

PERSISTENT MISSION HOME DELIVERY IN IBADAN: ATTRACTIVE ROLE OF TRADITIONAL BIRTH ATTENDANTS

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ABSTRACT

Background and objective: One of the major factors responsible for high maternal and neonatal deaths in Nigeria and other developing countries is the use of Traditional Birth Attendants (TBAs). The current study was carried out to evaluate the attractive roles of the TBAs that make pregnant mothers persistently use them.

Methodology: The study was conducted in Ido and Lagelu local government areas of Oyo State in Nigeria. TBA basic demographic data were collected and were then followed up for a period of six months by trained Nurses and Doctors targeting a total of ten direct observations made per TBA per ANC/delivery.

Results: There were a total of 146 TBAs out of which 134 fulfilled the inclusion criteria and were recruited into the study. The Male to female ratio was 1/133 and age range was 22–68 years with 70.1 % above 40 years. Seventy two per cent of them had only elementary school and 72%, 30% and 38% had been re-trained by LGA, SMOH and National TBA associations respectively. Post-partum care, counseling services, tender care in labour, easy accessibility, accommodating other relations, installmental payment were observed in all TBAs while 60–98% of them did home visit, assisted in referral and arranged for USS and laboratory services.

Conclusions and Recommendations: These good practices should be incorporated into formal health sector and attitudinal change in the current health workers across all health care levels should be encouraged. CHEWs should also be primarily involved in home visit in pregnancy and post-natal care services.

Key words: mission home, delivery, traditional birth attendants, attractive role

INTRODUCTION

Each year around four million newborns die in the first week of life, worldwide^{1,2} and an estimated 529,000 mothers die due to pregnancy-related causes^{2,3}. In low and middle-income countries many deliveries still occur at home and without the assistance of trained attendants^{4,7}. A recent review reported that around 20-30% of neonatal mortality could be reduced by implementing skilled birth care services⁸. Attention to maternal health was demonstrated in 2000 when 147 heads of state and government and 189 nations in total signed the Millennium Declaration, in which the proportion of births assisted by trained birth attendants became an important indicator to measure the progress of improving maternal health (Millennium Development Goal 5⁹⁻¹¹). About 59,000 pregnant mothers die each year in Nigeria. Nigeria also ranks highest in Africa and 2nd highest worldwide in numbers of newborn deaths. In Nigeria alone, over a quarter of a million newborn dies annually and this account for about 24% of Nigerian's under-5 mortality¹².

One of the major factors responsible for high maternal and neonatal deaths in Nigeria and other developing countries is the use of unskilled birth attendants such as Traditional Birth Attendants and Voluntary Health Workers. The World Health Organization defines a traditional birth attendant (TBA) as a person who assists the mother during childbirth and who initially acquired her skills by delivering babies herself or through an apprenticeship to other TBAs¹³. Individual TBAs and their roles vary. However, certain characteristics are commonly seen across continents and regions¹⁴. TBAs tend to be older women, respected in the community for their knowledge and experience. They are often non-literate and have learned their skills through older more experienced TBAs. They may work independently, in collaboration with an individual provider or facility or they may be integrated into the health system. Their role may include, in addition to birth attendance, bathing and massage, domestic chores, and provision of care during the later postpartum or postnatal period.

TBAs may perform other roles depending on local custom, their own interests and expertise. The number of births TBAs attend each year ranges from a few births to as many as 120 births per year. Typically, TBAs attract clients by reputation and word-of-mouth. Usually they receive some remuneration for their services. Today, TBAs remain an important provider of maternity care in developing countries¹⁵. Despite various campaigns on the importance of facility delivery assisted by skilled birth attendants, up to 60% of deliveries are still attended to by these TBAs in some communities¹⁶. The pregnancy outcome effects are seen more in the morbidities and mortalities that are particularly associated with post-partum haemorrhage, prolonged obstructed labor, infection, eclampsia, prematurity, perinatal asphyxia and neonatal sepsis which are the leading causes of maternal and neonatal deaths in Nigeria¹². The aim of this study was to look into the attractive role of TBAs that are responsible for preference for their use in two peri-urban Local Government Areas of Oyo state.

