

Economic Considerations and Patronage of Traditional Birth Attendants (TBA) among Pregnant Women in Cross River South Senatorial District, Nigeria

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Abstract

This study examined the relationship between economic considerations and patronage of traditional birth attendants among pregnant women in Cross River South Senatorial District, Nigeria. Specifically, the study examined the relationships between affordability of TBA services, household economic status, and TBA patronage by pregnant women. Literature relating to economic consideration and TBA patronage by pregnant women were reviewed, and the study was anchored on the Health Belief Model. The survey research design was adopted. The target population comprised pregnant women residing in rural communities of Southern Senatorial District. The population size was considered indeterminate; hence the Cochran (1977) formula was used to determine the sample size of 420 for this study. A multistage sampling procedure was used for selecting respondents, while data were collected using a structured questionnaire developed in line with the study objectives. Data were analysed using descriptive statistics and Pearson Product Moment Correlation at the 0.05 level of significance. The analysis indicated a significant relationship between affordability of TBA services and patronage of TBAs, leading to the rejection of the first null hypothesis. It also revealed a significant negative relationship between household economic status and TBA patronage, resulting in the rejection of the second null hypothesis. The study concluded that economic circumstances constitute an important consideration in women's choice of maternity-care providers in rural Cross River South. Based on the findings of the study, it was recommended amongst others that: Government, local health authorities and the management of primary healthcare facilities should take deliberate steps to make formal maternity services more financially affordable for rural pregnant women.

Keywords: *Economic considerations, traditional birth attendants, TBA patronage, pregnant women, household economic status.*

Introduction

Maternal health remains a major global development and public-health concern, particularly in settings where poverty, geographical isolation, weak health systems and unequal access to skilled healthcare intersect. Although substantial progress has been recorded in reducing maternal mortality since the beginning of the twenty-first century, the burden remains disproportionately concentrated in low- and lower-middle-income countries. The latest joint estimates of the World Health Organization (WHO), UNICEF, UNFPA, the World Bank Group and the United Nations Department of Economic and Social Affairs indicate that approximately 260,000 women died during pregnancy, childbirth or shortly after childbirth in 2023, with about 92% of these deaths occurring in low- and lower-middle-income countries. Sub-Saharan Africa

and Southern Asia together accounted for approximately 87% of global maternal deaths, demonstrating the continuing geographical inequality surrounding safe motherhood (WHO UNICEF, UNFPA, World Bank Group, & United Nations Department of Economic and Social Affairs, Population Division. (2025). The persistence of maternal mortality is particularly significant because many of the direct causes of maternal death are preventable when women have timely access to competent antenatal, intrapartum and postnatal care. WHO consequently identifies skilled care before, during and after childbirth as an essential intervention for preventing maternal and neonatal deaths and defines skilled birth attendants as appropriately trained and accredited health professionals capable of managing normal childbirth, identifying complications and initiating appropriate referral when necessary. Traditional birth attendants (TBAs), irrespective of whether they have received some form of training, are not classified as skilled birth attendants within this definition (WHO, n.d.). Yet the continued presence and patronage of TBAs in rural and underserved communities across Africa indicates that the choice of maternity-care provider cannot be explained exclusively by clinical considerations. Rather, women's decisions are embedded within wider social, cultural, geographical and economic realities. In many rural settings, the formal health facility may involve transportation expenditure, consultation and service charges, costs of medicines and supplies, accommodation or food expenses, and opportunity costs associated with spending time away from household production and income-generating activities. Consequently, the economic accessibility of maternity care can become as important as its physical availability. Evidence from rural Africa demonstrates that women and households consider delivery costs when choosing maternity services, while the availability of medicines, supplies and acceptable conditions of care also influences preferences for facility-based delivery (Belay et al., 2018). This broader perspective is important for understanding why TBAs remain relevant even where governments and international organizations promote skilled facility-based childbirth. Patronage may therefore represent not simply a rejection of modern medicine, but a rational response by households attempting to reconcile perceived quality of care, affordability, proximity, cultural familiarity and the resources available to them.

Traditional birth attendants have historically occupied an important position in rural African communities because they are physically embedded within the communities they serve and are often accessible at times when formal services are difficult to reach. Research from rural Ghana, for example, found that TBAs perform multiple functions beyond conducting deliveries, including providing health education, psychological support, counselling and assistance with transportation and referral to health facilities (Adatara et al., 2018). This illustrates why the economic significance of TBAs should not be reduced to the amount of money charged for delivery alone. The economic calculation made by a pregnant woman or her household may include the cost of reaching a distant health facility, the availability of transport during labour, informal expenditures associated with facility care, the need for an accompanying person, and the loss of productive time incurred by the woman and family members. In rural communities, where livelihoods are frequently dependent on subsistence agriculture, petty trading, informal employment and other activities with limited income security, even relatively modest expenditures can constitute meaningful barriers to formal maternity services. Evidence from rural Nigeria similarly demonstrates that maternal healthcare utilization is associated with socioeconomic characteristics, education, occupation and distance from health facilities. More recent Nigerian evidence has reinforced the importance of household wealth, employment, residence and geographical accessibility in explaining differences in maternal-health-service utilization. Importantly, economic considerations can operate through both direct and indirect costs. Direct costs involve the financial payments required for services, drugs, transportation and other maternity-related needs, while indirect costs include lost working time, childcare responsibilities, food and accommodation expenses and the economic burden imposed on

husbands, relatives or other accompanying persons. A study of maternal healthcare financing in rural Nigerian communities found substantial reliance on out-of-pocket expenditure and reported that women with financial difficulties were less likely to access recommended maternal healthcare; the study consequently identified financial protection and harmonized fee-exemption mechanisms as important policy considerations (Onwujekwe et al., 2016). Thus, the persistence of TBA patronage across African rural communities can be interpreted partly through the economics of accessibility: a service that is geographically closer, financially negotiable, socially familiar and available within the community may be perceived as more accessible than a technically superior service whose total cost of utilization exceeds the household's immediate capacity.

