NUTRITION

Traditional Amulets, Talismans and Child Health in Africa

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Published November 2026

Abstract

Objectives: This study examines the types and indications of amulets, talismans, and bands, among malnourished children admitted to an inpatient therapeutic feeding centre. **Methods:** This was a cross-sectional study conducted between May and September 2026. Children admitted into the project's inpatient therapeutic feeding centre with traditional applications were recruited. A semi-structured questionnaire obtained information on demography, location of attachment, reason, cost implications, and belief about efficacy. Socioeconomic class was defined using the Oyedeji Classification. **Results:** Of 2,834 children admitted into the centre via the Ambulatory therapeutic feeding centre (ATFC) and spontaneous admission, the five-month prevalence of traditional applications was 5.3% (149 patients). The mean age of the participants was 16.93 months. The study group includes 90 males and 59 females (sex ratio 1.5:1) aged 3 months- 36 months. The applications used included neckbands (52.7%), waistbands (34.8%), and ankle bands (11.0%). Reasons for the application included teething (38.3%), to aid walking (8.5%), whooping cough (8.0%), malnutrition (7.0%), and warding off evil spirits (6.4%). The socioeconomic classification was IV (47.0%) and V (49.0%). Sixty-seven (45%) of parents believed that the applications were effective, and 59.7% of the caregivers paid for the application. **Conclusion:** The employment of traditional applications for preventive and curative purposes is a widespread practice among paediatric patients particularly those of low socioeconomic status. This has a detrimental effect on the quest for medical services and leads to late presentation at medical institutions. A persistent engagement in promotive and preventive healthcare measures and an end to insecurity are needed to alter this trend.

Keywords: Amulets; talismans; traditional healing practices; cultural beliefs; childhood malnutrition; child health; healthcare-seeking behaviour; Africa

1 Introduction

Amulets and charms have been used since mankind evolved from its distant ancestry millions of years ago [1]. They have been used to protect and to harm, and in both the practice and avoidance of witchcraft and sorcery. They are made of wood, stone, clay, metals, plants, and dead animals [1].

Merriam-Webster Dictionary defines an amulet as a charm (such as an ornament) often inscribed with a magic incantation or symbol to aid the wearer or protect against evil (such as disease or witchcraft) [2]. Different types of amulets exist among several communities based on what was passed from generation to generation and the locality and beliefs of the people. Hence, the use of amulets, and bands has become a cultural practice embedded into every aspect of the populace, including their health. Its usage is primarily cultural [3].

The prevalence of this practice even among malnourished children could be fueled by the gradual progressive deterioration of the illness which gives the caregiver ample time to use it. Furthermore,

the relative cheapness of the commodity also aids in its prevalence. Lastly, the role of religion cannot be over-emphasized in the use of amulets and bands. Because children are not independent in their choices concerning religion or culture, it is typical for parents or caregivers to secure amulets based on their beliefs unto various parts of the child's body.

The significant utilization of amulets, and bands, along with the lack of comprehensive documentation in this area especially among malnourished children has motivated us to collect and analyze data on this topic. Additionally, healthcare providers must grasp the cultural practices of the populations they attend to, as this insight will facilitate appropriate counseling and enhance patient management. To address the research gap, a cross-sectional study was conducted to examine the traditional applications among malnourished children admitted into ITFC. This investigation sought to identify the types, indications, perceived effectiveness, and costs involved. The outcomes of this study will support healthcare planners and providers in creating targeted promotive and preventive healthcare strategies for pediatric malnourished population.

2 Methodology

The study was carried out at Inpatient Therapeutic Feeding Centre (ITFC). The study was conducted over 5 months between May 2026 and September 2026.

2.1 Study design

It was a cross-sectional study.

2.2 Sample size

A total of one hundred and forty-nine (149) patients were recruited for the study.

2.3 Recruitment criteria

Inclusion criterion: Patients admitted with any form of superficial attachment on any part of the body.

Exclusion criterion: Parents or caregivers who declined participation.

2.4 Data collection

The study instrument was a structured pre-tested researcher-administered closed-ended questionnaire.

2.5 Anthropometric measurements

The nutrition assistant and nurse measured anthropometric parameters at the triage. Weight was measured using an electronic infant weighing scale (SECA 354 Digital baby scale Hamburg, Germany) to the nearest 0.1kg, and length was measured using an infantometer to the nearest 0.1cm. The Z scores of the anthropometric parameters of weight for length (WHZ) were calculated using the WHO 2006 references chart.