MATERIALS AND METHODS

Study site description

The study was carried out in Ido and Lagelu Local Government Areas (LGA) of Oyo State in the south western part of Nigeria. Oyo state has thirty-three LGAs and these two LGAs are peri-urban LGAs which are part of the eleven LGAs of Ibadan metropolis.

The population is mainly rural with some urban areas. The population is 104,087 and 148,133 in the Ido and Lagelu LGA respectively¹⁶. Most people are poor peasant farmers, petty traders, artisans and government workers so financial constraints also pose a problem to maternal and newborn health. Most women attend antenatal clinics while pregnant either in government hospitals or mission homes usually owned by Traditional Birth Attendants but less than 50% deliver in these government health facilities (Ayede, unpublished data). Unsupervised home delivery is also practiced by significant number of people particularly in the rural areas of the communities. The estimated number of deliveries per year is 4.7 % of the population¹⁷. The LGAs have 10-12 functional LGA

owned health facilities each and they are within 60–90 minutes' drive to major referral hospitals.

Study Subjects

The subjects involved in this study were Traditional Birth Attendants who live and practice in Lagelu and Ido LGAs. They were recruited into the study through the Local Government main Primary Health Care facilities and focal persons for Maternal and Child health.

Study Types and Methods

This was a community based observational study carried in Ido and Lagelu LGAs between June 2011 and February 2012. The lists of all the TBAs were collected from the Maternal and Child Health focal persons in the LGAs and TBA leaders in the communities. The inclusion criteria were assurance that the TBAs will not relocate outside the two LGAs throughout the period of the study and willingness to participate in the study. A structured questionnaire was used to collect basic bio-data, address, place of residence, place of practice, level of formal education, sources of TBA training and re-training from all the recruited TBAs. Good penetration to all the TBAs was achieved by adequate mobilization through the TBAs Zonal, State and National Coordinators. A series of mobilization meetings were held first with the TBA Coordinators and latter with the TBAs in each LGA. Their houses and places of practice were located through direct home visit using addresses given by the TBAs sometimes with the help of the TBA leaders. The day and time of antenatal clinics were collected from all the TBAs and they were subsequently grouped based on the clinic days. Eight Nurses and two Doctor trained on WHO/UNICEF community based newborn care package were used in the project implementation. All the TBAs were divided into eight groups and each group had a nurse assigned to it. These nurses directly observed the activities of the TBAs during antenatal clinics, home visits and deliveries. Each TBA was visited at least twice a week for a total of eight months targeting 10 observations per ANC/delivery and post-partum/TBA. The Doctors confirmed 10% of the observations. Observations were documented in the questionnaires as open-ended

Characteristics	Lagelu LGA	Ido LGA	Total
Total Number of TBAs	76	58	134
Sex ratio (M/F)	1/75	0/58	1/133
Age range in years (22 – 40)	24 (31.6 %)	15 (25.9%)	39 (21.9%)
Age range in years (41 – 68)	52 (68.4%)	43 (74.1 %)	41-68 (70.1%)
Range of years of practice	2 – 38	3- 35	2 - 38

Table 1: The basic demographic data of the TBAs

and these were later grouped together when found to be similar. A total of fourteen of such documentations were made. This study was part of the maternal and child community-based research being conducted by the Author.

Data Management

All data obtained were entered into Epi Data version 3 by dual data entry for easy data cleaning and validation. The data were then transferred into excel spreadsheet where analysis was done using frequency tables, pie and bar charts.

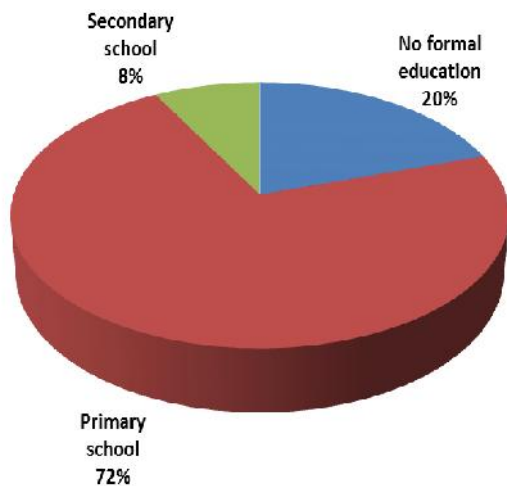


Figure 1: Educational status of the TBAs

RESULTS

TBA Distribution

There were a total of 146 TBAs out of which 134 fulfilled the inclusion criteria and were recruited into the study. There were 133 females and only one male who practice in Lagelu LGA. The basic demographic data is as presented in Table 1.

