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Assessment of the Effects of Traditional Medicine Use in Treating Malaria among Pregnant Women in Kuta Community, Shiroro Local Government Area, Niger State, Nigeria

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ABSTRACT

Malaria remains a significant public health concern in sub-Saharan Africa, particularly among pregnant women who are vulnerable to complications. This study investigates the factors influencing the use of traditional medicine, evaluates its perceived effectiveness, and examines its adverse effects among pregnant women in Kuta community, Shiroro LGA, Niger State. A descriptive cross-sectional design was adopted, and data were collected from 120 pregnant women using a structured questionnaire. Findings revealed high reliance on traditional medicine due to affordability, availability, and cultural beliefs. While many women perceived traditional medicine as effective, notable side effects, including diarrhoea and nausea, were also reported. Recommendations include enhanced public awareness, improved access to antenatal care, and collaborative engagement between traditional and formal health systems.

Key Words: Malaria, Traditional Medicine, Pregnant women

INTRODUCTION

Malaria, as defined by the World Health Organization (WHO, 2021), is a life-threatening parasitic disease transmitted through the bites of infected female Anopheles mosquitoes. The global malaria burden remains highest in sub-Saharan Africa, with Nigeria alone accounting for 25% of all reported cases globally (WHO, 2020; 2024). Despite a decline in global incidence between 2010 and 2017, Nigeria recorded increasing cases, indicating persistent challenges in malaria control.

Environmental conditions, such as stagnant water, poor sanitation, and dense vegetation, particularly in urban slums and rural communities, facilitate the spread of malaria vectors (Daher *et al*., 2019; Odii *et al*., 2024). Pregnant women are particularly vulnerable due to lowered immunity, and the disease can lead to maternal anaemia, low birth weight, and increased infant and maternal mortality (Lu *et al*., 2022; WHO, 2023).

Amidst these challenges, traditional medicine remains widely used in Africa. Defined by WHO (2024) as preparations using plant-based materials, these remedies are often perceived as more accessible and safer than modern pharmaceuticals. However, concerns persist regarding their efficacy and safety, particularly among pregnant women (Anywar *et al*., 2022; Obbo *et al*., 2023). In light of this, this study explores the use of traditional medicine for treating malaria among pregnant women in Kuta community, Niger State. This study

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aimed: to investigate the factors influencing the use of traditional medicine in treating malaria among pregnant women in Kuta community; to evaluate the perceived effectiveness of traditional medicine in treating malaria among pregnant women in Kuta Community; and to assess the adverse effects of traditional medicine use during pregnancy in the context of malaria treatment Kuta Community.

METHODOLOGY

Design and Setting:

A descriptive, non-experimental research design was employed. The study was conducted in Kuta, a rural community in Shiroro LGA, Niger State, Nigeria, predominantly inhabited by farmers and traders.

Population and Sampling:

Out of 200 targeted residents, 120 pregnant women participated, representing the available pregnant population at the time. Random sampling ensured equal representation.

Data Collection Instrument:

A structured, self-administered questionnaire was used. The tool was validated by academic experts to ensure clarity and content relevance. Responses were analyzed using descriptive statistics (frequencies and percentages).

