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Original Research Article

Determinants of utilisation of traditional birth attendant services by pregnant women in Ogbomoso, Nigeria

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ABSTRACT

Background: This study was designed to assess the determinants of utilization of Traditional Birth Attendants (TBAs) services by pregnant women in different communities in Ogbomoso, Nigeria.

Methods: This was a community-based cross-sectional study. Fisher's formula was used to calculate the sample size and a total of 270 eligible pregnant women were enrolled for the study using multistage sampling technique. Data was collected using pretested structured interviewer-administered questionnaire. Data analysis was done using SPSS version 20 and results were presented in frequencies and percentages.

Results: Factors found to have a significant influence on the utilization of TBA services in this study include: low educational status ($p < 0.001$), lower socioeconomic status ($p < 0.001$), and compassionate care given by the TBAs ($p = 0.004$). Other factors include service proximity and lower cost of TBA services.

Conclusions: The impact of TBAs and their services cannot be overemphasized in the present state of maternal and child health in Nigeria. Lower educational status among others has been found to be a strong predictor of utilization of TBA services. There is, therefore, the need to improve the educational and socioeconomic status of women in order to allow them to access quality health care services that will safeguard their well-being. Inculcating compassionate care into orthodox healthcare delivery will go a long way to improve patronage and discourage TBA utilization.

Keywords: Determinants, Pregnant women, TBA utilization

INTRODUCTION

In the developing world, maternal and infant morbidity still remain a global concern, most especially in many Sub-Saharan African Countries.^{1,2} The estimate shows that there are more than 500 maternal mortalities out of every 100,000 live births in most African countries.³

It has been discovered that the increased maternal and infant mortality rate is blamed on many deliveries that took place at home with the help of untrained attendants.²⁻⁵ Deliveries conducted by TBAs have been shown to be associated with four times higher morbidity and mortality when compared with deliveries supervised by midwives and other health professionals.⁶

The practice of traditional birth attendant has caused a lot of havoc on the health of mother and child. Despite the introduction of modern health facilities, safe motherhood initiative program, free medical services etc., statistics showed that majority of children are born by TBAs both in rural and urban areas. The majority of deliveries are being carried out by TBAs which indicate that several deliveries still occur outside hospitals and health facilities.^{2,7,8}

According to National Population Commission, one in every three births in Nigeria is attended by skilled personnel, thus confirming the fact that TBA utilization rate in Nigeria is still very high.^{9,10}

Studies conducted in some African countries have shown that most pregnant women still prefer TBAs services to orthodox services due to several reasons. Some of these include economic and pragmatic reasons, unaffordable fees aggravated by the low economic status of the community members, and embarrassment by health care providers. Other reasons found were the trust and tradition that the TBAs exhibit. Some of the respondents claimed that TBAs shared the same culture with them and that they were long-serving members of the community. Furthermore, difficult access to health personnel and social distance between the community and village midwife were among the issues raised.¹¹

Considering the foregoing, it is imperative to study the determinants of utilization of TBA services by pregnant women in Ogbomoso, Nigeria. This will go a long way to influence policy making on maternal and child health in Nigeria.

METHODS

It was a community-based cross-sectional study carried out between January and May 2016 in Ogbomoso South and Ogbomoso North Local government areas in Oyo State, Nigeria. The two Local Government Areas (LGA) within Ogbomoso Township (Ogbomoso North and South) are semi-urban. These two LGAs have an estimated population of 300,000 according to 2006 census (Federal Republic of Nigeria, Official Gazette, 2009).¹²

About 100 TBAs were registered in the Primary Health Care Units of both North and South LGAs in Ogbomoso. Pregnant women attending these TBAs were recruited for the study. Non-consenting pregnant women attending these TBAs were excluded from the study. Eligible respondents were selected using multi-stage sampling procedure.

The minimum sample size was determined by using the Fishers formula.¹³ Using a prevalence rate i.e. the proportion of pregnant women utilizing TBAs services in Ogbomoso. (Not known presently, therefore 50% is chosen, extrapolated from National Demographic Health

Survey, 2008 the sample size needed to achieve a precision of 5% at 95% confident interval was obtained from equation $N=Z^2P(1-P)/d^2$ where $d=0.05$, $Z=1.96$ and $P=0.5$.⁹ The calculated sample size was 246. To allow for non-respondents and those who will be excluded due to breach in the study protocol, a total of 270 subjects were enrolled for the study.

