

Parents' Cultural Practices and Infant Mortality in Mangu Local Government Area of Plateau State, Nigeria

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Abstract

Infant mortality remains a significant public health concern in Nigeria, with cultural practices playing a crucial role in child survival. This study examined parents' cultural practices and infant mortality in Mangu Local Government Area of Plateau State, Nigeria. The study used a descriptive, cross-sectional survey research design. A sample size of 400 respondents was selected from the total population of 442,100 using the Tare Yamane formula. Questionnaires were distributed to 400 randomly selected participants across all the wards in Mangu LGA. Interviews were also conducted with six key informants to complement the data gathered from the questionnaires. Responses from the questionnaires were analyzed using descriptive statistics of frequency counts and percentages. Qualitative data were analyzed while outlining the key point presented by the key informant. The study revealed that cultural practices, such as reliance on traditional herbs, beliefs in supernatural

causes, and generational curses, significantly contribute to infant mortality in Mangu LGA by discouraging timely medical interventions. The study concludes that deep-rooted trust, affordability, and community influence sustain these practices, making it difficult for parents to fully embrace modern healthcare. The study recommended that enhancing healthcare access, educating communities on infant health, and collaborating with traditional leaders can bridge the gap between cultural practices and modern medical care, promoting timely and effective interventions.

Keywords: Parents' Culture, Practices, Infant, Mortality

INTRODUCTION

One of the accepted indicators used globally for the health and socio-economic status of a given population is the infant mortality rate (Sharifzadeh, Namakin & Mehrjoofard, 2008). In the past two decades, many countries have achieved significant improvements in reducing infant mortality (IM). According to the UN 2018 mortality report, the Infant mortality rate (IMR) declined by 51% between 2000 and 2017 (Damilola, Ayomide, Yueming, Jianrong, Fitriana & Hezekiah, 2022). Despite this progress, wide disparities exist between low-income and high-income countries with 76 deaths per 1000 live births in low-income countries and 7 deaths per 1000 live births in high-income countries respectively. Nigeria reported 72 deaths per 1000 live births among infants in 2020 with disparities across its regions and geopolitical zones (World Bank, 2022). Nigeria has worse IMR compared with neighbouring West African countries such as Benin with 57, Cameroon with 48, Togo with 44, and Ghana with 33 deaths per 1000 live births, respectively.^{4,5} The rate makes Nigeria one of the countries with the highest IMR rate in Africa (World Bank, 2022).

However, efforts to address the high infant mortality rates in Nigeria and other developing countries date back to the World Summit for Children (WSC) as part of the United Nations in 1990 which brought the welfare of children to the forefront of the global agenda and a promise to improve the lives of children in every part of the world. It was further supported by the National Child Welfare Committee (NCWC) of Nigeria which adopted specific actions to improve child survival in Nigeria. Actions included combating

childhood diseases through low-cost remedies and strengthening the Basic Health Services Scheme (BHSS), prioritizing the prevention and treatment of AIDS, providing universal access to safe drinking water and sanitary excreta disposal, and controlling for waterborne diseases (Bolu-Steve, Adegoke & Kim-Ju, 2022). Yet, despite these actions, Nigeria continues to be plagued by high infant mortality rates, with many infant deaths that seemingly could have been prevented through timely and adequate medical care.

Cultural beliefs and practices have a considerable influence on the health behaviour of Nigerians despite the numerous campaigns; awareness etc. carried out by the government and other public and private organizations. Some researchers (such as Ariyo, Ozodiegwu, & Doctor, 2017, Fayehun & Obafemi, 2012 & Nzewi, 2001) have pointed out the role of cultural beliefs in infant mortality where the endorsement of certain cultural beliefs may be related to the prevention of appropriate care for sick children and lead to infant mortality. Interestingly, most social groups vary by their distinct cultural traits, including their cultural beliefs and behaviours. Most of these cultural beliefs have existed long before the colonial days and the advent of orthodox medicine and include the belief that angry gods and evil spirits are the major causes of illness and, as such, the presence of an illness may be seen as a warning sign of an imbalance between the natural and the spiritual world (Agara, Makanjuola, & Morakinyo, 2008). Among ethnic groups in Nigeria, there is the belief that no matter how hardworking individuals are, there are forces that can block their progress. Some professionals have attributed infant mortality rates to traditional beliefs and practices that mothers may adhere to in Nigerian society where people believe something or someone is behind evil occurrences and the culprits of infant death (Bolu-Steve, et al., 2022).