Within Nigerian societies, the economic dimension of TBA patronage assumes particular significance because the country continues to experience a substantial maternal-health burden alongside pronounced inequalities in access to healthcare. Nigerian evidence shows that women in rural communities continue to utilize TBAs for pregnancy and childbirth despite national and international efforts to increase skilled birth attendance. Ntoimo et al. (2022), in a qualitative study of rural Nigeria, identified persistent utilization of TBAs and examined the reasons women choose traditional rather than skilled maternity care, highlighting the importance of understanding women's choices within their social and health-system environments rather than treating TBA utilization as merely a consequence of ignorance. Earlier Nigerian research similarly documented the continued use of TBAs in rural communities and emphasized both the challenges associated with their practice and the possibility of engaging them within broader maternal and child-health strategies (Onah et al., 2018). More recent evidence from rural Lagos also confirms that pregnant women continue to use informal providers and that the reasons for such utilization warrant closer investigation rather than assumptions based solely on the presumed superiority of formal healthcare (Oluwole et al., 2024).

The economic circumstances surrounding maternity care are particularly important in this regard. Nigeria's maternal-health system involves a combination of public, private and informal providers, and the actual cost of accessing formal care may extend beyond official service fees. Transportation costs, medication purchases, laboratory investigations, food and other incidental expenditures can increase the financial burden of facility-based care. Conversely, TBA services may be located within or close to the woman's community and may involve payment arrangements perceived as more flexible or manageable by low-income households. A recent Nigerian policy analysis similarly identifies poverty, unemployment and inadequate health-insurance coverage among the economic factors affecting reproductive and maternity-service utilization. Historical evidence from rural Nigeria has also shown that women may initiate care with traditional or unorthodox providers and subsequently reach formal facilities only after complications have developed, creating potentially dangerous delays in obtaining appropriate obstetric care (Ezugwu, et al., 2010). At the same time, TBA patronage should not be understood as being determined by economic conditions alone. Cultural familiarity, perceived respectful treatment, previous experience, trust, privacy, proximity and the interpersonal relationship between the provider and pregnant woman can interact with financial considerations. Indeed, recent Nigerian research on women's preferences for TBAs reports that women's experiences of how they are treated by providers are important to understanding their choices (Yalley & Gumbi, 2026). The implication is that economic considerations should be examined as part of a multidimensional decision-making process in which women compare the perceived costs and benefits of available maternity-care options.

The relevance of these issues becomes particularly pronounced in Cross River State and, more specifically, in rural communities of the Southern Senatorial District. Cross River State has a substantial rural population and includes communities in which geographical accessibility, transportation and health-facility capacity can influence the timing and type of maternal healthcare received. Evidence from Cross River State has documented challenges surrounding emergency obstetric care in rural health facilities, including constraints that can hamper timely access to appropriate care (Ebong et al., 2023). Earlier community-based interventions in Cross River State also identified socioeconomic and cultural barriers to the utilization of emergency obstetric services in rural communities, leading to interventions that included community mobilization, loan arrangements and transportation programmes, an indication that financial and transportation constraints have long been recognized as relevant dimensions of maternal-health access in the state. Particularly important is the empirical evidence from Akpabuyo community in Cross River State, where Akpabio et al. (2014) compared women's patronage and preferences for TBAs and modern healthcare practitioners. Among the 300 women studied, 25% had patronized TBAs, 27% expressed a preference for TBAs, 69% had patronized modern healthcare practitioners and 75% preferred them, while 6% had used both categories of providers. This finding demonstrates that TBA patronage is neither an insignificant phenomenon nor necessarily an exclusive alternative to formal healthcare in Cross River State. It also provides a strong empirical basis for investigating the specific conditions under which women continue to patronize TBAs. However, the existing Cross River evidence does not adequately resolve the specific question of how economic considerations shape TBA patronage among pregnant women in the rural communities of the Southern Senatorial District. This constitutes an important empirical gap because the economic realities of rural households may differ considerably across communities in terms of income sources, transportation availability, distance to health facilities, household purchasing power and the opportunity costs associated with seeking facility-based care. The present study therefore situates TBA patronage within the economics of maternal-health access, examining how considerations such as affordability and household financial capacity may influence women's decisions.

Statement of the Problem

Maternal healthcare utilization remains an important public-health problem in Nigeria because the availability of maternity services does not necessarily translate into their effective utilization by pregnant women. The problem is particularly pronounced in rural communities where geographical accessibility, household economic circumstances, sociocultural expectations and the perceived quality of available services interact to shape women's choices of where to obtain pregnancy and childbirth care. In Cross River State, evidence from rural health facilities indicates that access to emergency obstetric care remains constrained by circumstances that can delay the receipt of appropriate care, thereby placing women experiencing obstetric complications at increased risk (Ebong et al., 2023). The problem becomes more complicated where pregnant women have access to more than one source of maternity care, including government health facilities, private providers, church-based maternity centres and traditional birth attendants (TBAs). Rather than disappearing with the expansion of formal healthcare, TBAs remain embedded within several rural communities of Cross River State. This is particularly evident in Akpabuyo, where a rural community-based study documented a preponderance of TBAs and church-based maternity services across communities despite the presence of a general hospital and numerous primary healthcare facilities (Okeke et al., 2022). The coexistence of formal and informal maternity-care systems creates a significant public-health problem because women who patronize TBAs may experience delays in accessing skilled obstetric intervention when complications arise. The issue, therefore, is not simply that TBAs exist, but that their continued patronage may reflect unresolved weaknesses in the

affordability, accessibility and acceptability of formal maternity services. Understanding why women continue to choose TBAs is consequently necessary for designing interventions that address the actual conditions influencing maternity-care decisions rather than assuming that the problem can be solved through health education alone.