Mid-upper arm circumference was measured using a graduated Shakir strip.

2.6 Data analysis

Data was entered and analyzed using a statistical package for social sciences (SPSS version 18). The continuous variables are checked for normality and if normally distributed, the data was summarized

using mean and standard deviation. In contrast, the skewed data was presented as a median with interquartile ranges. The discrete variables were summarized as percentages. The chi-square test or Fisher's exact test was used for an association between categorical variables and to determine statistical significance. A $p<0.05$ was considered statistically significant.

3 Results

A total of 2834 malnourished children were admitted into our ITFC via the ATFCs and spontaneous admission during the study period. Of these, 149 (5.3%) with traditional applications were randomly selected and recruited for the study. There were 90 males and 59 females (male-to-female ratio 1.5:1) with an age range of 3 months – 36 months. The distribution was symmetrical, and the mean age of the participants was 16.93 months. Most participants were from Batsari Local Government 34 (22.8%) while others were from Jibia 12 (8.1%), Batagarawa 10 (6.7%), Kurfi 8 (5.4%), Charanchi 6 (4.0%), and Kankia, Sandamu and Daura 5 (3.4%) each. Neckband was seen in 106 (52.7%) cases, waist band 70 (34.8%), ankle band 22 (11.0%) 2(1%) on the hand, and 1(0.5%) on the arm.

Seventy (47.0%) of the cases were of class IV socioeconomic status (applying the Oyedeji socioeconomic classification scheme [4], Table 1), 73 (49.0%) were class V, and 6 (4%) had undocumented socioeconomic status.

Ninety-eight (37.1%) of the amulets were made from cloth, 71(26.9%) from thread, 68 (25.8%) from leather, 20 (7.6%) from metal (keys, metal nuts, rings), 5 (1.9%) from beads and 2 (0.8%) were bones. The clothing materials and thread usually anchor the amulet and part of the amulet. Some children had more than one amulet attached to their bodies. The function of the amulets/bands as narrated by the parents/caregivers includes the prevention/treatment of teething problems (38.3%), Aid in walking (8.5%), Prevention of whooping cough (8.0%), Prevention of malnutrition (6.9%), ward away evil spirit (6.4%), pulsation of the anterior fontanelle/ scalp veins (called infantile headache) (5.3%), Prevention of convulsions (4.8%), Prevention of weaning illness (4.3%), other childhood illnesses- measles, diarrhea, cold etc (4.3%), Twin (1.6%), Skin rashes (1.0%), Unspecified (4.3%), Does not know (6.4%).

The neck was the most favoured body part for the usage of the traditional application (52.7%), waist (34.8%), ankle (11.0%), hand (1.0%) and arm (0.5%). The reasons given for the applications are summarised in Table 2.

The traditional band was applied by grandparents (usually paternal), and well-wishers in 54 cases (36.2%) while parents applied it in 95 cases (63.8%). The application was given for free in 47 cases (31.5%), it was bought in 89 cases (59.7%) and the caregiver was not sure in 13 cases (8.7%). Seventy-nine (88.8%) of those who bought, it cost less than 500 naira (1 dollar), while 9 (10.1%) paid between 500-1000 naira (1-2 dollars) while 1(1.1%) paid 2000 naira (4 dollars).

The minimum amount paid for an application was 50 naira and the maximum was 2,000 naira. The distribution of purchase costs is shown in Figure 1.

Sixty-seven (45.0%) of the caregivers believed that the application was effective, 51 (34.2%) thought it was not effective, 22 (14.8%) were not sure of its efficacy and 9 (6.0%) gave no response (Table 3).

Of the 149 children, 148 were discharged and one died.

Table 1. Socioeconomic classification scheme of Oyedeji [4].

Class	Occupation
I	Senior public servants, professionals, managers, large-scale traders, businessmen and contractors
II	Intermediate-grade public servants and senior school teachers
III	Junior school teachers, professional drivers, artisans
IV	Petty traders, labourers, messengers
V	Unemployed, full-time housewives, students and subsistence farmers
Class	Education
I	University graduates or equivalents
II	School certificate holders (GCE ordinary level) who also had teaching or other professional training
III	School certificate or Grade II teachers' certificate holders or equivalents
IV	Modern three and primary six certificate holders
V	Those who could either just read and write or were illiterate

Note: the mean of four scores (two for the father, two for the mother) approximated to the nearest number was the social class assigned to the child. For example, if the mother was a junior school teacher, (score=3) and the father a senior school teacher (score=2) and the educational attainment of the mother was primary six (score=4). The father was a school certificate holder (score=2), the socioeconomic index score for this child was :(3+2+4+2) ÷4= 11÷4=2.75 (To the nearest whole number=3).

