INFORMATION AND TRAINING NEEDS OF TRADITIONAL BIRTH ATTENDANTS IN SELECTED RURAL COMMUNITIES OF OYO STATE, NIGERIA

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ABSTRACT
This study investigated the information and training needs of Traditional Birth Attendants (TBAs) in selected rural communities of Oyo State. A multi-stage sampling procedure was used to select TBAs from the study area to give a total of 120 respondents that form the sample size for this study. Data on socioeconomic characteristics of respondents, sources of training available, services provided, constraints faced by TBAs and information and training needs of TBAs were obtained. Data were analysed using descriptive statistics, PPMC and chi square. Results of the study revealed that the mean age of respondents was 44.8±9.9 years and 93.3% were married. Sources of training available to TBAs are from community health workers (98.3%) and skilled health workers (82.5%). Services rendered by TBAs are antenatal care (92.5%) breastfeeding lectures (87.5%) and referral services (43.3%). The mean score for constraints shows that management of severe bleeding (0.92), management of retained placenta (0.85) and insufficient information and training (0.54) were ranked as the major constraints. The result of the study also revealed that information and training needs on referral of sick baby, weight of the baby and advice on immunization (100%) were highly needed by all the respondents. Chi-square result shows that sex (x^2=4.611, $p<0.05$) and religion (x^2=7.397, $p<0.05$) were significantly related to the information and training needs. Also, age (r =0.238, $p<0.05$) and working experience (r =0.236, $p<0.05$) were significantly related to the information and training needs of the respondents. The study recommended that Policy makers on reproductive health issues must develop collaborative opportunities with TBAs and skilled health workers that encompass mutual trust and respect which will ensure sustainable health sector in the nation.
Keywords: Health services, Maternal mortality, Skilled birth Attendants, Traditional birth Attendants, Training

INTRODUCTION

The maternal mortality in Nigeria is one of the highest in the world, ranking second after India (Olonade, Olawande, Alabi and Imhonopi, 2019). Okereke, Ishaku and Unumeri *et al*, (2019) approximated that 90 percent of all maternal deaths and 80 percent of all still births occur in developing countries, largely because those countries lack trained midwives.

Maternal mortality caused by childbirth, unsafe abortion process and pregnancy complications are threat to agricultural development as it reduces labour in the agricultural sector and affects development of the economy, food and nutrition security as well as child and elderly care in the household (Adeleke, 2018). The health of mothers is very crucial because it has a bearing on the health of every members of the household, particularly that of children and aged persons (WHO, 2016). Education, poverty and lack of access to qualified health workers are some of the factors that have contributed to maternal and infant mortality rate in Nigeria especially in rural areas. (Piane, 2019).

A qualified health worker refers to highly skilled workers, in professions that usually require extensive knowledge including university level study leading to the award of a first degree or higher qualification (WHO, 2018). This includes physicians, midwives, registered nurses, pharmacists, physiotherapists, and others. Many countries especially in developing countries still have unqualified health workers to perform and deliver primary health care services. Therefore,

unqualified health workers like Traditional Birth Attendants (TBAs) can affect the health status and conditions of those countries, such as maternal and neonatal mortality rate if not impacted with basic training and information to improve their knowledge, skills and practices.

The World Health Organization defines a Traditional Birth Attendant (TBA) as a person, usually a woman who assists a pregnant woman at childbirth and acquired her skills in delivering babies by herself or working with other TBAs (WHO, 2018). They belong to the informal healthcare system and are commonly found in rural areas (Shah, Brieger, and Peters, 2011). The TBAs live in the same village with their clients, are well known and are trusted members of the community and seen to provide supportive and culturally acceptable care (Caulfield *et al*, 2016). They provide social support during the perinatal period and often go beyond the usual job of delivering babies (e.g., they also cook and clean) (Liambila and Kuria, 2014). This support creates a strong bond between the TBAs and their clients, which is cherished by rural women. In most rural communities, the services of TBAs are valued. This is because they speak local language, they are available, accessible at all hours, affordable, culturally acceptable and they share similar cultures with their client communities (Ebuehi and Akintujoye, 2012: Turinawe, 2016). Also, the shortage or few skilled birth attendants like doctors, nurses and midwives particularly their uneven distribution across region and communities in the country makes TBAs to be available in rural communities so as to fill the gap.

