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The Knowledge and Utilization of Traditional Birth Attendants by Women in a Rural Community of Ilorin, Northern Nigeria

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Background: One of the major factors contributing towards high maternal morbidity and mortality in many developing countries is the lack of access to skilled maternal healthcare services, as traditional birth attendants (TBAs) continue to serve as predominant providers of maternal healthcare in many rural communities.
Aim: This study explores the knowledge and utilization of TBAs by women in a rural community, in order to identify healthcare gaps towards the provision of needed intervention.
Study Design: This study is a descriptive cross-sectional study which was conducted in Alanamu community of Ilorin, northern Nigeria, in the year 2019.
Methodology: A well-structured interviewer based questionnaire was administered to 212 women of reproductive age-group to collect data on their knowledge and utilization of the services of TBAs. Analysis was done using Statistical Product and Service Solutions (SPSS) software version 20.
Results: One hundred and fifty three respondents (72.2%) had background knowledge of TBAs, 91 (40.8%) had visited a TBA at least once to carry out their deliveries, of which 73 (80.2%) of them had successful deliveries, 18 (19.8%) had complications during their deliveries, of which 7 (7.7%) were referred to health care facilities for expect management.
The study showed statistical significance between the level of education of respondents and their patronage of TBAs with a *P*-value of .04.
Conclusion: Our study showed adequate knowledge and utilization of the services of TBAs by members of the community. The use of TBAs has continued to thrive in this rural community especially among the uneducated population and has been associated with maternal complications. The integration of TBAs with standard healthcare system as well as continuous sensitization of the public on their roles and limitations would go a long way in reducing maternal morbidity and mortality associated with the use of untrained TBAs.

Keywords: Knowledge; utilization; TBA; traditional birth attendant; Nigeria.

1. INTRODUCTION

A traditional Birth Attendant (TBA), may be defined a person who assists a pregnant woman during childbirth and has acquired her skills informally through the delivery of babies herself or through apprenticeship to other TBAs [1]. A skilled TBA is one who has received a standard training course through the modern health care system, and has been educated in the skills and knowledge needed to be proficient in the management of uncomplicated pregnancies and childbirth with the ability to promptly identify and refer complications [1,2].

The roles of TBAs vary depending upon the local community [3]. The primary function ascribed to a TBA is assisting pregnant women at the time of labour; this usually includes delivery of the baby, cutting and care of the cord, as well as disposal of the placenta. It may also involve post-delivery care such as maternal massage, child bathing and circumcision, domestic chores, and counselling during the postnatal period [3]. A trained TBA on the other hand is expected to augment her traditional functions by performing risk assessment in the prenatal period, as well as referral to health care facilities for expert management in the events of complications or emergencies [3,4,5].

Although TBAs play significant roles in maternal and neonatal healthcare within rural communities, they lack the special skills and knowledge to handle peculiar emergency situations and obstetrics complications [4,5]. Pregnancies and deliveries taken under the supervision of skilled birth attendants are associated with a reduced risk to mother and child [6,7,8]. In Nigeria, only about 38% of deliveries are carried out by skilled birth attendants, 74% in Ghana, 71% in Malawi, 66% in sierra Leon, and 44% in Kenya [6,9,10,11,12].

Various factors have been found to be associated with the patronage of TBAs such as illiteracy, low socio economic status and high-risk socio-cultural beliefs [13,14,15]. The services of TBAs are seen to be more easily accessible and user friendly by local communities [16,17], and TBAs are generally perceived to be more matured, patient and more accessible than midwives and other skill birth attendants [18,19].

The availability of a skilled birth attendant at every child birth is an essential strategy to

reduce maternal and neonatal mortality and improve pregnancy outcomes in low and middle income countries [20,21,22]. One of the interventions adopted in promoting safe pregnancy and delivery is the incorporation of TBAs as well as local midwives into the health care system to assist in the provision of standardized maternal healthcare within rural communities [23,24,25,26]. However, despite the level of advocacy and intervention, many rural communities have been found to still continually utilize the services of untrained TBAs [27,28,29], hence the need to explore the knowledge and the utilization of the services of TBAs by women in rural communities and implement effective measures in reducing the patronage of unskilled birth attendants.