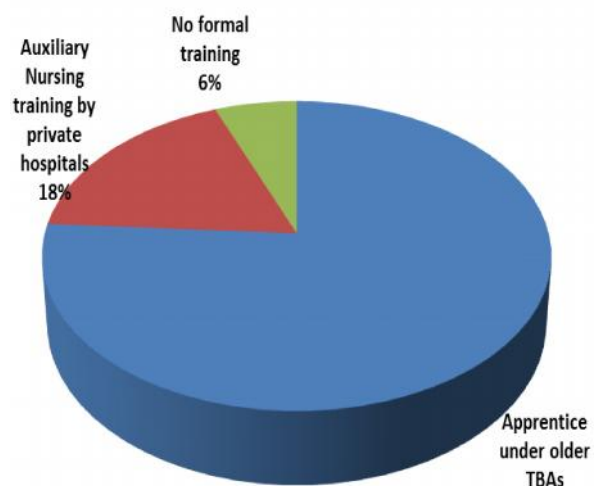


Figure 2: Sources of TBA training on pregnancy and child birth services before practicing

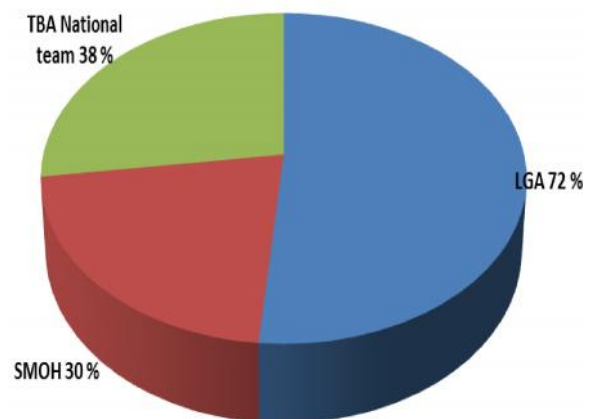


Figure 3: Sources of additional training after practicing as TBAs

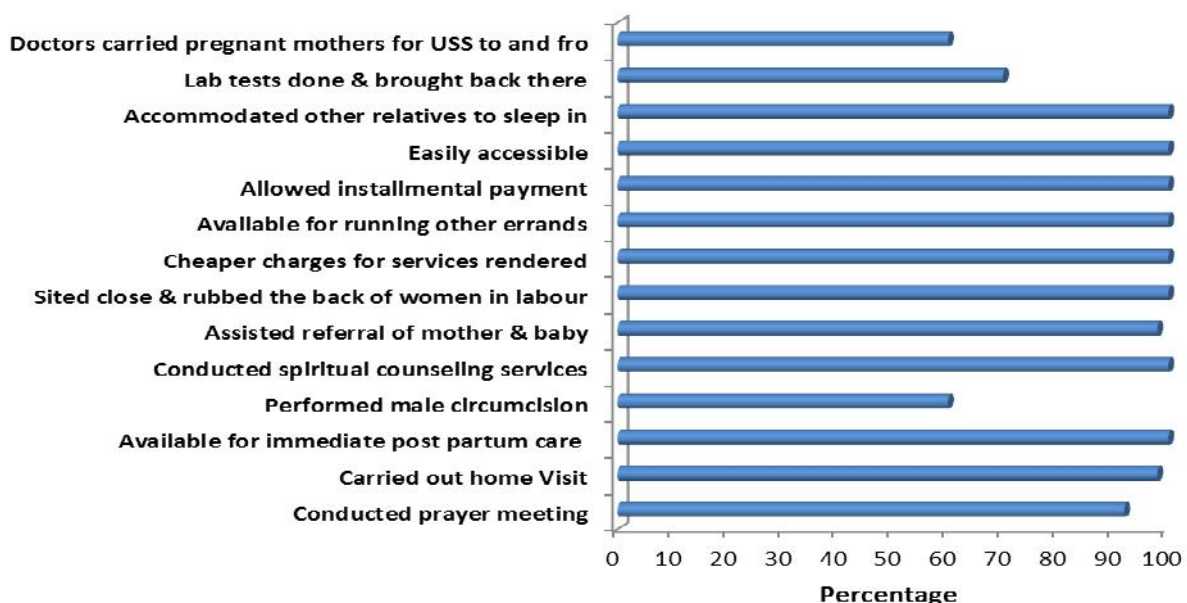


Figure 4: Distribution of attractive practices

TBA educational status

Most of the TBAs did not go beyond elementary school. The various proportion of their educational status is as shown in Figure 1.

Sources of TBA Training Pre-practicing

The sources of the pre-practicing training for all the TBAs are as shown in Figure 2.

Sources of TBA Training Post-practicing

The sources of the post-practicing training for all the TBAs are as shown in Figure 3. All the TBAs have had one or more types of re-training since commencement of their practicing as TBAs. Trainings were given as seminars and most were organized by the LGAs while some were by State Ministry of Health (SMOH).

Attractive Practices Exhibited by the TBAs

Figure 4 shows the various attractive practices exhibited by the TBAs. Most of the practices were similarly performed by the majority of the TBAs.

DISCUSSION

Maternal and neonatal care services are still not optimal in Nigeria though several campaigns have been organized in this regards and several programmes have been put in place. Despite all these, maternal and neonatal deaths have remained very high in Nigeria. A recent package targeting reduction of maternal, newborn and child health is the Integrated Maternal Newborn and Child Management Strategy (IMNCH). This is currently being pulled through various health sectors by the Federal Government of Nigeria with the help of International Agencies. One of the major issues identified in this package is the need to increase the proportion of Skilled Birth Attendants and to make them as close to the people as much as possible¹². The non-availability of Skilled Birth Attendants cuts across every type of community settings in Nigeria and spreads across all social status. Where this Skilled Birth Attendants are not available, Traditional Birth Attendants have virtually taken over their responsibilities. Several factors have been identified to be responsible for this^{12, 18, 19}. TBAs have been shown to be very successful in making their services very acceptable to pregnant mothers that patronize them and even in some communities, as many as over 60 % of pregnant mothers who attend mission home facilities deliver there despite unhygienic practices and several risks associated with such deliveries¹². Non availability of skilled birth attendants, Poverty and accessibility have been shown to be major factors responsible for choosing these TBAs but other attractive factors have also been identified in other developing countries¹¹. This current study therefore evaluated some of the other factors that seem to be