However, services of TBAs have been linked with high maternal death rates especially among women with low economic status who do not have access to skilled health care (Desai *et al.,* 2013). The situation is even grave in rural areas where the health care system is poor and overstretched in addition to the high poverty level. Many of their beliefs and practices pertaining to the reproductive cycle are dependent upon religion or mystic sanctions which are reinforced by rituals that are performed with traditional ceremonies (WHO, 2016). TBAs have been implicated in unsafe practices and the late referral of women who suffer from complications during pregnancy, labour and delivery in other settings (Okereke, Ishaku and Unumeri *et al*, (2019).

Several reviews highlight evidence that TBAs, when trained, can contribute to maternal mortality reduction (Amutah-Onukagha *et al*, 2017) and facilitate access to services (Piane, 2019) and that integration of TBAs with formal health systems can increase skilled birth attendance services (Byrne and Morgan, 2011). Riberio (2014) recommend TBA retraining and use by African countries, mainly based on arguments relating to the scarcity of skilled birth attendants, the lower cost of services by TBAs and community/traditional acceptance of the services.

In recent years, there has been increasing debates over the usefulness of TBAs in maternal health care (Sarker, 2016; Amutah-Onukagha *et al*, 2017). Opponents of TBAs care are of the view that TBAs have done little to improve maternal health. They opined that TBAs have frustrated laudable efforts made by governments in Sub-Saharan Africa to reduce maternal mortality while proponent have expressed the need for a sustained partnership with TBAs as a strategy to improve access to basic maternity care in rural areas to achieve significant reduction in maternal mortality (Ebuechi and Akintujoye, 2012).

Some of the problems of TBAs are lack of proper and continuous training, lack of access to adequate facilities, shortage of essential medicines and other important medical supplies including delivery kits and equipment as well as limited physical infrastructure, lack of ability to deliver appropriate services, including those relating to emergency obstetric care. The TBAs are not monitored and supervised, therefore they do not know their limit and make every attempt whether they succeed or not. The TBAs are not hygienic in nature and their inability to provide immunization services against diseases can expose the mother and the baby to risks of infection, malformation and eventually results to death. The impact of these problems on global development is frightening to the extent that one of the main targets of the Sustainable Development Goals (SDGs) by 2030 is

the reduction by two-third in infant mortality and three-quarters in maternal mortality rate.

Therefore, one solution to addressing maternal and neonatal mortality is through educating and providing information to the untrained and trained birth attendants. In view of this, if TBAs are in tune with required skills and emerging practices in child delivery, this would largely minimize the maternal mortality rate especially amongst the rural populace. It is against this background that this study sought to empirically validate the information and training needs of TBAs in selected rural communities of Oyo state.

The general objective of the study is to investigate the information and training needs of Traditional Birth Attendants in rural communities of Oyo state, Nigeria. The specific objectives were to:

1. describe the socioeconomic characteristics of the respondents in the study area;
2. determine the sources of training available to TBAs;
3. identify the services provided by TBAs to rural dwellers;
4. identify the information and training needs of TBAs in the study area;
5. determine the constraints faced by TBAs in the study area.

The hypothesis of the study is as stated; there is no significant relationship between the selected socioeconomic characteristics of respondents and the information and training needs of traditional birth attendants.

METHODOLOGY

This study was carried out in rural communities of Oyo State. Oyo state is located in the southwest geopolitical zone of Nigeria and consists of 33 Local Government Areas (LGAS). It is situated in latitude 7^0 241N and Longitude $3^0$52E as well as altitude 234m above sea level. Oyo state was created in 1976 out of the old western region and covers a total of 27,249 square kilometers of land mass. It is bounded to the south by Ogun State, in the north by Kwara State, in the east by Osun State and in the west; it is partly bounded by Ogun and partly by the republic of Benin. The people of Oyo State are divided into four zones which are: Ibadan/Ibarapa, Oyo, Oke-ogun and Ogbomoso. The population of this study comprised of traditional birth attendants in the study area.

A multi-stage sampling procedure was used to select respondents for this study. At the first stage, 10% of LGAs in the 28 rural LGAs in Oyo State were randomly selected to give 3 LGAs which are Ido (10 wards), Iseyin (11 wards) and Akinyele (10 wards). At the second stage, 20% of the wards in each LGA were selected to give a total of 6 wards which are Ido/Onikede (14 villages) and Aba emo (12 villages) from Ido LGA, Ado a. .aye (24

villages) and Isalu I (14 villages) from Iseyin LGA and Ajibade/Alabata (10 villages) and Arulogun (20 villages) from Akinyele LGA. At the third stage, 10% of the villages in each ward were randomly selected to give a total of 15 villages. At the last stage, snowball sampling technique was used to identify TBAs from each village to give a total of 120 respondents that form the sample size for this study.

