of advanced reproductive technologies in Ghana, numerous barriers hinder access to Assisted Reproductive Technologies (ART) such as in vitro fertilization (IVF) and intracytoplasmic sperm injection (ICSI). These barriers are multifaceted, encompassing economic, geographic, informational, cultural, and institutional challenges.

The foremost barrier identified by participants was the prohibitive cost of ART. A single cycle of IVF in Ghana can cost between GHS 20,000 and GHS 30,000 (approximately USD 1,700–2,500), a figure well beyond the financial reach of most working- and middle-class families (Hammond and Hamidi 2025). This cost excludes necessary medications, follow-up consultations, and potential repeat cycles, which cumulatively make ART an unsustainable option for the majority. Unlike in some high-income countries where health insurance may cover part or all of the treatment cost, ART in Ghana is offered almost exclusively in private facilities and paid out-of-pocket.

Geographic accessibility also limits ART utilization. Most fertility clinics offering ART services are located in major urban centers such as Accra and Kumasi. For residents in northern Ghana, particularly rural communities, accessing these services entails long-distance travel, additional lodging expenses, and time away from work or family. This geographic centralization of services creates a stark urban-rural divide in infertility care and exacerbates existing health disparities (Hammond and Hamidi 2025).

Another key barrier is the shortage of trained fertility specialists and infrastructure. ART procedures require skilled personnel and advanced equipment, which are limited in both number and distribution across Ghana. Public hospitals rarely offer ART, and existing private clinics are often overwhelmed by demand, leading to long wait times and inconsistent follow-up care (Whittaker, Gerrits et al. 2024).

Informational and awareness gaps also contribute to limited ART uptake. Several participants in this study reported either being unaware of ART or holding misconceptions about how it works. Common myths include beliefs that IVF always results in twins, that children born through ART are unnatural or unhealthy, or that the process involves occult practices. These misconceptions are compounded by a general lack of public education and counseling on infertility and ART (Nugin-Dean 2023).

Cultural and religious beliefs present additional obstacles. Some women feared that undergoing ART might conflict with their religious convictions or community expectations. For

instance, IVF was sometimes viewed as a form of "playing God" or interfering with divine will. Spiritual leaders, especially in conservative religious settings, occasionally discouraged followers from pursuing ART and instead advocated for prayer and spiritual intervention. This spiritual framing often influenced women's choices, particularly in close-knit communities where religious and traditional authority figures are deeply respected (Whittaker, Gerrits et al. 2025).

Lastly, psychological barriers play a subtle yet influential role. The emotional strain of repeated infertility treatments, fear of failure, and the social stigma of seeking "unnatural" interventions can discourage women from pursuing ART. Participants who had previously experienced failed biomedical interventions sometimes lacked the emotional resilience to commit to the rigorous demands of ART cycles.

5.3. The Complementary Role of Traditional and Biomedical Care

One of the most significant findings from this study is the complementary role that traditional and biomedical care play in the treatment of infertility among Ghanaian women. Rather than choosing one system over the other, many participants engaged both paradigms either sequentially or simultaneously, reflecting a pragmatic and pluralistic health-seeking behavior. This dual engagement is not contradictory within the local context but is instead viewed as holistic and strategic.

Traditional care, which includes herbal medicine, spiritual healing, and ritual practices, provides psychosocial support, spiritual reassurance, and cultural validation. These practices are deeply rooted in the community's belief systems and often form the first line of response to infertility. Women reported that traditional healers and faith-based practitioners not only provided treatments but also offered emotional comfort and moral explanations for their condition. This support system can help reduce the psychological burden of infertility, especially in societies where childlessness carries heavy stigma (Taylor 2024).

Biomedical care, on the other hand, is valued for its diagnostic capabilities and perceived scientific legitimacy. Participants appreciated the clarity that came with medical tests and the structured treatment protocols available in hospitals. Hormonal therapy, ovulation induction, and ultrasound monitoring provided a sense of progress and accountability in the

treatment journey(Thaker, Dhande et al. 2023). For many, the hospital offered hope based on measurable biological data, which complemented the spiritual confidence gained from traditional approaches.

The integration of these two systems often occurred not out of confusion or lack of knowledge, but as a deliberate effort to maximize chances of conception. Participants described combining prescribed medications with herbal tonics or undergoing hospital tests while attending prayer vigils. This integrative strategy stems from a broader African health worldview that embraces both biomedical and indigenous knowledge systems (Okantey, Adomako et al. 2021).

Moreover, the complementary use of both care systems reflects patients' agency in navigating their reproductive challenges. It allows them to exercise choice, maintain cultural identity, and manage uncertainty. In situations where biomedical care alone does not yield results, turning to traditional methods offers a renewed sense of control and hope. Conversely, when traditional practices fail, biomedical care provides an alternative rooted in evidence-based science.