attracting these pregnant mothers through direct prospective observational study.

The demographic distribution of the TBAs seem to be a reflection of the population settings, the religion and culture under the study. The numbers of the TBAs in each LGA seem to follow the population sizes: higher number of TBAs in Lagelu which has a higher population. The fact that only one male out of 134 TBAs (female/male ratio of 99.99/0.01) is a reflection of the fact that this profession which has always been practiced by the elderly women in the communities has remained so and continued to be passed as a female profession from one generation to another. This is not peculiar to the study area or Nigeria as a country but similar findings were observed in other parts of Nigeria and other developing countries^{11, 15, 19}. These women are usually in the elderly age group and seem to practice the profession for a relatively long time. The age range is predominantly above 40 years in the two LGAs as well as long years of practice seen in this study also shows what obtains in other developing countries of similar demographic data¹¹.

TBAs are usually local women with little formal education. Their little formal education is also depicted in our study as very few of them had more than elementary school (8%) education and a large proportion (20%) did not have any formal education. This trend is similar across countries where the use of TBA is common. This is generally thought to be related to the level of the general educational status of the citizens and the level of poverty^{15, 16, 18}. The fact that this skill is usually passed from an experienced TBA to another is reflected in the sources of their training before starting to practice as TBAs. In this study a very high proportion of the TBAs had their initial training under another TBA (76%) while a few did not have any training. An interesting trend is the involvement of private hospitals in the training of TBAs as also shown in the study were up to 18% had their under this settings. The importance of the role of older TBAs in training other younger TBAs is also shown by Titaley *et al* in his recent review of why some pregnant mothers prefer traditional midwives¹¹.