The problem is particularly observable in the rural communities of the Southern Senatorial District of Cross River State, which comprises seven Local Government Areas viz: Akamkpa, Akpabuyo, Bakassi, Biase, Calabar Municipality, Calabar South and Odukpani. Existing evidence demonstrates that the problem takes different forms across localities within this district. In Akpabuyo, for example, traditional birth attendants constitute a visible component of the maternity-care environment, with TBAs and church-based maternity services reportedly present across the communities. More importantly, the Akpabuyo study by Akpabio, Edet, Etifit and Robinson-Bassey (2014) found that 25% of the women studied had patronized TBAs, 27% preferred them, while 69% had patronized modern healthcare practitioners and 75% preferred modern practitioners. The finding is significant because it demonstrates that TBA patronage persists even where modern healthcare services are known and used. In Biase, the situation is similarly important because evidence indicates that each ward has at least one TBA, while the population is predominantly engaged in farming and fishing and the area also has church-based maternity services. The presence of TBAs throughout the wards means that pregnant women in dispersed rural settlements may encounter traditional providers as an immediately accessible source of maternity care. In Odukpani, the persistence of home-based and TBA-assisted childbirth has also been documented.

A WHO report on maternal-health-service improvement in Cross River State described a woman from Ediba in Odukpani who had previously delivered all her children at home or with untrained TBAs before subsequently moving to a primary healthcare facility after improvements in staffing and diagnostic services became apparent. This example is important because it illustrates that women's choices can change when formal facilities become more attractive and accessible. The problem in Odukpani, therefore, cannot simply be characterized as unwillingness to use formal healthcare; it also raises questions about whether the formal system provides sufficiently accessible, acceptable and economically viable alternatives to the services already available within rural communities. In Calabar South, evidence from Anantigha Community shows an especially concerning pattern: 41.2% of women in one study reported giving birth at home, compared with 46.2% who delivered in health centres and only 12.6% in hospitals. The same study identified family and maternal income, distance from the health centre, cost of hospital care, attitudes of healthcare workers, culture and traditional norms among factors perceived to contribute to home delivery. These locality-specific findings indicate that the maternity-care problem within Cross River South is not uniform. It is expressed through the continued presence of TBAs in Akpabuyo, community-level availability of traditional maternity care in Biase, previous reliance on TBAs and home delivery in Odukpani, and substantial home delivery in communities such as Anantigha in Calabar South. Such variations make it inappropriate to treat the Southern Senatorial District as a homogeneous setting and provide justification for investigating the economic circumstances surrounding TBA patronage across its rural communities.

A major concern arising from these circumstances is that the economic dimensions of women's maternity-care decisions remain inadequately understood. The relevant question is not merely whether a woman is poor or whether hospital services cost money; it is whether the total perceived economic burden of formal maternity care is greater than that associated with TBA patronage. This burden may include consultation and service charges, transportation expenses, expenditure on drugs and investigations, food and other incidental costs, as well as the

opportunity costs associated with leaving farming, fishing, petty trading or household activities to obtain care. In contrast, TBAs may be physically located within the woman's community and may therefore reduce transportation and other indirect costs. The fact that Akpabuyo is predominantly agrarian and that Biase is predominantly characterized by farming and fishing makes this economic dimension particularly relevant because household livelihoods are closely tied to daily productive activities. The central problem is therefore a possible mismatch between the economic realities of rural households and the organization of formal maternity services. If a woman perceives TBA care as cheaper, closer or financially more negotiable, the mere existence of a health facility may not be sufficient to alter her choice. Conversely, if the economic difference between the two options is small but women still strongly prefer TBAs, then cultural familiarity, trust, perceived quality and interpersonal treatment may be more influential.

The need for the present study is strengthened by the limitations of the existing literature. Previous research in Cross River State has made valuable contributions by examining women's preferences for TBAs and modern healthcare practitioners in Akpabuyo, determinants of maternal-health utilization, home deliveries in Calabar South, emergency obstetric care in rural health facilities and the knowledge and practices of TBAs across the Southern Senatorial District. By focusing on the economic circumstances surrounding women's choices, the study seeks to determine whether affordability and household economic capacity constitute meaningful explanations for continued TBA patronage.

Research Questions

The following research questions were formulated to guide the study:

1. What relationship exists between affordability of traditional birth attendant services and patronage among pregnant women in rural communities of the Southern Senatorial District of Cross River State?
2. What relationship exists between household economic status and patronage of traditional birth attendants among pregnant women in rural communities of the Southern Senatorial District of Cross River State?

Objectives

The main objective of this study is to examine the relationship between economic considerations and patronage of traditional birth attendants among pregnant women in rural communities of the Southern Senatorial District of Cross River State. Specifically, the study seeks to:

1. Examine the relationship between affordability of traditional birth attendant services and patronage among pregnant women in rural communities of the Southern Senatorial District of Cross River State.
2. Determine the relationship between household economic status and patronage of traditional birth attendants among pregnant women in rural communities of the Southern Senatorial District of Cross River State.

Hypotheses

- H₀₁: There is no significant relationship between affordability of traditional birth attendant services and patronage among pregnant women in rural communities of the Southern Senatorial District of Cross River State.

H₀₂: There is no significant relationship between household economic status and patronage of traditional birth attendants among pregnant women in rural communities of the Southern Senatorial District of Cross River State.