RESULTS AND DISCUSSIONS

Socio-demographic Characteristics

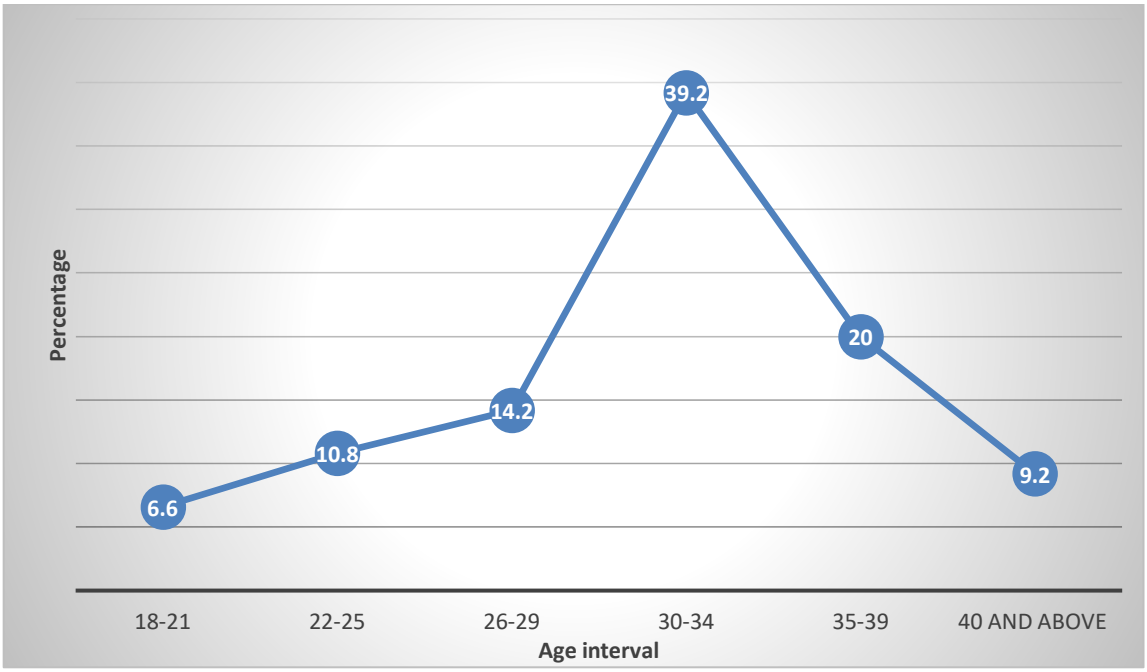

Fig. 1.: Age Distribution of the respondents

It was revealed that the age group with the highest participants was within the ages of 30-34 (39.2%), followed by 35-39 (20%).

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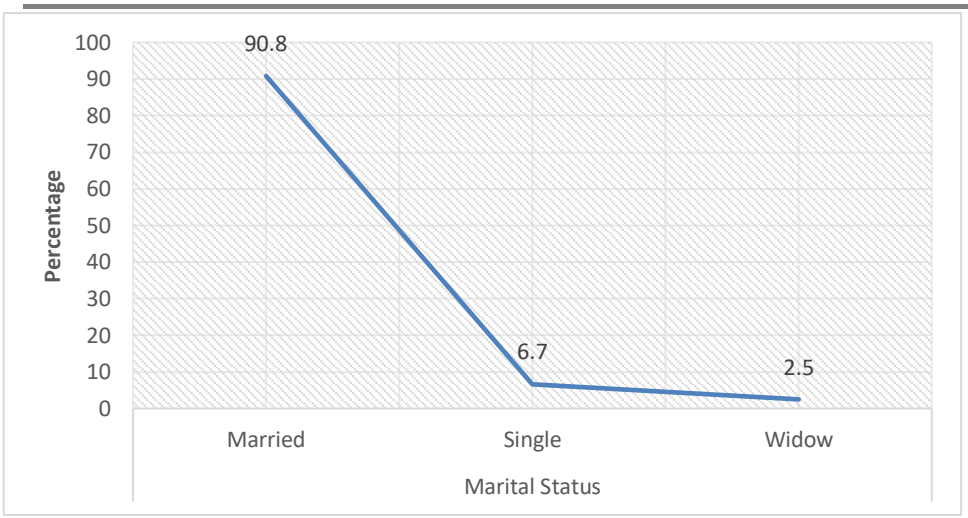

Fig.2.: Marital Status of the respondents

The marital status of the respondents revealed that majority of the respondents were married with the percentage of 90.80%, followed by single with a value of 6.70 %.