2. MATERIALS AND METHODS

This study was conducted in Alanamu community, a rural area of Ilorin west Local Government in kwara state, Northern Nigeria. Alamamu community has a range of social services such as primary health care and maternity centers, primary education, markets, and road networks, provided by the local government.

The population size of Alanamu community is estimated to be 2000 with our target population being women of reproductive age (15-49 years), with an estimated population of 380 individuals [30]

The sample size was estimated using the Fishers formula, n = $\frac{z^2pq}{d^2}$

Where n is the sample size for a population > 10,000. Z is the standard normal deviate = 1.96

P = prevalence rate; 50%.

q = 1 – p = 50%, and d is the degree of accuracy; 0.05

$\frac{1.92*1.92*0.5*0.5}{0.05*0.05}$ =384

For a population size < 10,000

n'= $\frac{n}{1+n/N}$ Where n is sample size calculated and N is size of the population.

Hence n'= 384 / (1+ 384/380)

n'= 384/2.01= 191

A total of 212 questionnaires were administered to cover for a 10% non-response rate.

A descriptive cross sectional study was conducted using a well-structured interviewer based questionnaire administered to 212 women of reproductive age-group, to collect data on their socio-demographic variable such as age, occupation and marital status as well as their knowledge and utilization of the services of traditional birth attendants.

A consecutive sampling technique was adopted in administering the questionnaire, and analysis was done using Statistical Product and Service Solutions (SPSS) software version 20

2.1 Inclusion Criteria

Women of reproductive age (15-49 years)

2.2 Exclusion Criteria

Female traditional Birth Attendants within the community

Women who were visitors within the community

3. RESULTS

3.1 Socio-demographic Variable

One hundred and forty three (67.5%) were between the age group of 15-30 years, 45 (21.2%) were between the ages 31-40, while 24 (11.3%) were between the ages 41-49. One hundred and sixty three (77.0%) of the respondents were traders, 136 (64.2%) earned an average monthly income of less than 18,000 naira, 73 (34.4%) earned between 18,000 - 50,000 naira, while 3 (1.4 %) earned above 50, 000 naira.

Thirty (14.2%) of the respondents had no form of formal education, 41 (19.3%) respondents had completed primary education, 66 (31.1%) respondents had completed secondary school education, while 75 (35.4%) had completed tertiary education.

Table 1. Socio-demographic variable

Variables	Response	Frequency (n=212)	Percentage (%)
Age (years)	15 – 30	143	67.5
	31 – 40	45	21.2
	41 – 49	24	11.3
Education	None	30	14.2
	Primary	41	19.3
	Secondary	66	31.1
	Tertiary	75	35.4
Estimated income (naira)	< 18,000	136	64.2
	18,000 – 50,000	73	34.4
	> 50,000	3	2.4

3.2 Knowledge about Traditional Birth Attendants

One hundred and fifty three (72%) of the respondents were aware of the term "traditional birth attendants", of which 62 (40.5%) ascribed the use of traditional birth attendants to be a safe practice, with no associated danger attached to their patronage. Eighty one (53%) of the respondents believed it to be an unsafe practice, while 10 (6.5%) of the respondents had no idea about its complications.

One hundred and thirty one (85.6%) of them ascribed the services of traditional birth attendants to be more affordable compared to standard health care services, 5 found it expensive and 17 had no idea of its cost implication.

3.3 Attitude towards the Use of Traditional Birth Attendants

One hundred and forty three (67.5%) of the respondents affirmed to the importance of TBAs in the community, while 69 (32.5%) of the respondents were of the opinion that TBAs were of no significance to the community.

One hundred and fifty four (72.6%) of the respondents would prefer the services of skilled health care providers, while 58 (27.4%) of the respondents preferred the services of local traditional birth attendants to that of a trained health care worker.

Eighty one (38.2%) of the respondents would recommend the use of TBAs to other people, 116 (54.7%) of the respondents discouraged the practice, while 15 (7.1%) were indifferent about the practice.