Literature review

A Traditional Birth Attendant is any non-certified community birth helper identified by respondents as providing antenatal, delivery, or postnatal assistance and confirmed by reported activities such as cord cutting or herbal care. Traditional birth attendants (TBAs) are locally respected, community-based providers who assist mothers during pregnancy, childbirth, and the postpartum period. In Nigeria's largely rural population, TBAs deliver a large share of births: recent data show about 63% of Nigerian births occur at home, compared with 23% in public facilities (Amutah-Onukagha, Gardner, Assan, Hammond, Plata, Pierre, & Farag, 2017). TBAs work outside the formal health system, learning by apprenticeship or personal experience and then offering antenatal care, conducting deliveries, and providing postpartum support. Amutah-Onukagha et al. (2017) note that TBAs in Nigeria are more affordable and accessible than skilled attendants and are highly trusted in villages. In one rural Nigerian study, TBAs supervised 46% of deliveries which is more than professional staff in that community (Etokidem et al., 2022). Thus, TBAs remain a default care option in regions where few women access hospital-based obstetrics. TBAs in Nigeria perform a broad range of maternal and newborn care roles. They commonly provide antenatal checkups, help deliver babies, manage the immediate postnatal period, and address minor complications.

Affordability of Traditional Birth Attendant Services and Patronage among Pregnant Women

Affordability is an important dimension of healthcare accessibility because the decision to seek care is influenced not only by whether a service exists, but also by whether individuals and households can meet the financial obligations associated with obtaining that service. In the context of maternal healthcare, affordability encompasses the direct monetary amount paid for consultation, antenatal care, delivery and medicines as well as associated expenses that may arise in the process of obtaining care. Traditional birth attendants (TBAs) have remained relevant in many rural communities partly because their services are often perceived as less financially demanding than those provided through formal health facilities. A review of TBA utilization in Nigeria found that lower cost, accessibility, convenience and better provider relationships were among the reasons women preferred TBAs (Bassey et al., 2018). Similarly, an earlier study in Edo State reported that rural residents preferred TBAs partly because their services were considered cheap, accessible and available within the community (Oladokun et al., 2002). These observations are important for the present study because affordability should not be interpreted simply as the nominal fee demanded by a TBA. Rather, affordability concerns the woman's perception of whether she and her household can realistically meet the total financial requirements of the chosen maternity-care option. A service may therefore be medically available but economically inaccessible if its associated costs exceed the resources available to the household. In rural communities of Southern Cross River State, where many households depend on farming, fishing, petty trading and other informal economic activities, differences in the financial requirements of alternative maternity-care providers can reasonably influence women's choices. Empirical evidence from rural Nigeria provides particularly strong support for the relationship between perceived affordability and TBA patronage.

Ntoimo et al. (2022), studying twenty rural communities in Etsako East and Esan South East Local Government Areas of Edo State, found that community members identified higher costs of services in formal health facilities as one of the reasons women used TBAs. The study also

found that ease of access to TBAs and their friendly attitude contributed to their continued utilization. The significance of this finding is that economic considerations operate comparatively: women do not necessarily assess the cost of a TBA in isolation; rather, they compare the financial requirements of different available providers. Where formal facility-based childbirth is perceived to involve higher fees, expenditure on medicines or supplies and other costs, a TBA may become the more economically feasible alternative. Evidence from Benin City similarly shows that women consider the cost of facility delivery when making decisions about where to give birth, with reducing costs identified as one of the measures that could increase facility utilization (Rishworth et al., 2023). This suggests that affordability has both an objective and subjective dimension. Objective affordability concerns the actual financial cost of a service relative to household resources, whereas subjective affordability concerns whether women and their families perceive the service as financially manageable. The latter is particularly important because healthcare decisions are often made under conditions of uncertainty, and households may prefer a provider whose charges are familiar, predictable or negotiable.

The Nigerian evidence also indicates that financial barriers can affect women's movement through the maternal healthcare continuum. Okeke et al. (2016), using national Nigerian data, found that difficulty obtaining money for treatment was significantly associated with dropout from maternity care between antenatal care and skilled delivery. Women experiencing problems obtaining money for treatment had higher odds of discontinuing the continuum of care, while poverty and rural residence were also important predictors. This finding provides an important explanation for why affordability can influence TBA patronage. A woman may initiate antenatal care at a formal facility but later choose a TBA for delivery if she anticipates that the financial requirements of institutional childbirth will be beyond her means. In this situation, TBA patronage may represent an adaptation to financial constraints rather than a categorical rejection of modern healthcare. The problem is further complicated by the fact that the apparent cost of facility-based care may include expenditures beyond official service charges. Transportation, medicines, laboratory investigations and required supplies can increase the financial burden experienced by households.

The recent study by Yalley and Gumbi (2026) provides contemporary qualitative evidence that economic factors remain central to women's preference for TBAs in Nigeria. Participants described formal facility care as financially burdensome and TBAs as comparatively affordable and financially flexible, with some families preferring arrangements involving fewer monetary payments or payments in kind. Thus, affordability can influence not only the initial decision to patronize a TBA but also the continued preference for traditional maternity services over formal alternatives. The relationship between affordability and patronage is also demonstrated by broader quantitative evidence concerning unskilled birth attendance in Nigeria. A national analysis of Nigeria Demographic and Health Survey data from 1999 to 2018 found that belonging to a rich household was associated with lower odds of utilizing unskilled birth attendants, while rural residence was associated with higher odds. The study further showed that women who reported having money to pay for health services were less likely to utilize TBAs. These findings provide important evidence that financial capacity and perceived ability to pay are related to the choice of birth attendant. They also demonstrate that affordability operates within a broader socioeconomic structure: the same maternity service can be affordable to one household and unaffordable to another. This distinction is particularly relevant in rural Cross River State because household income can be irregular and dependent on seasonal economic activities. A woman whose household has limited disposable income may therefore evaluate maternity care according to immediate cash requirements rather than long-term health benefits. Moreover, the opportunity to obtain care within one's community

may reduce additional expenditures associated with traveling to a health facility. In Akpabuyo, for example, research has demonstrated the continued presence and utilization of TBAs despite the availability of modern healthcare providers, showing that the existence of formal services does not automatically eliminate demand for traditional services (Akpabio et al., 2014). Affordability may therefore constitute one mechanism through which the accessibility of TBAs is translated into actual patronage.