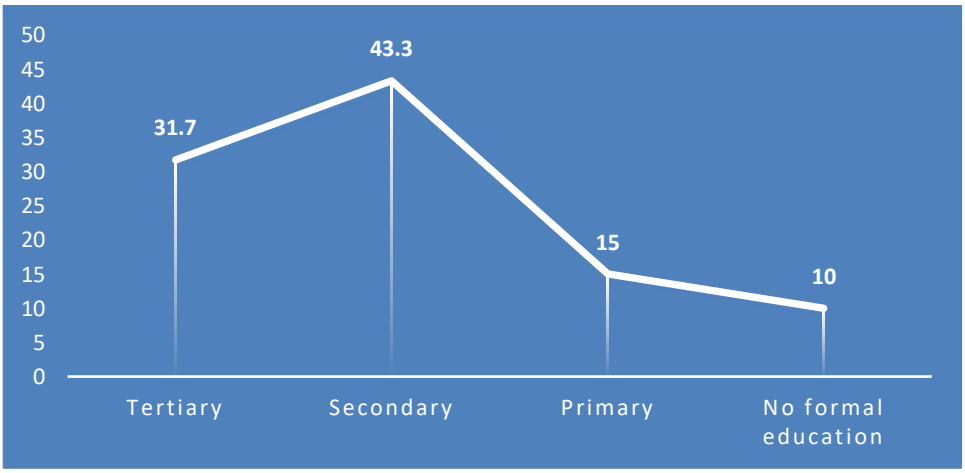

Fig. 3.: Education level of the respondents

The educational level of the respondents revealed that the majority of the respondents, 43.30% had secondary school certificates as their highest qualification at the time of this study followed by 31.70% with tertiary education certificates. The least value, 10.0% is an indication that a good number of the responded have the basic education, although not adequate as expected.

Fig.4.: Occupation of the respondents

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Results of the occupation of the respondents showed that majority of the respondents in the community were traders with the value of 41%, followed by Civil Servants, 36%.

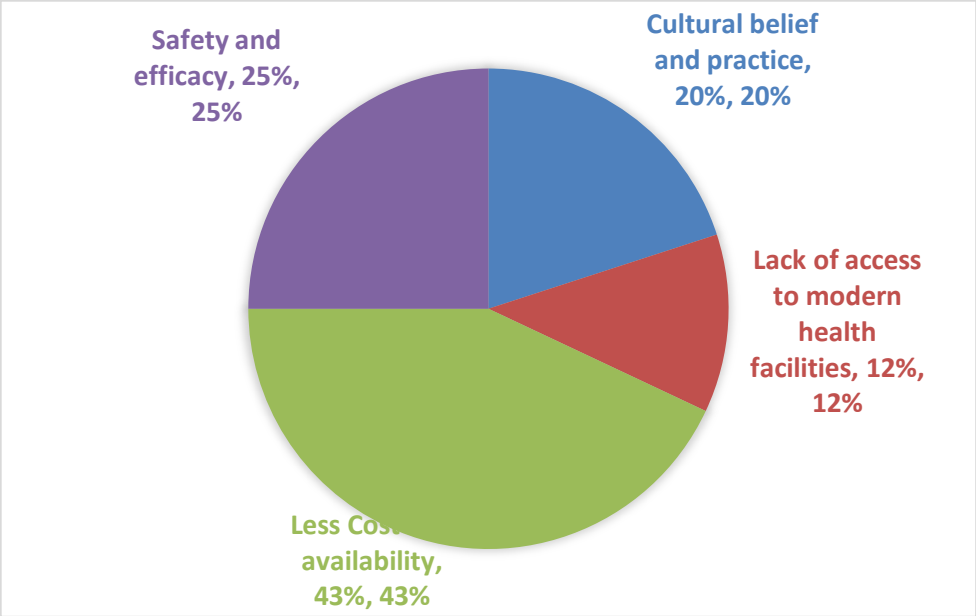

Fig. 5.: Factors Influencing Use of Traditional Medicine

42.5% of the respondents cited cost and availability as the primary factor, 24.2% believed in its safety and efficacy, 17.5% were influenced by cultural beliefs.