Literature Review

Veronica & Ebingha (2018) were of the view that culture has an important influence on the health behaviour of people especially in developing countries where the majority of the people are traditionally oriented and superstitious. Among the predominantly rural populace, ill health is commonly believed to be due to evil mechanization of witchcraft, magicians, wizards, gods, and ancestors and this influences the health-seeking behaviour of the people. Maternal and child health are inseparable (Ihejiamaizu, 2002). Studies have shown that whatever affects the health of the mother affects the child (WHO, 2017). It is observed that when a woman gets inadequate medical care, or none at all during pregnancy,

childbirth, and postnatal period, her baby also receives little or no medical care. The WHO's guidelines for essential newborn care include hygiene during delivery, keeping the newborn warm, early initiation of breastfeeding, exclusive breast-feeding, care of the eyes, care during illness, immunization, and care of low birth-weight newborns (Chandrashekhar, Hari, Binu, Sabitri and Neena 2006). The leading causes of infant mortality in Nigeria are preventable which with the adoption of the WHO's guideline essential care for newborns can reduce substantially the infant mortality rate in the country. The leading causes are birth asphyxia, pneumonia, pre-term birth, complications, diarrhoea, malaria, measles, and malnutrition.

In Nigeria, certain practices may be related to greater health risks for infants. As an example, one harmful practice involves the traditional surgical cut performed on the umbilical cord of an infant by traditional birth attendants who are preferred due to their easy availability, intimate relations, and low fees. Not being aware of the concept of using sterile instruments, birth attendants may use different types of instruments such as blades, knives, or bamboo edges to cut the umbilical cord of the newborn. After cutting the umbilical cord, they use different applications on the navel of the newborn, including cow dung, talc powder, cow urine, and cow bile to clean the umbilical cord, which can lead to infant death (Veronica & Ebingha, 2018). Other examples of cultural practices include mothers resorting to native medicine rather than accessing proper medical attention when children have problems related to convulsions or dysentery.

Furthermore, in Nigeria, Veronica and Ebingha (2018) posited that if the cause of an illness is not properly diagnosed, people tend to turn to traditional spiritual healers to help them identify the cause of the illness. In these cases, the cause is always supernatural, and usually, a member of the extended family will be accused of causing the illness. Oftentimes, these traditional spiritual healers adduce the cause of the illness to the operation of witches that need to be appeased or placated through processes such as rituals, sacrifices, and other traditional form of worship. In most cases, the traditional healers are the medium for such appeasement to stop the innocent child from being harmed. If a child is thought to have been bewitched, herbalists are consulted to cure the victim by propitiation. One illustration involves a folklore explanation, in Yoruba: "Aje ke lana, omokuloni, tani ko mope is ana lopa moonie" (the witch cried yesterday, the child died today); the interpretation of that means a child's death is often attributed to the operations of witchcraft who then would doubt that the witch that cried yesterday is responsible for the death of the child. While

witches draw their powers from the cosmic realm, sorcerers get their power by invoking spirits (Agara, Makanjuola & Morakinyo, 2008). Olorundare (1998) believes that witchcraft is a dreaded word in Nigeria and that it is not uncommon for people to believe that there is nothing like a natural death.

Other examples of cultural practices include the Hausas from the northern parts of Nigeria who believe in the existence of Allah (God) as a highly regarded supreme being who judges by rewarding and punishing each person related to that person's deeds (Babatunde, 2006). According to Adewale, Adedoun, Fola, and Olufemi (2019), most Northerners believe in destiny, whether good or bad, as preordained by Allah. Central to this belief is the use of herbal remedies for physical aspects, magical rituals for reversing what is beyond normal, and sacrifices to appease supernatural agencies. Northerners also attribute natural illness to be intensified by the activities of enemies, spirits, or demons. Olorundare (1998) reported that for the prevention of evil, some substances such as cowries, scents, features, animal skin, and alum are burnt, which they put on the skin of a sick child to prevent death. Yet, despite the common beliefs related to cultural practices and illness, it is not clear based on extant literature the specific cultural beliefs that may be related to infant mortality and how these cultural beliefs may vary by age, education, and income as well as marital status, religious and ethnic group affiliation, and locality.