Table 2. Reasons for use of the applications.

Function	Frequency	Percentage (%)
Teething	72	38.3
Walking	16	8.5
Whooping Cough (Pertussis)	15	8.0
Malnutrition	13	6.9
Chase away malevolent spirits	12	6.4
Headache	10	5.3
Convulsion	9	4.8
Weaning	8	4.3
Twins	3	1.6
Skin Rashes	2	1.1
Prevention of other childhood illnesses (measles, diarrhea, cold, fever)	8	4.3
Unspecified	8	4.3
Does not know its function	12	6.4
Total	188	100.0

Note: The total exceeds the number of children because some children had more than one amulet with different functions (Figures 5–7).

Table 3. Perceived effectiveness of the applications.

Perceived as effective	Frequency	Percentage (%)
Yes	67	45.0
No	51	34.2
Not Sure	22	14.8
No response	9	6.0
Total	149	100.0

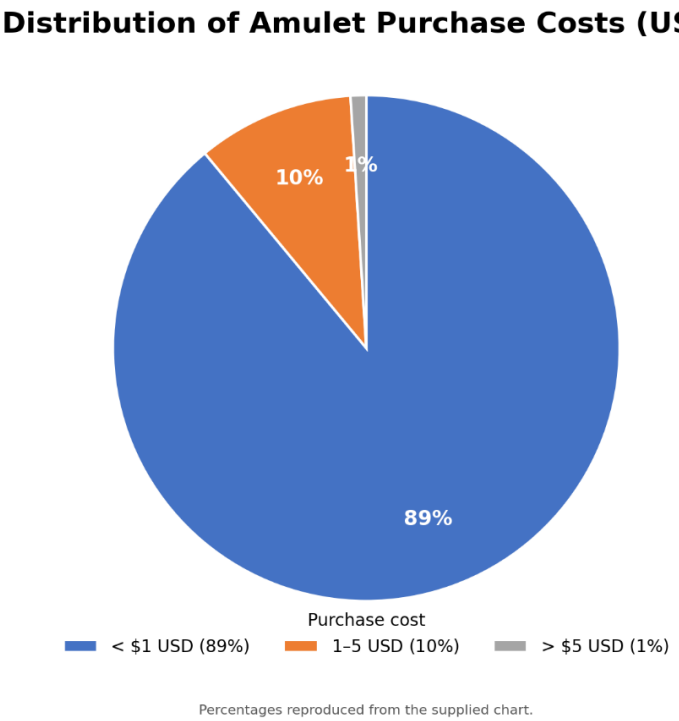


Figure 1. Distribution of amulet purchase costs (USD) among caregivers who bought the application.

4 Discussion

There are few studies on the use of amulets in the literature, even though it is acknowledged to be a common practice worldwide. Our malnutrition project saw a prevalence of 5.3% of the use of traditional amulets and bands over 5 months. This is lower than the 11.4% that was seen in Bida, Niger State, Nigeria [5]. This could be attributed to the shorter duration of our study, the larger number of our total admissions as against theirs (774 patients for 7 months to 2834 for 5 months), and the restricted age range that was employed in our study (3 months- 5 years against 11 days – 8 years in theirs). However, the gross number of participants in this study was more. A higher prevalence of 30% was seen by J. Barr et al in Jerusalem [6]. However, the total number of patients was very few and was restricted to the ICU. Hence, our study was more homogenous in primary morbidity (Malnutrition) and specific in the age group.

This study was carried out among the malnourished who all fell within the paediatrics age group of under 5 years. The mean age of the participants was 16.93 months which is the toddler age group where malnutrition is rampant. This is the age when children are weaned off from breastmilk completely and placed on complementary feed.

Ancient traditional applications are made from diverse types of materials like wood, metal, plants, dead animals, etc. [3] This is also similar to what is found in this study where the amulets, and bands were made from different materials like clothes, thread, tanned leather, metals, cowrie, etc as shown in Figures 2–10.