3.4 Practices towards Traditional Birth Attendants

Ninety one (40.8%) of the respondents have had their deliveries carried out by a TBA at least once, of which 50 (56.0%) were satisfied with the service rendered to them, 37 (39.7%) were not satisfied and 4 (4.3%) were indifferent.

Seventy three (80.2%) of those who had patronized a TBA had successful deliveries, while 18 (19.8%) of the respondents had complications during their delivery of which 7 (7.7%) were referred to a health care facility for expect management. Fifty two (47.3%) of these respondents were willing to continue patronizing the services a traditional birth attendant.

The study showed significant association between the level of education of respondents and the utilization of Traditional birth attendants (*P* value = .04), and showed no statistical significance between average monthly income of respondents and their utilization of Traditional birth attendant (*P* value = .87).

4. DISCUSSION

The use of traditional birth attendants continue to thrive in many developing parts of the world such as Nigeria, with studies showing that women from these rural areas still prefer the services of TBAs, however the use of untrained TBAs has been associated with continuous increase in maternal and neonatal morbidity and mortality [28,19].

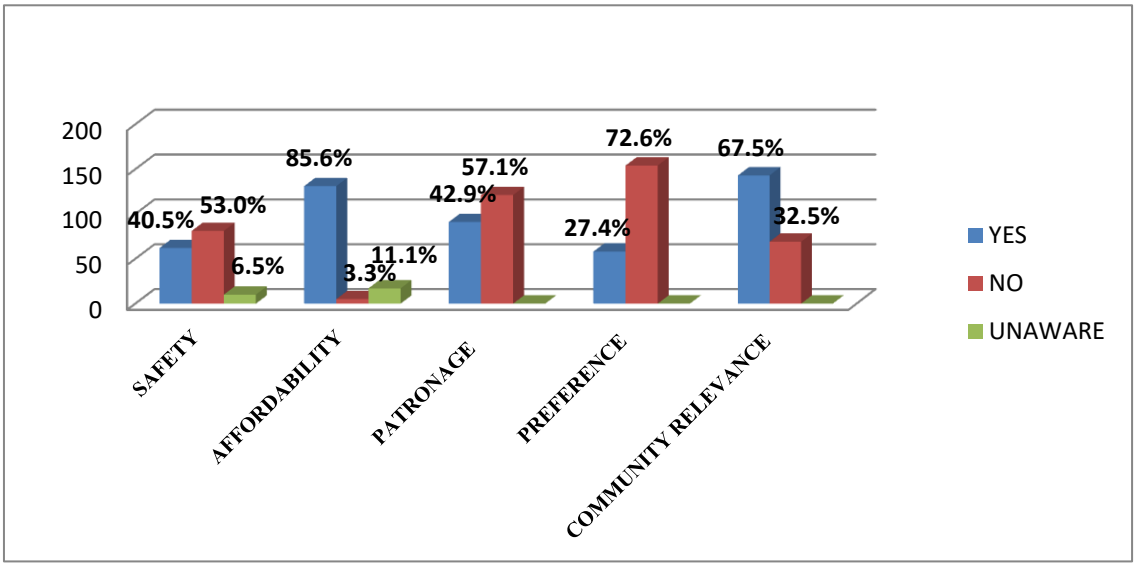

Fig. 1. Distribution of knowledge variables and the utilization of TBAs

4.1 Socio-demographic Variable

Majority of the respondents were educated, with 142 (66.9%) having at least a primary level of education. One hundred and forty three (67.5%) of the respondents were between the ages of 15-30 years, with 136 (64.2%) belonging to the low socio-economic class. In a similar study of by Awotunde et al, carried out in the western part of Nigeria, 55.2% of their respondents were within the age 20-29years, with the majority having secondary education (67.8%), and 70.4% belonging to the low socio-economic class [31]

4.2 Factors Influencing the Utilization of TBAs

It is believed that the lower the socioeconomic class of an individual, the more likely they are to patronize TBAs, as it is perceived to be cheaper than standard healthcare services [31].