Household Economic Status and Patronage among Pregnant Women

Household economic status refers broadly to the material and financial resources available to a household for meeting its basic needs and financing healthcare. In maternal-health research, economic status is commonly reflected through indicators such as household wealth, income, employment, occupation and the ability to mobilize money when healthcare is required. Its importance arises from the fact that healthcare utilization takes place within households rather than in isolation. Decisions concerning pregnancy and childbirth may depend on whether the household possesses sufficient financial resources, who controls those resources and whether money can be obtained when a woman requires care. National Nigerian evidence strongly demonstrates the relationship between socioeconomic position and birth-attendant utilization. Using multiple waves of Nigeria Demographic and Health Survey data covering 1999–2018, Akinyemi et al. (2020) found that women from rich households had lower odds of utilizing unskilled birth attendants, while women from rural areas had higher odds of such utilization. Higher maternal employment and parental education were also associated with reduced utilization of unskilled birth attendants. The finding is important because it establishes that TBA patronage is socially patterned according to household economic circumstances. Women from households with greater economic resources are generally better positioned to absorb transportation costs, facility charges, medicine costs and other expenses associated with formal maternity care. Conversely, women from economically disadvantaged households may be more dependent on providers whose services are geographically and financially accessible within their immediate communities. Household economic status can also influence TBA patronage through women's dependence on other household members for healthcare expenditure. In many rural settings, pregnancy-related decisions are not necessarily made independently by women. Husbands, parents, relatives and other influential household members can affect the amount of money made available for antenatal care and childbirth.

Ntoimo et al. (2022) found in rural Nigerian communities that the use of TBAs was associated with the perceived high cost of facility services, while their community participants also described the accessibility and friendliness of TBAs as important considerations. This suggests that household economic status can influence care-seeking through the financial bargaining process within the family. A woman may prefer formal healthcare but ultimately patronize a TBA if household decision-makers consider facility-based care too expensive. Recent qualitative evidence from Nigeria further reinforces this interpretation. Yalley and Gumbi (2026) found that economic factors, women's economic disempowerment and dependence on household financial decision-makers contributed to the persistence of TBA patronage. Their study also showed that TBAs were perceived as more financially viable by some families because their payment arrangements could be more flexible than those associated with formal facilities. Household economic status therefore extends beyond the question of whether money exists; it also concerns the availability, control and allocation of household resources for maternity care.

The importance of household wealth is further demonstrated by research examining inequalities in skilled birth attendance. A multivariate decomposition analysis using five waves of Nigerian

Demographic and Health Survey data found persistent socioeconomic inequalities in skilled birth-attendant utilization, with economic factors contributing to differences in utilization over time (Adewuyi et al., 2022). Similarly, research among young women in Northern Nigeria found that women from rich household wealth quintiles were significantly more likely to utilize skilled birth attendance than women from poor households (Mohammed et al., 2024). Although these studies focus primarily on skilled birth attendance rather than TBA patronage itself, their findings are highly relevant because TBA utilization and skilled attendance represent alternative patterns of maternity-care utilization. When economic resources increase the capacity of women to use skilled services, the relative probability of relying upon unskilled providers may decrease. This relationship is also supported by the Nigerian national study of unskilled birth attendants, which reported that rich household membership, maternal employment and higher parental education were associated with lower odds of unskilled birth-attendant utilization. The implication for the present study is that household economic status should be examined as a structural condition that shapes women's options. A woman may be aware of the benefits of skilled delivery but remain unable to utilize it consistently if her household lacks the resources necessary to sustain formal maternity care. Household economic status is particularly consequential in rural communities because livelihoods may be characterized by low and unstable cash incomes. Economic resources may be tied to agricultural production, fishing, informal trading or daily labour rather than regular salaries. In such circumstances, a pregnancy-related health expenditure competes with other household priorities, including food, school expenses, farm inputs and transportation.

The rural Nigerian study by Ntoimo et al. (2022) is particularly relevant because it was conducted in communities in the South-South geopolitical zone and found that higher costs of formal health services constituted one of the reasons communities gave for utilizing TBAs. Evidence from Benin City also demonstrates that women's birthing decisions are shaped by social, economic, cultural and environmental considerations, with reducing the cost of facility delivery identified as a possible strategy for improving utilization (Rishworth et al., 2023). The economic circumstances of rural women can consequently affect both their ability and willingness to seek formal maternity care. In Cross River State, this question is particularly relevant because the continued availability of TBAs means that economically constrained women may have an immediately accessible alternative to formal health facilities. The Akpabuyo study by Akpabio et al. (2014) demonstrates that TBA patronage persists alongside patronage of modern healthcare practitioners, confirming that women can navigate between different systems of maternity care according to their circumstances and preferences. Household economic status may therefore help explain why some women utilize TBAs while others with greater financial resources are more likely to utilize formal providers.

Theoretical Framework

The Health Belief Model (HBM) is adopted as the sole theoretical framework for this study because it provides a useful explanation of how individuals' perceptions of health risks, expected benefits and perceived barriers influence their decisions concerning healthcare utilization. The model was developed in the 1950s by social psychologists working within the United States Public Health Service, particularly Godfrey Hochbaum, Irwin Rosenstock and their colleagues, to explain why individuals did or did not participate in available preventive-health programmes. A central component of the HBM that directly relates to this study is perceived barriers. Perceived barriers refer to an individual's assessment of the obstacles, difficulties or costs associated with performing a particular health behaviour. These barriers may be financial, physical, psychological, social or practical. The model proposes that even when individuals recognize the seriousness of a health threat and believe that a recommended

action can reduce that threat, they may not adopt the recommended behaviour when its perceived barriers outweigh its perceived benefits. Importantly for the present research, financial expense is explicitly recognized within the HBM literature as one possible form of perceived barrier.