The results in Fig. 5 above indicate that, Less Cost and Availability (43%) is the most influential factor driving the use of traditional medicine. It suggests that traditional remedies are more affordable and easier to access, especially in rural or underserved areas. Many individuals, particularly those from low-income backgrounds, rely on these treatments as they cannot afford or reach modern healthcare facilities. This finding aligns with studies by Lu *et al.*, (2022) and WHO (2021), which noted that economic barriers and proximity significantly influence healthcare decisions in sub-Saharan Africa.

Again, a substantial portion of respondents trust traditional medicine due to perceived effectiveness and fewer side effects. This aligns with findings from Teng *et al.*, (2022), who observed that many individuals believe traditional remedies are safer, especially for managing chronic or culturally-defined illnesses like malaria, infertility, or spiritual ailments. The long history of use within communities also reinforces confidence in their efficacy.

Similarly, Cultural factors remain a strong influence, with 20% of respondents citing this as their reason. This includes indigenous knowledge passed through generations, religious beliefs, and community norms. According to Odii *et al.*, (2024), cultural heritage and spiritual beliefs are major contributors to the persistent use of traditional medicine in African societies, especially among the elderly and pregnant women.

In another development, Lack of Access to Modern Health Facilities (12%) is the least cited factor, it still reflects a significant structural problem in healthcare delivery. Poor transportation, long distances to clinics, and the absence of trained medical personnel contribute to reliance on traditional medicine. Studies in rural Nigeria and other sub-Saharan African countries confirm that healthcare accessibility remains a barrier, particularly for pregnant women and children (Lu *et al.*, 2022).

This study corroborates findings from previous literature on the widespread use of traditional medicine among African women, particularly during pregnancy (Okello & Kang, 2019). Cultural beliefs, accessibility, and cost are major drivers. While many women perceived traditional medicine to be effective, the lack of standardized dosage and scientific validation of these remedies raises concerns (Teng *et al.*, 2022).

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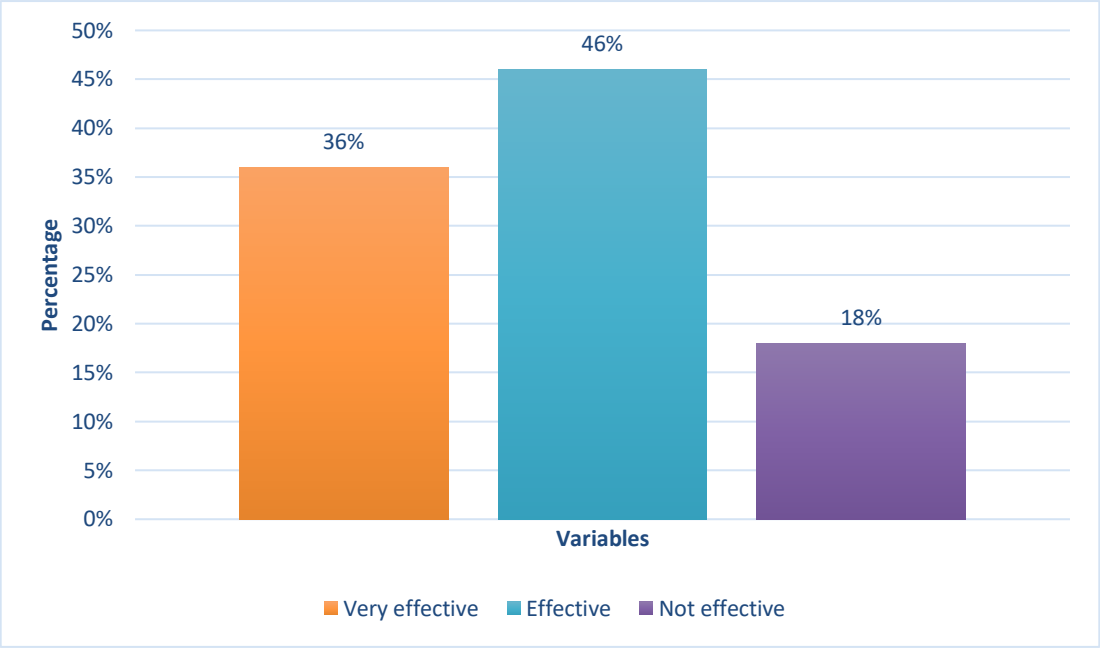