One hundred and thirty one (61.8%) of our respondents did ascribe the services of traditional birth attendants to be affordable with 91 (43%) of our respondents having had their deliveries carried out by TBAs at least once. However from the analysis of the level of income of the respondents in relation to their utilization of traditional birth attendants, a Pearson chi-square value (*P* –value) of .87 was obtained, showing no significant statistical association between these variables, this goes to show that low socio economic status alone isn't a factor influencing the patronage of TBAs in this community. In contrast, Awotunde et al, reported that lower socioeconomic status was a significant factor influencing the use of TBAs, where respondents with lower economic strata were more likely to patronize TBAs in comparison to individuals in higher classes, this is similar to studies in Malawi, Zambia, and other parts of Nigeria [12,31], however, a study done in Southwest Nigeria revealed that most women irrespective of their economic class, still utilized TBAs [32].

Other factors such as educational background and socio-cultural beliefs also play significant role in the patronage of TBAs [31,32]. In analyzing the statistical relationship between the level of education of the respondents with their knowledge and utilization of TBAs, a Pearson chi-square value (*P*-value) of .04 was obtained showing statistical significance between these two variables, as about two third (182) of our respondents had at least a primary level of education. This indicates that illiteracy, and the lack of essential health education is a significant contributing factor to the patronization of untrained TBAs by members of this rural communities. The more educated and enlightened the community is, the less likely their patronage of unskilled birth attendants would be. It is vital that rural communities are continuously sensitized on the roles and limitations of TBAs in the community. Identifying these limitations and knowing when to seek expert medical care is crucial in preventing maternal and neonatal morbidity and mortality.

4.3 The Integration of TBAs into the Healthcare System

The role of TBAs towards reducing maternal morbidity and mortality in developing countries such as Nigeria has been a topic of discuss over the years, ranging from the school of thought advocating for its incorporation into the formal healthcare sector, to those in support of its total rejection [6]

Eighty one respondents (56.2%) were aware of the possible dangers involved in patronizing untrained TBAs. Seventy three (80.2%) of the 91 respondents who had patronized a TBA before had successful deliveries, while 18 (19.8%) developed complications during their delivery, of which only 7 (7.7%) were referred to health care facility for expert management. This goes to show the limitations of unskilled birth attendants in providing the needed essential care for promoting safe pregnancy and delivery in rural communities.

Increasing the number of skilled birth attendants in rural communities by the incorporation of TBAs into the health system has been analyzed and found to be an effective strategy for reducing maternal morbidity and mortality [33]. This has been implemented in several developing countries, for example, the “Agbebiye program”, which was initiated in Ondo state: a western part of Nigeria, where TBAs were incorporated into their maternal healthcare system. They recorded a reduction in TBA-related deaths when compared to the previous year, with a 61.8% increase in facility births from about 33,000 in the year 2013 to over 53,000 in 2016, having a significant reduction in maternal mortality rate and confirming the positive effect of incorporating TBAs into the healthcare system. [34].

One hundred and forty three (67.5%) of our respondents affirmed that traditional birth attendants do have important roles to play in the community, however, 154 (72.6%) of our respondents would still rather have their delivery carried by a well-trained healthcare provider who would be able to effectively attend to any form of complications that may arise, while 58 (27.4%) of the respondents were still willing to continue patronizing TBAs if they are well trained. This tends to buttress the fact that members of the community do actually find the roles of the traditional birth attendant vital in the community.

5. CONCLUSION

The study showed adequate knowledge and utilization of the services of TBAs by members of the community. The use of TBAs has continued to thrive in this rural community, especially among the uneducated population with associated maternal complications arising from their patronage, hence the integration of their services with standard healthcare system as well as the continuous sensitization of the general public by Government agencies and related health organizations, especially at the rural level on the roles and limitations of TBAs would go a long way in reducing maternal morbidity and mortality associated with the use of poorly trained TBAs.

6. LIMITATIONS

This study does have its limitations, being a cross sectional study with a limited sample size, the causal relationship of measured variables and biases from the respondents cannot be fully ascertained. We also encountered reluctances from some women in the community in filling the questionnaires.

CONSENT

As per international standard or university standard, respondents’ written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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