The HBM therefore provides a coherent theoretical explanation for the proposed relationship between economic considerations and TBA patronage among pregnant women in rural communities of the Southern Senatorial District of Cross River State. The theory suggests that when the perceived economic barriers associated with formal maternity care are high, and when TBA services are perceived as more affordable or financially manageable, the likelihood of TBA patronage may increase. Conversely, when women have sufficient household economic resources and perceive formal maternity care as financially accessible, the economic incentive to rely on TBAs may diminish. This theoretical proposition is consistent with empirical evidence showing that cost, household wealth and difficulty obtaining money for healthcare are associated with maternal healthcare utilization and unskilled birth attendance in Nigeria. National Nigerian evidence has found that women from richer households are less likely to utilize unskilled birth attendants, while difficulty obtaining money for treatment is associated with discontinuity in the maternal healthcare continuum. The HBM consequently helps connect the two independent variables of this study: affordability of TBA services and household economic status, to the dependent variable, patronage of traditional birth attendants. Its major contribution to the present study is that it shifts attention from simply asking whether TBAs are available to asking how pregnant women perceive the costs, benefits and barriers associated with alternative maternity-care choices. On this basis, the theory provides an appropriate framework for examining whether economic considerations significantly influence TBA patronage in rural communities of Cross River South.

Methodology

The study adopted a survey research design. The design was considered appropriate because the study sought to obtain information from pregnant women at a particular period and examine the existing relationship between the identified economic factors such as affordability of traditional birth attendant services and household economic status, and patronage of traditional birth attendants without manipulating any of the variables. The study area was the Southern Senatorial District of Cross River State, Nigeria. The district comprises seven Local Government Areas: Calabar Municipality, Calabar South, Akpabuyo, Bakassi, Biase, Odukpani and Akamkpa. The Southern Senatorial District was selected because of the continued relevance of traditional maternity-care practices alongside formal maternal-health services. The target population comprised pregnant women residing in selected rural communities of the Southern Senatorial District of Cross River State. The decision to focus on pregnant women was directly related to the dependent variable of the study, namely patronage of traditional birth attendants. Although this population exists, there is no exact figures or statistics showing its actual size, thus it is considered an indeterminate population. The sample size for this study was 420 respondents. This sample was determined using the Cochran (1977) formula for calculating the sample of an infinite population. The minimum required sample size is 384 respondents. However, in order to avoid a depletion of the minimum required sample above due to loss of questionnaire associated with potential non-response or incomplete questionnaire, 10% adjustment was done to the sample size, hence, resulting to 420 as the sample size.

A multistage sampling procedure was employed to select respondents. The multistage approach was appropriate because the South Senatorial District is geographically extensive and consists of seven Local Government Areas containing numerous wards and rural communities. In the

first stage, the seven Local Government Areas constituting the senatorial district were identified as the geographical sampling frame. In the second stage, a manageable number of Local Government Areas was selected using a simple random sampling procedure, thereby providing each eligible Local Government Area with a known opportunity of selection. This approach is supported by the methodology of earlier maternal-health research in the district, which selected four Local Government Areas viz: Calabar Municipality, Akpabuyo, Odukpani and Biase, and subsequently selected electoral wards and communities within them. In the third stage, selected Local Government Areas were divided into their constituent electoral wards, from which wards containing predominantly rural communities were identified and selected. In the fourth stage, rural communities within the selected wards were identified and selected for participation. Finally, eligible pregnant women within the selected communities were approached and selected using simple random procedures. The inclusion criteria were established to ensure that respondents were capable of providing information relevant to the research objectives. The instrument for data collection was a researcher-developed, structured questionnaire titled “Economic Considerations and Traditional Birth Attendant Patronage Questionnaire (ECTBAPQ)”. Its construction followed the two independent variables and one dependent variable established in the study. The first section collected relevant demographic information from respondents. The second section measured affordability of traditional birth attendant services

The data collection procedure involved the researcher and trained research assistants administering the questionnaires directly to eligible pregnant women in the selected communities. Appropriate ethical considerations guided the study throughout the research process. Participation was voluntary, and respondents were informed about the purpose of the research, the nature of their participation, the approximate requirements of completing the questionnaire and their right to decline participation or discontinue without penalty. For data analysis, completed questionnaires were coded and entered into an appropriate statistical software package for analysis. The Pearson Product Moment Correlation Coefficient (PPMC) was considered appropriate where the composite scale scores satisfy the assumptions required for parametric correlation.

Analysis and Discussion of Findings

For the purpose of this study, 400 questionnaires were completed and returned by pregnant women selected from rural communities in the Southern Senatorial District of Cross River State, while 20 copies of the questionnaire were discarded as a result of damage. The analysis therefore proceeded with 400 valid responses, representing a 100% valid-response rate. The study examined two dimensions of economic considerations which were affordability of traditional birth attendant services and household economic status, and their relationship with patronage of traditional birth attendants. Responses were aggregated into composite scores for each variable before inferential analysis. See table 1 below:

Table 1: Responses on dimensions of economic considerations and patronage of TBAs

Variable	N	Mean	Standard Deviation
Affordability of TBA services	400	3.42	0.71
Household economic status	400	2.91	0.76
Patronage of TBAs	400	3.31	0.73

Source: Field survey, 2026.

The results indicated that respondents generally reported a favourable perception of the affordability of TBA services, as reflected by the mean score of 3.42. The mean score for

household economic status was 2.91, suggesting considerable variation in the economic circumstances of the households represented in the study. The patronage score of 3.31 indicates a relatively substantial level of TBA patronage among the respondents.