Fig. 6.: Perceived Effectiveness of traditional medicine in the treatment of malaria among pregnant women in Kuta community

The findings from this study reveal that a significant proportion of pregnant women in the Kuta community perceive traditional medicine as effective in the treatment of malaria. As shown in Fig. 6, 34.2% of respondents described traditional medicine as very effective, while 44.2% considered it effective. Only 16.6% believed it to be not effective. This suggests that traditional medicine is highly trusted and widely used for malaria treatment during pregnancy in the study area.

This high level of perceived effectiveness (78.4% combined) aligns with findings from other parts of sub-Saharan Africa where traditional medicine plays a dominant role in healthcare delivery. According to Amzat and Razum (2014), cultural familiarity, accessibility, and affordability contribute to the widespread use of traditional remedies, particularly in rural communities with limited access to modern medical facilities. In a similar vein, Fakeye *et al.*, (2009) noted that a substantial proportion of pregnant women in Nigeria use herbal medicine for malaria and other pregnancy-related ailments, often with the belief that it is both safer and more natural.

The low percentage (16.6%) of respondents who view traditional medicine as ineffective may reflect personal experiences of treatment failure, adverse reactions, or awareness of the limitations of non-biomedical therapies. However, the relatively small size of this group indicates a dominant positive perception within the community.

This finding must be considered within the broader context of maternal health in malaria-endemic regions. Malaria during pregnancy remains a significant public health challenge in Nigeria, contributing to maternal anemia, miscarriage, and low birth weight (WHO, 2021). While traditional medicine may offer symptomatic relief or perceived benefits, there is limited scientific evidence supporting the efficacy and safety of many traditional remedies, especially for pregnant women. The reliance on unregulated traditional therapies could delay appropriate treatment, leading to complications.

Furthermore, the continued preference for traditional medicine may be driven by systemic challenges such as inadequate health infrastructure, poor transportation networks, cost barriers, and negative experiences with formal healthcare providers. This is consistent with the findings of Ogunwale *et al.*, (2024), who emphasized that distrust in public health services often drives rural populations toward alternative treatments.