Recognizing the complementary role of traditional and biomedical care has important implications for reproductive health policy. Healthcare providers should not dismiss traditional practices outright but rather engage in respectful dialogue with traditional healers and spiritual leaders. Culturally sensitive counseling that acknowledges and incorporates patients' beliefs can enhance trust and treatment adherence. Collaborative care models that integrate spiritual counseling, psychosocial support, and medical treatment can significantly improve patient satisfaction and outcomes (Whittaker, Gerrits et al. 2025).

5.4. Trust, Beliefs, and the Need for Holistic Approaches

A recurring theme throughout the study was the centrality of trust and belief systems in shaping women's experiences with infertility treatment. Trust operates as both an emotional and rational framework through which participants assessed the credibility and efficacy of different therapeutic options. For many women, traditional healers and spiritual leaders were not only trusted authorities but also culturally sanctioned figures who offered care that resonated with their worldviews (Chamberlain 2022).

This trust was reinforced by deeply held beliefs about the nature and origin of infertility. In the Ghanaian context, infertility is often viewed through a moral-spiritual lens, where issues of childlessness are interpreted as the result of spiritual blockages, ancestral displeasure, or divine will. Consequently, healing must address both the physical and metaphysical domains. Participants believed that even when medical explanations were provided, there remained a spiritual dimension that needed attention through prayer, fasting, or ritual cleansing (Ofosu-Budu and Hänninen 2021).

In contrast, biomedical care was perceived as trustworthy for its diagnostic tools, scientific methods, and potential for tangible results. However, trust in hospitals and clinics was conditional. Participants frequently described feeling disillusioned after multiple failed treatments or when care providers appeared dismissive of their cultural beliefs. For example, several women shared frustrations about not receiving emotional support from hospital staff or being told to abandon traditional methods. This perceived disconnect reduced confidence in medical professionals and occasionally led to treatment discontinuation(Khan 2023).

These dynamics illustrate the importance of trust not just in the treatment modality itself, but in the provider-patient relationship. When healthcare professionals failed to acknowledge or respect patients' cultural beliefs, trust was eroded. On the other hand, when patients felt heard and supported, they were more likely to adhere to medical recommendations and integrate them with their traditional practices.

The findings point to the necessity of a holistic approach to infertility care—one that recognizes and engages with the cultural, emotional, spiritual, and biomedical dimensions of reproductive health. A holistic model should include counseling services that address psychological distress, spiritual consultations that respect personal beliefs, and community education that bridges the gap between traditional and modern knowledge systems (Penzias, Azziz et al. 2021).

Culturally competent care also demands training healthcare providers to be empathetic, respectful, and open to patients' lived realities. Rather than viewing traditional beliefs as barriers, providers should see them as entry points for dialogue and rapport-building. This inclusive strategy can enhance trust, improve health outcomes, and promote continuity of care.

6. CONCLUSION AND RECOMMENDATIONS

This study underscores the complex and multifaceted nature of infertility treatment in Ghana, where women navigate both traditional and biomedical pathways in their pursuit of conception. The findings affirm the widespread use of dual treatment paths, reflecting both practical responses to healthcare access limitations and deeply rooted cultural beliefs about fertility. Rather than rejecting one system in favor of the other, many women embraced both as complementary, revealing a pluralistic approach to reproductive healthcare.

There is an urgent need for the Ghanaian healthcare system to acknowledge and accommodate these dual treatment paths. Traditional and biomedical practices can coexist more effectively when there is mutual respect and structured collaboration. Integrating culturally competent care models that respect local beliefs and practices while maintaining scientific rigor is crucial to improving access, satisfaction, and outcomes in fertility treatment.

Healthcare professionals should receive training in cultural sensitivity and communication to build trust and reduce stigma surrounding infertility. This includes equipping providers to engage with traditional beliefs without judgment, and to address the emotional toll of infertility through psychosocial support services. Incorporating trained counselors, spiritual care liaisons, or social workers into fertility clinics can help address the psychological and social needs of patients, ensuring a more holistic care experience (Whittaker, Gerrits et al. 2024).

Policymakers should also consider reforms that make fertility services more equitable and accessible. Subsidizing the cost of low- and midlevel infertility interventions and decentralizing services beyond urban centers would reduce disparities in care. Creating forums for dialogue between traditional healers and biomedical professionals could foster collaboration and reduce misinformation among patients.