More recently, a study by Geoffrey (2024) identified that misconceptions about the causes of illness might lead to misconceptions about treatment. The practitioners of traditional treatments for mental illness fill a major gap in mental health service delivery because of beliefs about the causes of mental illness. Cultural and traditional beliefs in supernatural causes and remedies of mental illnesses influence people's knowledge and attitudes towards mental illness and help-seeking behaviour. Many traditional belief systems in Ife Central LGA attribute mental health problems to the influence of ancestors or bewitchment, and traditional healers are, therefore, viewed as the experts in these matters. These traditional healers are consulted as either the first step in seeking help or as the sole providers of mental healthcare (Geoffrey, 2024).

According to Oke (1995), African societies perceive illness from three sources: natural, supernatural, and mystic when infants fall ill instead of utilizing orthodox practitioners, attention will be directed at seeking supernatural interpretations of the illness and cure. Certain illnesses such as diarrhoea and teething are believed to be either consequences for

wrongdoing, bad food, signs of growth, or bad weather. He further revealed that an individual's belief and attitude about the effectiveness of particular health care influences one's choice of which health care to utilize. Nwaokoro, Ibe, Ihenacho, Emerole, Nwufo, Ebiriekwe, and Onwuliri (2015) reported that a common belief among the Yoruba is that the enemies are the cause of measles attacks. Also, when diarrhoea occurs, it is seen as a way of ridding the body of impurities, a sign of teething, stretching, or crawling. These beliefs affect people's attitudes and behaviour towards childcare and health strategies. Udoh, Ebong, and Undelikwo (2012) discovered that there exists a strong belief in witchcraft and fate among the Ibibio and that such beliefs enhance the patronage of diviners, faith-based facilities-herbalists, and traditional birth attendants.

Theoretical Framework

Health Belief Model (HBM)

The Health Belief Model (HBM), introduced in the 1950s by Hochbaum, Rosenstock, and Kegels, offers a framework for understanding health behaviours based on individual perceptions. It suggests that people are motivated to act when they perceive themselves or their loved ones as susceptible to a health risk, recognize the severity of its consequences, see benefits in taking action, and believe they can overcome barriers. Cues to action and self-efficacy further influence their willingness to adopt health interventions (Rosenstock, 1974).

In Mangu LGA, the HBM explains how cultural practices shape parents' decisions regarding infant healthcare, which impacts infant mortality rates. Many parents trust traditional practices to protect their children, reducing their perceived need for modern healthcare. Barriers such as mistrust of Western medicine, cultural norms, and financial constraints hinder access to interventions like immunization and antenatal care. However, community leaders and health workers can serve as cues to action, promoting modern practices while respecting cultural values. Increasing parental confidence through culturally sensitive education can encourage the adoption of evidence-based healthcare.

The HBM is highly relevant for addressing infant mortality in Mangu LGA by identifying and addressing perceptions that influence health behaviours. Its strength lies in providing a structured, adaptable framework for diverse populations, but it has limitations, such as focusing on individual behaviours while overlooking systemic challenges like poverty and

inadequate healthcare infrastructure. Despite this, the model offers valuable insights for designing culturally appropriate interventions to reduce infant mortality.

METHODS

The study used a descriptive, cross-sectional survey research design. A sample size of 400 respondents was selected from the total population of 442,100 using the Tare Yamane formula. Questionnaires were distributed to 400 randomly selected participants across all the wards in Mangu LGA. Interviews were also conducted with six key informants to complement the data gathered from the questionnaires. Responses from the questionnaires were analyzed using descriptive statistics of frequency counts and percentages. Qualitative data were analyzed while outlining the key point presented by the key informant.