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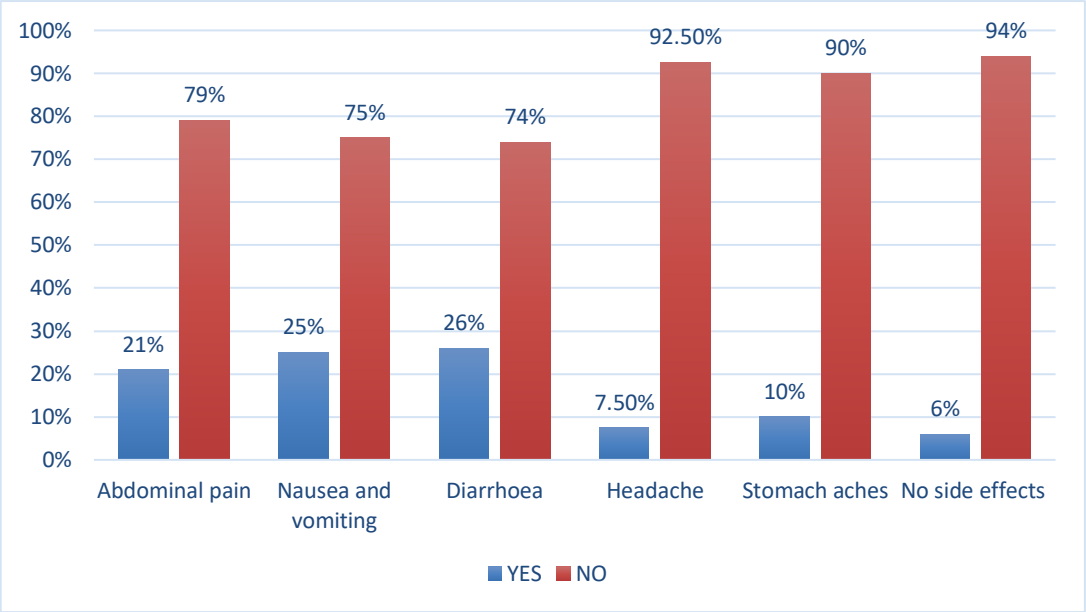

Fig. 7.: Reported Effects of traditional medicine used in the treatment of malaria among pregnant women in Kuta Community

Fig. 7 above presents data on the side effects reported by pregnant women who used traditional medicine for the treatment of malaria. The results indicate that while some adverse effects were experienced, they were relatively low in prevalence across the board. The most common side effects reported were:

Diarrhoea (26%)

Nausea and vomiting (25%)

Abdominal pain (21%)

These symptoms are relatively common gastrointestinal side effects and may be linked to the composition or preparation methods of traditional herbs, some of which may be harsh on the digestive system or improperly dosed. These findings align with earlier research by Goodman *et al*. (2022), which noted that certain herbal concoctions can irritate the gastrointestinal tract, particularly in vulnerable populations like pregnant women.

Other side effects reported include:

Stomach aches (10%)

Headache (7.5%)

These are mild in comparison and reported by a small proportion of the respondents. Notably, only 6% of respondents reported no side effects, which may suggest that traditional remedies, though perceived as natural and safe, are not entirely free from adverse effects. However, the fact that 94% reported no side effects under the "No side effects" category indicates that most of the respondents either experienced very mild or no discomfort at all.

This discrepancy may stem from how the question was interpreted or the overlap in symptom reporting. It's possible that respondents who experienced mild symptoms did not classify them as significant "side effects."

According to WHO (2023), while traditional medicine plays a vital role in primary health care, especially in rural communities, its unregulated use can pose health risks due to unknown dosages and lack of standardized preparation. Studies such as those by Ismail *et al*. (2023) have emphasized the need for integrating traditional medicine into formal health systems with appropriate training and monitoring to enhance safety. Furthermore, the findings align with reports by WHO (2024) and Obbo *et al*., (2023), highlighting the health risks of

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unregulated traditional medicine use, especially during pregnancy. These risks may be exacerbated by poor disclosure to healthcare providers and lack of formal education.

These findings underscore the potential health risks, particularly gastrointestinal symptoms, linked to traditional remedies.

CONCLUSION

Malaria continues to pose a major threat to maternal and child health in Nigeria. In Kuta community, the use of traditional medicine remains widespread, driven by cultural beliefs, perceived effectiveness, and socioeconomic factors. However, the associated effects necessitate urgent public health intervention. In conclusion, the side effects of traditional medicine for malaria treatment among pregnant women in the study area appear to be relatively low in frequency and severity. However, the presence of symptoms like diarrhoea, nausea, and abdominal pain highlights the need for caution, education, and regulatory oversight in the use of traditional remedies during pregnancy.

RECOMMENDATIONS

Intensify awareness campaigns on the risks of self-medication during pregnancy.

Involve traditional practitioners in safe maternal health promotion strategies.

Improve the availability and affordability of antenatal services in rural areas.

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