Poor socioeconomic status seems to be a major contributory reason why families/caregivers make use of these traditional applications. This could be attributed to its relative cheapness. In addition, because of the low level of literacy and enlightenment of these families who reside in rural areas, they are easily convinced of the need to get it especially if the vendors of these amulets and bands are their kinsmen who dwell with them in the communities. Furthermore, the absence or poor conditions of health facilities in their areas leave the parents/caregivers little or no option but to get this application. These findings collaborate with what Adeboye et al. [5] found in Bida Nigeria but this was contrary to what Barr et al. [6] found in Jerusalem where the usage of amulets was commoner among families with a higher parental educational level mostly the Jews who have religious belief concerning amulets and talismans which could skew the socioeconomic status of their participants [6].

Half of the families/caregivers believe the application is effective despite admitting the children for the same illness the amulet was supposed to prevent or treat. E.g an amulet was meant to prevent malnutrition which the child was admitted for. Some assumed the application was meant to prevent/cure pulsation of the scalp vein and anterior fontanelle ("infantile headache") which is a normal expectation in a child of that age. One-third of families attest that the application was not functional, prompting the need to seek medical care. Some were unsure if it worked seeing that the child became ill as shown in Table 3.

Most of the traditional applications (38.3%) were to treat or prevent teething problems (Table 2) usually caused by infections from poor hygiene. Some assert that placing a rusted metal item like a key to the ankle or other part of the body may serve as a preventive measure against whooping cough, a disease that is preventable through vaccination to name just an example as seen in Figure 8. Some of the use of these amulets, talismans, and bands could not be objectively assessed because there are no specific signs or symptoms to identify them e.g evil spirits.

Traditional amulets for teething problems ranked the far highest because, when children start crawling coincides with teeth eruption (6-8 months). This is the time the child puts whatever he or she sees into his or her mouth. Most of the objects are dirty and loaded with micro-organisms that cause diarrhea, vomiting, and sometimes fever. The occurrence of these symptoms has been wrongly linked to the eruption of the teeth by most parents all over the world which usually necessitate the need to prevent or treat it [7–10].

Despite the differences in the perceived efficacy of these applications, parents/caregivers still came for medical care in our facility. This could be because care and treatment are free. Furthermore, it is possible that the parents may not have faith in the applications; even though, it was endorsed by grandparents, older relatives, and husbands, whom they often hold their opinions in high regard due to the ultraconservative lifestyle prevalent in Northern Nigeria and certain regions of Africa as a whole.

About one-third of the applications (31.5%) were given free of charge (by grandparents, usually paternal, and well-wishers), while 59.7% were bought, mostly by the parents (often the husbands). For those who bought it, it cost less than 1 dollar in 88.8% of cases, as shown in Figure 1. It is believed that its cost-free nature and relative affordability account for its widespread usage.

None of the patients left against medical advice. This could be attributed to free treatment and care given to the children including feeding of the caregiver. This finding is different from what was seen by Adeboye et al in Federal Medical Centre a government hospital where patients usually pay from their pocket, many of the patients leaving against medical advice could largely be due to financial constraints.

The use of these amulets, talismans, and bands results in problems which include false security in something that is not effective, source of infection to the child, the progression of the illness leading to complications, misuse of meagre resources of the family, continuous patronage of the issuer of these applications putting other children and unborn babies to the same consequences. These ultimately increase morbidity and mortality.

It will be interesting to see if scientific and objective investigations are carried out on these traditional applications to determine their efficacy and potency against the disease they claim to treat or prevent. Better still, combine both orthodox and cultural practices without tampering with the people's sociocultural conservative beliefs and at the same time take care of the child's health.11

The study's limitations encompass the inability to access the contents of certain amulets or talismans as seen in Figures 3, 7 and 9. Furthermore, the majority of participants were sourced from rural areas, which does not provide insight into the practices of urban residents in Africa regarding these cultural applications. Additionally, the research was conducted during the rainy season, a period marked by heightened malnutrition, which hindered our ability to assess whether the usage of these items was seasonal or consistent throughout the year



Figure 2. Neck band.