Sources of training were measured by asking respondents to respond 'Yes and No' to options like skilled health workers, books, apprenticeship with relations and so on.

Services provided by respondents were operationalised on a three-point Likert-type scale of always, sometimes and never for options like antenatal care, postnatal care, referral services, neonatal services and so on. Response options were scored as 2, 1 and 0, respectively.

Constraints faced by TBAs were measured on a three-point Likert-type scale of serious constraint, mild constraint and not a constraint for options like inadequate facilities/equipment, lack of referral services and so on. Response options were scored as 2, 1 and 0, respectively.

The Dependent variable for this study is information and training needs of TBAs which was classified into antenatal care, delivery care and postnatal care. It was measured on a three point Likert-type scale of seriously in need, slightly in need and not a need. A mean score of 40.6 was generated which was used to categorise the respondents into those having high and low information and training needs. Response options were scored as 2, 1 and 0, respectively.

Descriptive statistics such as; frequencies, percentages, mean and standard deviation and Inferential statistics like; Chi-square and Pearson Product Moment Correlation (PPMC) were used to analyse the data.

RESULTS AND DISCUSSION
Socioeconomic characteristics

The mean age of respondents was 44.8±9.9 years as seen in Table 1. This implies that majority of the respondents were in their productive and active age. This is in line with the finding of Piane (2019) that most TBAs are middle-aged which could give them zeal and strength to perform their duties maximally. Also, Table 1 reveals that 64.2% of the respondents were Christians and 33.3% were Muslims. This corroborates the findings of Maryam, *et al* (2016) that in Nigeria there are varying religious beliefs which explain some of the disparities in the use of available reproductive health services. The result in Table 1 further shows that most (93.3%) of the respondents were married. This suggests that most of the TBAs have responsibility for the provision of household needs. Table 1 shows that majority (93.3%) of the respondents were female. This implies that there were more female TBAs than male. This is in line with the findings of Adatara, Afaya, Baku, *et al* (2018) that most TBAs are women and often elderly. Table 1 further reveals that 23.3% of the respondents had primary education, 62.5% had secondary education and 10.8% had tertiary education. This means that most of the respondents could receive appropriate information and training that will help to manage their services effectively based on their level of education. This corroborates the findings of Ribeiro (2014) that some TBAs have education that might integrate them into the larger health care system and help them perform better. Majority (91.7%) of the respondents were engaged in TBAs services as their main occupation. This implies that most of the respondents work as birth attendants with few into trading and farming. The result in Table 1 also reveals that the mean value for respondents' working experience is 16.5±9.5years. This implies that the respondents had grater years of working experience which could be due to their ability of assisting women deliver at home in their community over the years. The result in Table 1 also shows the mean annual income of the respondents to be ₦32,016.67±17,518.29. This implies that most of the respondents in the study area could be described as low-income earners. This is in line with the findings of Sarker, *et al* (2016) that TBAs provide affordable and accessible services as well as conduct delivery at home not necessarily for the monetary gains.

Sources of training available to respondents

Sources of training available to TBAs as presented in Table 2 reveals that majority (98.3% and 82.5%) of the respondents received training from community health workers and skilled health workers, respectively. Also, 63.3% read books, 58.3% were trained by relation. This implies that community health workers and skilled health workers were the most available sources of training for the TBAs. This corroborates the study of Aborigo, Allotey and Reidpath (2015) and Amutah-Onukagha *et al*, 2017 that initiation into TBA practice includes formal training by district health staff, sacred calling through dreams or visions and inheriting or apprenticeship from close relatives such as mothers.

Table 1: Distribution of the respondents by socioeconomic characteristics

Variables	Percent	Mean	SD
Age (years)			
20-29	3.3	44.8	9.9
30-39	21.7		
40-49	42.5		
50-59	24.2		
60-69	8.3		
Religion			
Christianity	64.2		
Islamic	33.3		
Traditional	2.5		
Marital status			
Married	93.3		
Widowed	6.7		
Sex			
Female	93.3		
Male	6.7		
Years of working experience			
3-11	35.0		
12-20	39.2	16.5	9.5
21-29	13.3		
30-38	12.5		
Educational qualification			
No formal education	3.4		
Primary education	23.3		
Secondary education	62.5		
Tertiary education	10.8		
Primary occupation			
TBAs	55.8		
Trading	18.3		
Farming	14.2		
Evangelist	11.7		
Annual income (₦)			
10,000-40,000	52.5	₦32,016.67	17,518.29
40,001-70,000	35.8		
70,001-100,000	11.7		