Concerning the retraining of TBAs, the study revealed that there were three sources of their retraining and the governments at state and local government levels are actively involved. In the study, 72 % of the TBAs had their training with the LGA while 30 % is from State Ministry of Health (SMOH). The fact that most training organized by their national associations may not be in their places of domicile may be responsible for the unexpectedly smaller proportion (38%) trained by the TBAs at national level. Two opposite views

persist about use of training to improve their practices and aid the continuation of their role. Some health workers would like to see them trained better and incorporated into the formal health system while other health workers feel that all deliveries should be attended by either a nurse/midwife or a doctor, and that TBAs should eventually be phased out. Though TBAs are still actively trained in Nigeria but Current reviews and the Cochrane review on the effect of training of TBAs on maternal and neonatal mortality did not show enough evidence for significant positive effect^{15,16}.

Currently in Nigeria, TBAs are regarded as unskilled and are not recognized as part of the formal health sector. The Federal Government of Nigeria is currently recruiting midwives through the National Midwives Scheme of National Primary Health Care Development Agency. These are to work in remote areas of the country but the effectiveness of this may remain low as even if they were recruited, there is no guarantee that their obstetric services would be used due to potential low health facility usage and poor attitude of most health care workers working in these centres. The closer look at the practical aspect of the procedures and general positive attitudes seen in this study if incorporated into routine maternal and newborn care services may indeed assist in improving utilization of our health care services, improve facility delivery and eventually lead to reduced maternal and neonatal deaths. The TBAs uniform attractive roles observed in this study were: counseling services, care while in labor by rubbing the back and sitting close, accessibility, accommodating other relatives in the immediate post- partum period, cheaper charges for services rendered and allowing payment by installment. Ninety eight percent of the TBAs also assisted in referral by following the patients to the referral facilities which are mainly private hospitals. The same proportion also carried out home visits which are highly valued by the patients and their relations. Other significant roles were arranging to make lab results available, liaising with USS Doctors to carry pregnant mothers in their cars and bring them back as well as organizing prayer meetings both in the Christian and Islamic ways. The TBAs' social and emotional closeness to the community, their long experience in providing services to mothers and infants and their intimacy with the villagers which creates loyalty and understanding, particularly when other health care services were not accessible has been shown to build the authoritative knowledge conferred on them by the community^{11,20}.

These roles are not too far from the basic responsibilities of the Community Extension Workers (CHEWs) who are employed in Nigeria to work in the primary health facilities after 2-3 years formal

training and be linkages between the people in the communities and the health facilities. They are primarily expected to spend 80% of their time in the communities and the remaining 20% in the health facilities. This has gradually phased off in Nigeria as this CHEWs now work in the health facilities. Midwives are also few in these health facilities and secondary and tertiary health facilities are far from the communities and are only operated using the cash and carry system. The attitudes of the health workers in these government hospitals are also repelling and have played a leading role in limiting the use of these health facilities.

CONCLUSIONS AND RECOMMENDATIONS

TBAs' activities are still active in the study area. The numbers of these TBAs are significant and have well organized structures in place. Most are still not very educated with majority having only elementary school training. Their social roles and responsibilities are very attractive and are good examples for health workers to follow. Will it be possible for these roles to be restored into the health system? Can primary health care be closer to the people than it is now? It will definitely assist in improving health facility patronage and eventual reduction of maternal and newborn morbidity and mortality. The recommendation is to incorporate these good practices into formal health sector, encouraging attitudinal change in the current health workers across all health care levels. CHEWs should also be primarily involved in home visit in pregnancy and post-natal care services.

ACKNOWLEDGEMENT

The study was supported by World Health Organization through the AFRINEST study grant awarded to the Author. Dr Olutunde Olajide and Mr Seye Idris assisted in the data collection while Mr Nathaniel Afolabi, Mr Dapo Oyewole, Mrs Bukola Adeniji and Miss Ronke Egunjobi assisted in the data management.