RESULTS AND DISCUSSION

Table 1: Respondents' rating of Impact of Cultural Practices on Infant Mortality in Mangu LGA N=396

Cultural Practices Dev.	SA	A	U	D	SD	Mean	Std
Dependence on traditional							
Herbs only	201	117	21	46	11	4.14	1.122
Linking infant health							
To supernatural forces	161	93	73	39	30	3.80	1.277
Linking Infant Health to							
Generational & family issue	121	88	59	93	35	3.42	1.364

The table above illustrates respondents' ratings on the impact of cultural practices on infant mortality in Mangu LGA, assessed using a 5-point Likert scale. All cultural practices examined had mean scores above the threshold of 2.5, indicating their perceived susceptibility to contributing to infant mortality. Among the practices, the highest-rated concern was the reliance on traditional herbs for treating infant health needs (Mean = 4.14,

Std Dev = 1.122). This practice suggests a strong preference for traditional methods, which may delay or replace modern medical interventions, increasing health risks for infants.

Linking infant health to supernatural forces, such as spirits or curses, ranked second (Mean = 3.80, Std Dev = 1.277). This finding underscores the influence of spiritual beliefs, which often lead to the prioritization of rituals over timely medical care. The third notable practice was associating infant health problems with generational or family issues (Mean = 3.42, Std Dev = 1.364), reflecting a tendency to attribute medical conditions to familial or ancestral causes rather than seeking healthcare solutions.

The standard deviations for all practices were above one, indicating considerable variability in respondents' opinions. This variability could stem from differences in cultural adherence or exposure to healthcare education within the community. Overall, these findings highlight the critical need for targeted public health interventions that address cultural misconceptions and promote the adoption of modern healthcare practices to reduce infant mortality in Mangu LGA.

Participants were asked about the cultural practices that contribute to infant mortality in Mangu LGA. The findings of the study showed reoccurring reports of high levels of cultural practices that contribute to infant mortality in Mangu LGA. One of the interviewees, who is 57 years old, expressed that:

Traditional herbs are widely trusted in this community because they are affordable and readily available. However, parents often delay seeking hospital care until it's too late, which increases infant deaths (KII/Health Worker, Mangu).

Another interviewee expressed that:

Elders pass down the knowledge of herbal remedies, and many believe these herbs are the only solution for infant illnesses. Unfortunately, this has led to cases where preventable conditions become fatal due to lack of proper treatment (KII/Community Elder, Mangu).

Another interviewee expressed that:

We face challenges convincing parents to use modern medicine. Many fear hospital drugs will harm their babies or think herbs are spiritually superior, but this misconception has led to several avoidable deaths (KII/NGO Representative, Mangu).

The key informant's response underscores a significant issue within the community regarding healthcare practices and infant mortality. The trust placed in traditional herbs

stems from their affordability and wide availability, making them a popular first line of defence for many parents. In this context, these herbs are not only seen as a cost-effective solution but also as part of the community's established cultural practices. However, the informant points out a critical concern: while traditional herbs are widely used, parents often delay seeking hospital care, which can exacerbate the situation when an infant's condition worsens. This delay in seeking medical attention can result in preventable fatalities, as serious health conditions may not be adequately addressed in time with traditional remedies alone. The informant's position highlights the complex dynamics between cultural practices and modern healthcare systems. While the use of traditional herbs reflects a deeply rooted belief in their efficacy, it also poses a risk when it leads to hesitation or delay in seeking professional medical care. This situation calls for a careful approach that respects cultural practices while emphasizing the importance of timely and effective medical intervention, especially for vulnerable populations such as infants.

Linking infant health to supernatural forces is a significant cultural practice identified as contributing to infant mortality in Mangu LGA. This belief system attributes infant illnesses or deaths to supernatural causes, such as curses, evil spirits, or spiritual attacks. One of the interviewees, who is 57 years old, expressed that:

Parents believe illnesses like convulsions or diarrhoea are caused by evil spirits. Instead of going to the hospital, they first consult spiritual healers, which often delays life-saving treatment. In some cases, parents think their infants are cursed or possessed. They turn to traditional rituals for solutions, ignoring medical advice, which contributes to the rising mortality rate (KII/Community Leader, Mangu).