Source: Field survey, 2019

Table 2: Distribution of respondents by sources of training

Sources of training available	Yes (%)	No (%)
Books	63.3	31.7
Skilled health worker	82.5	17.5
Apprenticeship with relation	58.3	41.7
Pictures and charts	44.2	55.8
NGO	40.0	59.2
Health extension worker	59.2	40.8
Community health workers	98.3	1.7

Source: Field survey, 2019

Services provided by respondents

Result in Table 3 reveals that some services like antenatal care, breastfeeding lectures, and postnatal care (92.5%, 87.5%, and 67.5%), respectively were always provided by the TBAs, while referral services (43.3%) was sometimes provided by TBAs. This implies that services like antenatal care, breastfeeding lectures and postnatal care were always provided by the respondents. Referral services were sometimes provided by some of the respondents which is in line with the findings of Mboho, Eyo and Agbaje (2012) that training of TBAs was shown to possibly increase the number of hospital referrals when complications occur in comparison to non-trained birth attendants, thus reducing maternal mortality rates.

Table 3: Distribution of respondents by services provided

Services	Always (%)	Sometimes (%)	Never (%)	Mean	SD
Antenatal care	92.5	7.5	0	1.92	0.26
Post natal care	67.5	29.2	3.3	1.64	0.55
Referral services	55.0	43.3	1.7	1.53	0.53
Infant welfare	50.8	24.2	25.0	1.26	0.84
Concoction to make mother & baby strong	35.8	10.0	54.2	0.82	0.93
Neonatal care	49.2	24.2	26.7	1.23	0.84
Breastfeeding lecture	87.5	5.0	7.5	1.80	0.56
Immunization for children	26.7	9.2	64.2	0.63	0.88
Family planning services and lecture	28.3	13.3	58.3	0.70	0.88
Treatment of infertility in women	30.8	15.8	53.3	0.78	0.89
Management of complications during delivery	26.7	20.8	52.5	0.74	0.86

Source: Field survey, 2019

Constraints faced by the TBAs

The mean score for constraints shows that management of severe bleeding (0.92), management of retained placenta (0.85), insufficient information and training (0.54) and referral to hospital (0.50) were ranked as the major constraints among the listed constraints as shown in Table 4. This implies that TBAs may not be able to recognize danger signs which could lead to maternal mortality. This corroborates the findings of Lydia and Cephas (2018) who stated that problems could result from TBAs failure to recognize danger signs, inability to implement simple evidence-based interventions for complications and delayed referral.

Table 4: Distribution of respondents by constraints faced in service delivery

Constraints	Serious constraint (%)	Mild constraint (%)	Not a constraint (%)	Mean	Rank
Inability to handle normal delivery	0	12.5	87.5	0.13	10th
Insufficient information and training	18.3	17.5	64.2	0.54	3rd
Lack of referral to hospital	13.3	23.3	63.3	0.50	4th
Management of severe bleeding	37.5	15.8	46.7	0.92	1st
Management of retained placenta	34.2	16.7	49.2	0.85	2nd
Unavailability of essential drugs and consumables	15.0	10.0	75.0	0.40	6th
Inadequate facilities/equipment	15.0	10.8	74.2	0.41	5th
Lack of privacy and psychological support	14.2	5.0	80.8	0.33	7th

Source: Field survey, 2019

Information and training needs of respondents

The result in Table 5 shows that resuscitation, referral of sick baby, weight of the baby, advice on immunization, advice on birth spacing (100%) were needed by all the respondents, while treatment of infertility (16.7%), prevention and management of reproductive tract infection like sexually transmitted infection (15.8%) were slightly needed by the respondents. Less than one-third (31.7%) of the respondents were not in need of knowledge about precautions and safety measures to be taken by pregnant women. This implies that information and training needs on antenatal care, delivery care and postnatal care were highly needed by the respondents and this corroborates the findings of Iyaniwura and Yusuf (2013) which stated that providing adequate health education and training to TBAs can help increase access to skilled birth attendant services through referrals.