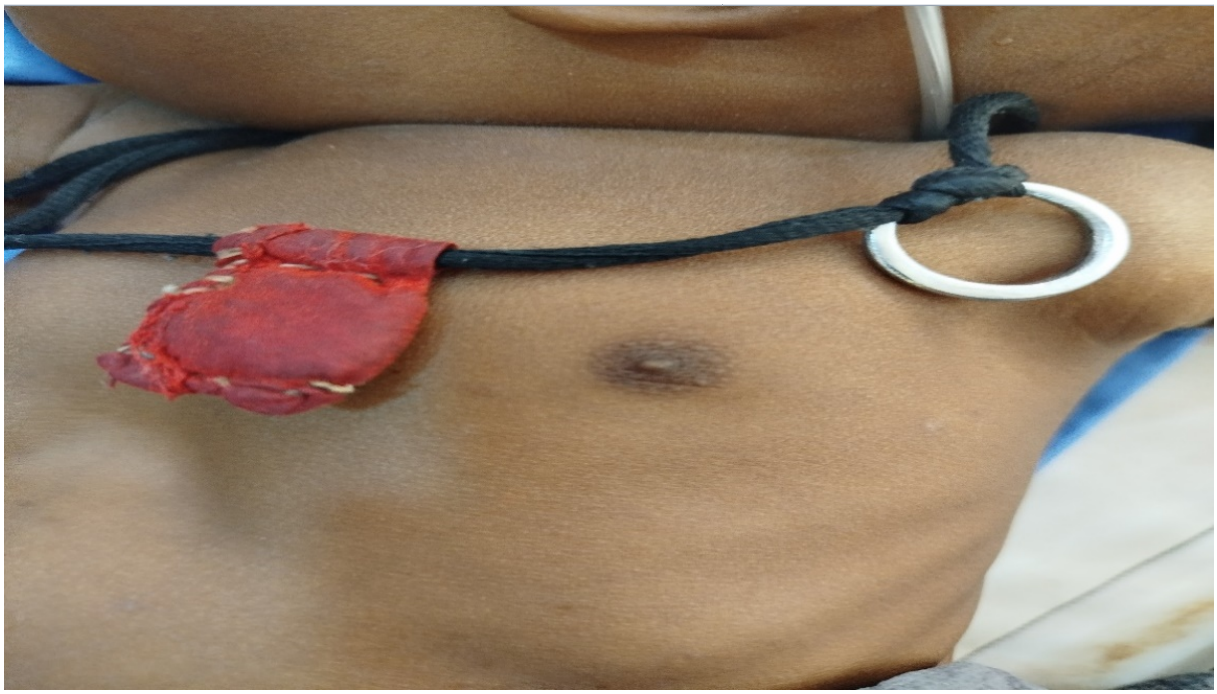


Figure 3. Neck band made of cloth with an iron ring.



Figure 4. Neck amulet with a ring and leather attachment.



Figure 5. Neck amulet made of cloth with a tanned-leather attachment.



Figure 6. Neck band with cowrie, ring and what is probably an animal tooth as attachments.



Figure 7. Multiple amulets on the neck, each with a different function, and another on the right ankle.



Figure 8. Key and metallic iron on the right ankle to prevent pertussis.



Figure 9. Traditional applications on a child (caption not supplied by the author).



Figure 10. Metal attachments on the lower limbs of twins.

5 Conclusion

In summary, the reasons for the use of amulets, bands, and talismans in our inpatient therapeutic feeding centre (ITFC) were mainly for the prevention and treatment of teething problems, childhood vaccine-preventable illnesses like pertussis, measles, diarrheal diseases etc, malnutrition, to aid walking, warding off evil spirit, to stop the pulsating of the scalp veins or anterior fontanelle ("Headache in infancy"), weaning challenges, skin rashes, twins. These applications were only seen among the low socioeconomic class, mostly in rural areas. Poverty, illiteracy, and ultraconservative

culture predispose these groups of populaces to the use of these traditional applications which can lead to non-patronage of medical care, delay in hospital presentation, and increase in morbidity and mortality of sick children.

There is a need to improve health education through health promoters, community health extension workers, religious and cultural leaders, the use of radio, television, and even social media to sensitize and raise the awareness of the populace on the causes, course, symptoms, and signs of common childhood illnesses to reduce the risk of these non-beneficial and sometimes harmful practices. It is also important that health centres with trained, skilled personnel are present in rural areas to provide quality health care for the people. This will reduce the patronage of the vendors of the applications.

Lastly, the government and relevant stakeholders should improve security in every nook and cranny of the state so that the local government areas plagued with banditry activities can be secured, and the children- the future of the state and country at large can be safe and healthy.

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