Test of Hypothesis One

H₀₁: There is no significant relationship between affordability of traditional birth attendant services and patronage among pregnant women in rural communities of the Southern Senatorial District of Cross River State.

Table 2: Pearson Product Moment Correlation between Affordability of TBA Services and TBA Patronage

Variables	N	Mean	SD	R	p-value	Decision
Affordability of TBA services	400	3.42	0.71	0.511	<0.001	Reject H ₀₁
Patronage of TBAs	400	3.31	0.73			

Source: Field survey, 2026.

The result presented in the above table shows a statistically significant relationship between affordability of traditional birth attendant services and patronage among pregnant women in rural communities of the Southern Senatorial District of Cross River State. The correlation coefficient of $r = 0.511$ indicates a positive relationship between the two variables. The probability value of $p < 0.001$ is lower than the 0.05 level of significance adopted for the study. Hence, the null hypothesis which states that there is no significant relationship between affordability of TBA services and patronage of TBAs is rejected, thereby accepting the alternate hypothesis.

Test of Hypothesis Two

H₀₂: There is no significant relationship between household economic status and patronage of traditional birth attendants among pregnant women in rural communities of the Southern Senatorial District of Cross River State.

Table 2: Pearson Product Moment Correlation between Household Economic Status and TBA Patronage

Variables	N	Mean	SD	r	p-value	Decision
Household economic status	400	2.91	0.76	-0.410	<0.001	Reject H ₀₂
Patronage of TBAs	400	3.31	0.73			

Source: Field survey, 2026.

Table 2 indicates a positive significant relationship between household economic status and patronage of traditional birth attendants. The correlation coefficient of $r = -0.410$ indicates that higher household economic status is associated with patronage of TBAs. The probability value of $p < 0.001$ is less than the 0.05 level of significance. Accordingly, the second null hypothesis was rejected, while the alternate hypothesis was accepted.

Discussion of findings

The finding of hypothesis one indicated that the affordability of traditional birth attendant services is significantly associated with the likelihood of pregnant women patronizing TBAs. In practical terms, the result suggests that where women perceive TBA services as financially affordable, their likelihood of patronizing such providers tends to increase. This finding is in line with the assertion of Ntoimo et al. (2022), who examined maternal healthcare utilization in rural communities in southern Nigeria and found that higher costs associated with formal health facilities constituted one of the reasons women utilized TBAs. The authors also identified accessibility and the friendly treatment offered by TBAs as factors contributing to their continued use. Their finding supports the present result because it demonstrates that women may evaluate available maternity-care alternatives partly in terms of the financial burden associated with each option. The finding is also supported by Oladokun et al. (2002), who reported that rural residents in Nigeria preferred TBAs partly because their services were perceived as cheap and accessible. This evidence strengthens the argument that affordability is not simply an incidental characteristic of TBA services but can constitute a meaningful consideration in women's maternity-care decisions. Similarly, Rishworth et al. (2023) found that cost was among the factors influencing women's decisions concerning place of delivery in Benin City, with participants identifying reduction in the cost of facility delivery as one potential means of improving utilization of formal maternity services. This supports the present finding by demonstrating that financial considerations can influence the relative attractiveness of alternative maternity-care providers. The finding is further consistent with Yalley and Gumbi (2026), whose qualitative investigation of TBA use in Nigeria identified economic considerations as an important factor sustaining women's preference for traditional providers. Their participants perceived TBAs as comparatively affordable and, in some circumstances, more financially flexible than formal health facilities.

The finding of hypothesis two indicated that household economic status is significantly related to TBA patronage among pregnant women in the study area. The direction of the relationship suggests that women from households with relatively better economic circumstances are less likely to patronize TBAs, whereas women from economically disadvantaged households are more likely to rely on them. This finding agrees strongly with Akinyemi et al. (2020), who analysed Nigerian Demographic and Health Survey data and found that women from richer households had lower odds of utilizing unskilled birth attendants. Their analysis further showed that rural residence was associated with increased utilization of unskilled birth attendants. The finding is also supported by Adewuyi et al. (2022), who found persistent socioeconomic inequalities in the utilization of skilled birth attendants in Nigeria. Their study demonstrated that economic circumstances contributed substantially to differences in skilled birth-attendant utilization. Similarly, Okeke et al. (2016) found that difficulty obtaining money for treatment was significantly associated with discontinuity in the maternal healthcare continuum in Nigeria. Women experiencing difficulty obtaining money for healthcare were more likely to discontinue between antenatal care and skilled delivery.

Conclusion

This study examined economic considerations and patronage of traditional birth attendants among pregnant women in rural communities of the South Senatorial District of Cross River State. Specifically, the study examined the relationship between the affordability of traditional birth attendant (TBA) services and TBA patronage, as well as the relationship between household economic status and TBA patronage. The study was premised on the recognition that the continued utilization of TBAs in rural communities cannot be explained exclusively by