The key informants collectively highlight the significant role that beliefs in supernatural forces play in shaping health-seeking behaviours within the community, particularly regarding infant health. According to the community leader, illnesses such as convulsions and diarrhoea are often perceived as caused by evil spirits, leading parents to consult spiritual healers instead of seeking medical care. This reliance on spiritual remedies, though deeply rooted in cultural practices, delays critical medical treatment and increases the risk of infant mortality. The youth leader further emphasizes that some parents view their infants as cursed or possessed, turning to traditional rituals rather than medical interventions, which exacerbates the mortality rate. This belief in supernatural causality is, as noted by the health advocate, one of the primary barriers to improving child health in the region. They

argue that the community needs more education to help parents understand the real causes of diseases and the importance of seeking medical care promptly. Addressing these misconceptions through education and awareness campaigns could be crucial in bridging the gap between traditional beliefs and medical practices, ultimately reducing preventable infant deaths.

Linking infant health to family curses reflects a deeply ingrained cultural belief in Mangu LGA, where sometimes infant health issues are often seen as the result of generational curses or ancestral grievances. One of the interviewees, who is 57 years old, expressed that:

Parents often attribute their baby's illness to generational curses, wasting time and resources on traditional healers rather than addressing the actual medical condition. Family disputes and generational issues are blamed for infant health problems, leading parents to seek spiritual solutions instead of medical care. This misconception costs lives (KII/ Youth Leader, Mangu).

Another interviewee expressed that:

It is common for families to think their problems are rooted in curses. This belief distracts them from taking practical steps to save their infants, like accessing medical care on time (KII/ Health Worker, Mangu).

The key informants provide a critical perspective on the role of family curses in shaping health-seeking behaviours within the community, particularly regarding infant health. The community elder points out that parents often attribute their infant's illness to generational curses, which leads them to seek out traditional healers rather than addressing the actual medical issue. This reliance on spiritual solutions can delay or prevent life-saving medical interventions. The youth leader adds that family disputes and generational issues are frequently blamed for health problems, diverting attention away from necessary medical care. This misconception is not only misguided but also costly, as it contributes to the rising mortality rate by preventing timely access to healthcare. Similarly, the health worker underscores how the belief in family curses distracts families from taking practical steps to ensure the health and well-being of their infants, particularly by delaying or neglecting medical care. Collectively, these responses highlight how deeply ingrained cultural beliefs in curses and spiritual causes of illness can negatively impact health outcomes. To address this, there is a clear need for education that helps parents understand the actual causes of infant health problems and the importance of seeking medical treatment promptly.

CONCLUSION

The findings from the study highlight the significant role cultural practices play in contributing to infant mortality in Mangu LGA. Key practices identified include dependence on traditional herbs, linking infant health to supernatural forces, and attributing health problems to family curses or generational issues. These practices are deeply rooted in cultural beliefs and traditions, with parents often prioritizing traditional remedies or spiritual solutions over modern healthcare. Dependence on traditional herbs emerged as the most critical factor, reflecting widespread trust in these remedies despite their limitations. Similarly, beliefs in supernatural causes and generational curses delay or replace timely medical interventions, increasing risks to infant health. The variability in respondents' opinions indicates differing levels of cultural adherence, likely influenced by access to healthcare education and awareness.

The preference for cultural practices is largely attributed to their affordability, accessibility, and deep-rooted trust in traditional methods passed down through generations. Many parents perceive traditional remedies as more effective and spiritually significant than modern healthcare. Additionally, mistrust of hospital treatments, fear of medical procedures, and the influence of community elders and spiritual leaders reinforce the reliance on these practices. These factors collectively shape health-seeking behaviours, making it challenging for parents to entirely adopt modern healthcare solutions for their infants.

Recommendations

1. Implement community-based health education programs to raise awareness about the medical causes of infant illnesses and the importance of seeking timely professional care. These programs should also address misconceptions about cultural practices and their impact on infant health.
2. Collaborate with traditional, spiritual, and community leaders to serve as advocates for modern healthcare practices. Their influence can help bridge the gap between cultural beliefs and medical interventions, encouraging families to seek appropriate care.
3. Enhance the availability and affordability of healthcare services in rural areas to reduce the dependence on traditional remedies. This includes building more

healthcare centres, ensuring the availability of trained medical personnel, and providing subsidized or free infant healthcare services.

4. Develop culturally sensitive healthcare strategies that incorporate safe and beneficial aspects of traditional practices while promoting modern medical treatments. Training traditional healers to recognize severe health conditions and refer cases to healthcare facilities can help improve outcomes.

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