REFERENCES

1. **Lawn JE**, Cousens S, Zupan J. Lancet Neonatal Survival Steering Team. 4 million neonatal deaths: When? Where? Why? *Lancet*. 2005;365 (9462):891–900. doi: 10.1016/S0140-6736(05) 71048-5.
2. World Health Organization. *The World Health Report 2005: Make Every Mother and Child Count*. Geneva. 2005.
3. **Ronsmans C**, Graham WJ. Lancet Maternal Survival Series steering group. Maternal mortality: who, when, where, and why. *Lancet*. 2006;368 (9542):1189–1200. doi: 10.1016/S0140-6736(06) 69380-X.]

4. **Mrisho M**, Schellenberg JA, Mushi AK, Obrist B, Mshinda H, Tanner M, Schellenberg D. Factors affecting home delivery in rural Tanzania. *Tropical Medicine & International Health*. 2007;12(7):862–872.
5. **Bell J**, Curtis SL, Alayon S. Trends in delivery care in six countries. Calverton, Maryland: ORC Macro and International Research Partnership for Skilled Attendance for Everyone (SAFE); 2003.
6. **Kyomuhendo GB**. Low Use of Rural Maternity Services in Uganda: Impact of Women's Status, Traditional Beliefs and Limited Resources. *Reproductive Health Matters*. 2003;11(21):16–26. doi: 10.1016/S0968-8080(03)02176-1.
7. **Duong DV**, Binns CW, Lee AH. Utilization of delivery services at the primary health care level in rural Vietnam. *Social Science & Medicine*. 2004;59(12):2585–2595.
8. **Darmstadt GL**, Bhutta ZA, Cousens S, Adam T, Walker N, de Bernis L. Lancet Neonatal Survival Steering Team. Evidence-based, cost-effective interventions: how many newborn babies can we save? *Lancet*. 2005;365(9463):977–988. doi: 10.1016/S0140-6736(05)71088-6.
9. United Nations. Road map towards the implementation of the United Nations Millennium Declaration: report of the Secretary-General. New York: United Nations; 2001.
10. **Sachs JD**, McArthur JW. The Millennium Project: a plan for meeting the Millennium Development Goals. *The Lancet*. 2005;365(9456):347–353.
11. **Christiana R Titaley**, Cynthia L Hunter, Michael J Dibley and Peter Heywood. Why do some women still prefer traditional birth attendants and home delivery?: a qualitative study on delivery care services in West Java Province, Indonesia. *BMC Pregnancy Childbirth*. 2010; 10: 43. doi: 10.1186/1471-2393-10-43
12. Saving newborn lives in Nigeria: Newborn health in the context of the integrated maternal, newborn and child health strategy, revised 2nd edition 2011, 1- 120.
13. World Health Organization. Traditional birth attendants: a joint WHO/UNICEF/UNFPA statement. Geneva: World Health Organization, 1992.
14. **Fortney JA**, Smith JB. Training of traditional birth attendants: issues and controversies. Durham, NC: Family Health International and United Nations Children's Fund, 1997.
15. **Sibley LM**, Sipe TA, Brown CM, Diallo MM, McNatt K, Habarta N. Traditional birth attendant training for improving health behaviours and pregnancy outcomes. *Cochrane Database of Systematic Reviews* 2007, Issue 3. Art. No.: CD005460. DOI: 10.1002/14651858.CD005460.
16. **Piper CJ**. Is there a place for traditional midwives in the provision of community-health services? *Ann Trop Med Parasitol*. 1997 Apr; 91(3):237-245.
17. Nigeria 2008 Demographic and Health Survey. National Population Federal Republic of Nigeria, Abuja, Nigeria. 2009; 1- 630
18. **Umar US**, Olumide EA, Bawa SB. Village health workers' and traditional birth attendants' record keeping practices in two rural LGAs in Oyo State, Nigeria. *Afr J Med Med Sci*. 2003 Jun;32(2):183-192.
19. **Akpala CO**. An evaluation of the knowledge and practices of trained traditional birth attendants in Bodinga, Sokoto State, Nigeria. *J Trop Med Hyg*, 1994 Feb;97(1):46-50.
30. **Davis-Floyd R**, Sargent C. The social production of authoritative knowledge in pregnancy and childbirth. *Medical anthropology quarterly*. 1996;10(2):111–120. doi: 10.1525/maq.1996.10.2.02a00010