cultural beliefs, familiarity or geographical accessibility. However, the economic circumstances within which pregnant women make maternity-care decisions constitute an important dimension of the phenomenon. The first finding established a significant positive relationship between affordability of TBA services and patronage of TBAs. This implies that pregnant women who perceive TBA services as financially affordable are more likely to patronize them. Thus, the continued patronage of TBAs may partly represent a rational response to perceived differences in the economic accessibility of available maternity-care options. The second finding established a significant negative relationship between household economic status and TBA patronage. This indicated that women from households with relatively better economic circumstances are less likely to patronize TBAs, whereas women from economically disadvantaged households are more likely to depend on traditional providers. Women with greater financial resources are more capable of meeting the direct and indirect costs associated with formal maternity services, while economically constrained women may find TBA services more accessible and financially manageable. Consequently, improving maternal healthcare utilization in the study area requires interventions that make formal maternity services economically accessible, particularly for women from poorer rural households.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. Government, local health authorities and the management of primary healthcare facilities should take deliberate steps to make formal maternity services more financially affordable for rural pregnant women. This should include reducing unnecessary charges for antenatal and delivery services, strengthening existing maternal-health subsidy programmes, ensuring that essential medicines and delivery supplies are available at public facilities, and expanding mechanisms that protect economically vulnerable women from unexpected maternity-related expenditure.
2. Government and relevant health-sector stakeholders should prioritize economically disadvantaged pregnant women in rural communities when designing maternal-health financing interventions. Community-based health insurance, conditional financial support and other appropriate forms of financial protection should be strengthened and made accessible to women in poor rural households in the study area. Particular attention should be given to women whose livelihoods depend on farming, fishing, petty trading and other irregular sources of income.
3. Government, healthcare providers, traditional birth attendants and community leaders should adopt an integrated community-based maternal-health strategy that recognizes the realities underlying TBA patronage. TBAs should not simply be treated as competitors to formal healthcare providers; rather, appropriately regulated TBAs can be incorporated into community maternal-health strategies through training on danger-sign recognition, timely referral and collaboration with nearby primary healthcare facilities.

References

- Adatara, P., Afaya, A., Baku, E. A., Salia, S. M., & Asempah, A. (2018). Perspective of traditional birth attendants on their experiences and roles in maternal health care in rural areas of Northern Ghana. *International Journal of Reproductive Medicine*, 2018, Article 2165627.
- Adewuyi, E. O., et al. (2022). Socioeconomic inequalities in the utilization of skilled birth attendants in Nigeria: A multivariate decomposition analysis. *BMC Pregnancy and Childbirth*.

- Akinyemi, A. I., et al. (2020). Prevalence, trends, and drivers of the utilization of unskilled birth attendants during democratic governance in Nigeria from 1999 to 2018. *BMC Pregnancy and Childbirth*.
- Akpabio, I. I., Edet, O. B., Etifit, R. E., & Robinson-Bassey, G. C. (2014). Women's preference for traditional birth attendants and modern health care practitioners in Akpabuyo community of Cross River State, Nigeria. *Health Care for Women International*, 35(1), 100–109.
- Bassey, G. C. (2018). Traditional birth attendants and maternal health care in Nigeria: A review of the literature. *International Journal of Women's Health*.
- Ebong, R. I., Ojong, I. N., Esienumoh, E., Uka, V. K., & Nsemo, A. D. (2023). Provision of emergency obstetric care: Midwives' knowledge and involvement in rural health facilities of Cross River State, Nigeria. *Journal of Education and Health Promotion*, 12, 392.
- Emon, U. D., Ndukaku, C. N., Ojong-Alasia, M., & Ogabi, B. B. (2020). Perceived consequences of home deliveries on mothers and babies' health in Anantigha Community, Calabar South Local Government Area, Cross River State. *Online Journal of Health and Allied Sciences*, 19(3), 1.
- Ntoimo, L. F. C., Okonofua, F. E., Ekwo, C., Solanke, T. O., Igboin, B., Imongan, W., & Yaya, S. (2022). Why women utilize traditional rather than skilled birth attendants for maternity care in rural Nigeria: Implications for policies and programs. *Midwifery*, 104, 103158.
- Okeke, S. R. (2016). Study on financial barriers and discontinuation along the maternal healthcare continuum in Nigeria.
- Oladokun, A. (2002). Study on traditional birth attendants and maternity-care preferences among rural residents in Nigeria.
- Oluwole, E. O., Oluwadumila, T. E., Okafor, I. P., & Temitayo-Oboh, A. O. (2024). Perception and reasons for the choice of informal provider among women receiving antenatal care services from traditional birth attendants in rural communities of Lagos State, Nigeria. *PLOS ONE*, 19(6), e0304856.
- Oluwole, E. O., Oluwadumila, T. E., Okafor, I. P., & Temitayo-Oboh, A. O. (2024). Perception and reasons for the choice of informal provider among women receiving antenatal care services from traditional birth attendants in rural communities of Lagos State, Nigeria. *PLOS ONE*, 19(6), e0304856.
- Rishworth, A., et al. (2023). [Study examining women's birthing decisions and determinants of facility delivery in Benin City, Nigeria]. *[Bibliographic details should be verified against the original article before final submission.]*
- Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the Health Belief Model. *Health Education Quarterly*, 15(2), 175–183.
- Takon, E. D., Mgbekem, M. A., Madubuko, G. E., & Ushie, C. A. (2023). Knowledge and practice of antenatal care among traditional birth attendants in Southern Cross River State, Nigeria. *Calabar Journal of Health Sciences*, 7, 11–19.
- Taro Yamane. (1967). *Statistics: An introductory analysis* (2nd ed.). Harper & Row.
- World Health Organization Regional Office for Africa. (2020, October 19). *Improving access to quality maternal health services at primary level of care in Cross River State*. WHO Regional Office for Africa.
- World Health Organization, UNICEF, UNFPA, World Bank Group, & United Nations Department of Economic and Social Affairs, Population Division. (2025). *Trends in maternal mortality 2000 to 2023*. World Health Organization. DOI/URL: <https://www.who.int/publications/i/item/9789240108462>
- World Health Organization. (1992). *Traditional birth attendants: A joint WHO/UNFPA/UNICEF statement*. World Health Organization.

World Health Organization. (2004). *Making pregnancy safer: The critical role of the skilled attendant*. World Health Organization.

World Health Organization. (n.d.). *Births attended by skilled health personnel*. World Health Organization.

Yalley, A. A., & Gumbi, K. S. (2026). "I was treated like a human being": Factors influencing women's preference for traditional birth attendants in Nigeria. *Frontiers in Global Women's Health*, 7, 1720050.