Finally, future research should expand to include the perspectives of men in infertility experiences. Although this study focused on women, infertility affects both partners, and male involvement in treatment-seeking behaviors, social stigma, and emotional responses remains underexplored in Ghana and other sub-Saharan contexts. Understanding men's roles and experiences will offer a more complete picture of

infertility dynamics and support the design of more inclusive interventions.

In conclusion, addressing infertility in Ghana requires a culturally grounded, socially inclusive, and clinically effective framework. Recognizing the value of both traditional and biomedical care, training providers in holistic support, and expanding research to include male perspectives are key steps toward a more equitable and compassionate reproductive health system.

REFERENCES

- [1] Adjei, J. (2023). Married couples and general public perceptions of childlessness in Kpando Gabi municipality, in the Volta region, Ghana, University of Education, Winneba.
- [2] Ameyaw, E. K. (2021). Maternal referral systems in the northern region of Ghana, University of Technology Sydney (Australia).
- [3] Andrews, E. D. (2023). ISLAM & THE QURAN, Christian Publishing House.
- [4] Barrera, N., et al. (2022). A contemporary view on global fertility, infertility, and assisted reproductive techniques. Fertility, Pregnancy, and Wellness, Elsevier: 93-120.
- [5] Cavoretto, P. I., et al. (2022). "Fertility and mode of conception affect the risk of preterm birth related to both spontaneous and iatrogenic etiologies." Fertility and sterility 118(5): 936-937.
- [6] Chakravarty, S. (2022). "Resource constrained innovation in a technology intensive sector: Frugal medical devices from manufacturing firms in South Africa." Technovation 112: 102397.
- [7] Chamberlain, A. M. (2022). The Spiritual Identity of Women Coping with Infertility in a Religion Stressing Fertility, Fielding Graduate University.
- [8] Drucker, D. J. (2023). Fertility Technology, MIT Press.
- [9] Hammond, K. and N. Hamidi (2025). "Exploring Muslim Communities' Experiences and Barriers While Accessing Assisted Reproductive Technologies: A Scoping Review of International Literature." Journal of religion and health 64(1): 330-368.
- [10] Kashyap, S. and P. Tripathi (2025). "'Are you pregnant? If not, why not?' artificial reproductive technology and the trauma of infertility." Medical Humanities 51(1): 102-111.
- [11] Khan, P. (2023). Trying to Conceive: Alternative Methods of Treating Infertility.
- [12] Lim, W. M. (2024). "What is qualitative research? An overview and guidelines."

- Australasian Marketing Journal: 144135822412 64619
- [13] Maponya, D. T. (2021). "The African woman's plight of reproduction: A philosophical analysis of marriage, procreation and womanhood." Agenda 35(3): 82-91.
- [14] Nsabimana, A., Et Al. "The Impact of Infertility: A Holistic Examination of Physical, Emotional, and Social Effects on Couples."
- [15] Nugin-Dean, A. L. (2023). African American Women and the Impact of Infertility on Family Planning, Capella University.
- [16] Ofosu-Budu, D. and V. Hänninen (2021). "Explanations for infertility: The case of women in rural Ghana." African Journal of Reproductive Health 25(4): 142-152.
- [17] Okantey, G. N. O., et al. (2021). "Sociocultural implications of infertility and challenges in accessing assisted reproductive technology: Experiences of couples from two health facilities in southern Ghana." Marriage & Family Review 57(5): 375-396.
- [18] Penzias, A., et al. (2021). "Fertility evaluation of infertile women: a committee opinion." Fertility and sterility 116(5): 1255-1265.
- [19] Taylor, S. (2024). Culture, Behavior, and Health. Handbook of Concepts in Health, Health Behavior and Environmental Health, Springer: 1-20.
- [20] Thaker, N., et al. (2023). "Role of Transvaginal Sonography in the Diagnosis of Female Infertility: A Comprehensive Review." Cureus 15(12): e50048.
- [21] Vitagliano, A., et al. (2021). "Dietary supplements for female infertility: a critical review of their composition." Nutrients 13(10): 3552.
- [22] Vivian, E. (2022). "Human Reproduction and Infertility in the Hebrew Bible." Currents in Biblical Research 21(1): 7-32.
- [23] Whittaker, A., et al. (2024). "Access to assisted reproductive technologies in sub-Saharan Africa: fertility professionals' views." Sexual and Reproductive Health Matters 32(1): 2355790.
- [24] Whittaker, A., et al. (2025). "The Divine in the Clinic: Assisted Reproduction and Religious Practice in Ghana and South Africa." J Relig Health 64(1): 369-384.
- [25] Zeng, L.-H., et al. (2022). "Polycystic ovary syndrome: a disorder of reproductive age, its pathogenesis, and a discussion on the emerging role of herbal remedies." Frontiers in Pharmacology 13: 874914.

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