Table 5: Distribution of respondents by information and training needs

Information and training needs	Seriously in need (%)	Slightly in need (%)	Not in need (%)	Mean	SD
Antenatal care					
Adequate knowledge about early registration of pregnant women	97.5	0.8	1.7	1.96	0.27
Referral of complicated issues to a comprehensive hospital for intensive care.	95.8	3.3	0.8	1.95	0.25
Identification of complication	98.3	0.0	1.7	1.97	0.26
Knowledge about precautions and safety measures to be taken by pregnant women	64.2	4.2	31.7	1.33	0.93
Delivery care					
Improved skill in conducting delivery	98.3	0.0	1.7	1.97	0.26
Inculcating cleanliness and safety practices in daily routine.	99.2	0.0	0.8	1.98	0.18
Management of severe bleeding	99.2	0.0	0.8	1.98	0.18
Management of retained placenta	98.3	0.8	0.8	1.98	0.20
Ability to handle proper delivery to prevent complications e.g., treatment of cord stump	98.3	0.8	0.8	1.98	0.20
Postnatal care					
Proper care of new born (warmth, infection control, exclusive breathing)	99.2	0.0	0.8	1.98	0.18
Adequate knowledge about taking constant record of baby's weight.	100.0	0.0	0.0	2.00	0.22
Resuscitation (use of mucous suction trap)	100.0	0.0	0.0	2.00	0.22
Referral of sick baby for intensive care	100.0	0.0	0.0	2.00	0.22
Training on immunization	100.0	0.0	0.0	2.00	0.22
Training on birth spacing	100.0	0.0	0.0	2.00	0.21
Training on introduction of complementary foods	100.0	0.0	0.0	2.00	0.22
Adequate training on circumcision of male babies	97.5	2.5	0.0	1.98	0.16
Treatment of infertility	82.5	16.7	0.8	1.81	0.41
Prevention and management of reproductive tract infection	83.3	15.8	0.8	1.83	0.40

Source: Field survey, 2019

Categorisation of respondents into high and low information and training needs

The result in Table 6 shows that there was a high (51.7%) need for training among TBAs in the study area. This implies that most of the respondents need more training and information on antenatal, delivery and post-natal services in other to improve their effectiveness and reduce maternal and child mortality. This is in line with the findings of Agbo (2013) which reveals that providing quality maternal health training to TBAs will help them recognize their scope and limitations and possibly refer mothers and their infants for immunization, family planning, and emergency services as needed.

Table 6: Categorisation of respondents into high and low information and training needs

Information and training needs	f (%)	Min.	Max.	Mean	SD
Low (26.0-40.6)	58(48.3)	26.0	42.0	40.6	1.97
High (40.7- 42.0)	62(51.7)				

Source: Field survey, 2019

Relationships between selected socioeconomic characteristics and information and training needs of TBAs

Result from the test of relationship between socioeconomic characteristics of respondent and information and training needs is presented in Table 7. From the result, sex (χ^2= 4.611, p<0.05) and religion (χ^2= 7.397, p<0.05) were significantly related to the information and training needs of respondents. The implication of this is that sex and religion could play significant roles in the information and training needs of traditional birth attendants. This is in line with Lydia and Cephas (2018) that religion has some influence on TBAs' belief systems as well as their practices and could possibly explain the concurrent utilisation of religious beliefs in the TBAs' practices with respect to pregnancy and delivery. This also implies that female TBAs are known to provide psychological support and counseling to women during pregnancy

and childbirth, which is in tandem with the finding of Miller and Smith (2017) that psychological support and counseling of women during pregnancy and childbirth is one of the reasons accounting for home births in developing countries.

The result on Table 8 also shows that age (r=0.238, p<0.05) and working experience (r= 0.236, p<0.05) were significantly correlated to the

information and training needs of the respondents. This implies that age and working experience could help the TBAs to perform better in their occupation, as experience over the years is crucial to their performance, which means that the older and more experienced the TBAs are, the lesser their information and training needs.

Table 7: Test of relationship between socioeconomic characteristics and information and training needs of respondents (chi-square analysis)

Variable	Df	χ^2 value	p-value	Decision
Sex	1	4.611	0.032	Significant
Religion	2	7.397	0.025	Significant
Educational attainment	3	1.629	0.653	Not significant

p> 0.05, Source: Field survey, 2019

Table 8: Test of relationship between socioeconomic characteristics of respondents and information and training needs (correlation)

Variables	r-value	p-value	Decision
Age	0.238	0.009	Significant
Working experience	0.236	0.009	Significant
Level of income	0.063	0.492	Not significant

Source: Field survey, 2019

CONCLUSION AND RECOMMENDATIONS

The study concluded that TBAs rendered services more on antenatal and postnatal care. They were however seriously in need of information and training needs on antenatal, delivery and post-natal care. Efforts should be made by Government at all levels to collaborate with skilled health workers to give proper information and training to TBAs on reproductive health services through sources like lectures, seminars and workshops. The study also recommended that Policy makers on reproductive health issues must develop collaborative opportunities with TBAs that encompasses mutual trust and respect for each other. Collaboration with skilled health workers in rural communities can aid referral of complicated issues to health centres and hospitals and help ensure sustainable health sector in the nation.

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