Data was collected using a pre-tested semi-structured interviewer-administered questionnaire which was administered by trained research assistants

Statistical analysis

Each questionnaire was given a unique code and entered into SPSS version 20. Frequencies of variables were used to check for missed values and outliers. Univariate analysis was carried out to determine the frequency distribution of the age groups, marital status, the level of education, occupation, religion and ethnicity of respondents. Bivariate analysis using Chi-square test was carried out to determine factors influencing utilization of TBAs services. For all statistical analysis, a P-value less than 0.05 was considered significant.

For ease of analysis, utilization of TBAs services was categorized into full and partial. Clients who utilized TBA services and also booked for antenatal care in other hospitals were regarded as partial utilizers while those who used only TBA services as full utilizers.

RESULTS

From the Table 1, the mean age of the respondents is 27.9 ± 5.4 years with the majority of the respondents (55.2%) within the age group 20-29 years. The majority of the respondents have a secondary education (67.8%). About 70.4% of the respondents belong to the low social classes shown in Table 1.

The majority of the respondents, 63.7% lived within a distance of less than 1km to the nearest health facility while only 44.8% lived within less than a kilometer from the nearest TBA center.

From the Table 2 above, the majority of the respondents (80.7%) mentioned compassionate care by the TBAs as a reason why they utilize TBAs services instead of orthodox services. But about 30% of the respondents claimed that they are not aware of another maternity centers other than TBAs.

Some other respondents mentioned cultural acceptability (67.4%), the proximity of TBAs to their dwelling place (47%) and cheaper service (65.2%) as shown in the table.

Amongst other reasons for utilizing TBA services, prayer was mentioned by (74.8%) of the respondents. However, a few stated prompt services (7.0%), clinic schedule

(3.3%), family support (2.6%) and spiritual counseling (1.5%) as reasons for utilizing the TBA services.

Table 1: Socio-demographic characteristics of the respondents.

Variables	Value (n=270)	
Mean Age	27.9	
SD	5.4	
Age Group (Yrs)	Frequency	%
<20	12	4.4
20-29	149	55.2
30-39	101	37.4
40-49	8	3
Religion		
Christianity	229	84.8
Islam	41	15.2
Marital status		
Never married	14	5.2
Married	256	94.8
Occupation		
Civil servant	29	10.7
Unemployed	20	7.4
Artisan	95	35.2
Private employee	126	46.7
Parity		
None	73	27
one child	74	27.4
2-5 children	122	45.2
Over 5 children	1	0.4
Level of Education		
Primary	21	7.8
Secondary	183	67.8
Post-secondary	66	24.4
Ethnic Group		
Yoruba	266	98.5
Igbo	1	0.4
Others	3	1.1
Social class		
Lower Class	190	70.4
Middle Class	35	13.0
Upper Class	45	16.7
Distance from TBA center from home		
< 1 km	121	44.8
1-2 km	53	19.6
3-4 km	50	18.5
≥ 5 km	46	17.0
Distance of nearest health facility		
< 1 km	172	63.7
1-2 km	54	20.0
3-4 km	21	7.8
≥5 km	23	8.5

Table 3 showed that respondents with lower educational level are more likely to utilize TBA services only compared to their more educated counterparts who tend to seek antenatal care from orthodox centers in addition to TBA services.

It also revealed a significant relationship between the social class of the respondents, ($p < 0.001$) and compassionate care by the TBAs ($p = 0.004$) as other factors influencing utilization of TBA services.

Table 2: Reasons for utilizing TBAs services.

Variable	Response	Frequency	%
TBA services cheaper	Yes	176*	65.2
TBA services cultural acceptable	Yes	182*	67.4
TBA services proximity	Yes	127*	47
TBA-compassionate care	Yes	218*	80.7
TBA-only maternity that I know	Yes	81*	30
Prayer		202*	74.8
Convenient clinic schedule		9*	3.3
Credit facility		2*	0.7
Prompt service		19*	7.0
Family support		7*	2.6
Spiritual counselling		4*	1.5
No response		31*	11.5

*Multiple responses noted

Table 4 showed the logistic regression of the determinants of utilization of TBA services among the respondents. Compared to respondents with secondary education or lower, those with post-secondary school education were 50% less likely to utilize TBA services only (OR 0.5, CI= 0.42-0.94, P= 0.02).

Respondents who were of higher socioeconomic status were 90% less likely to utilize TBA services only compared to their counterparts with lower socioeconomic status (OR 0.1, CI= 0.1- 0.45, P= 0.008). Respondents who believed that TBAs offer more compassionate care than orthodox healthcare providers were twice more likely to utilize TBA services only compared to those who believed otherwise (OR 2.12, CI= 1.39-5.87, P=0.003).

DISCUSSION

In Nigeria, just like most developing countries a number of pregnant women still prefer to utilize TBA services than seek health care from health facilities.

Studies have shown adverse effects of their practices on both mother and child leading to high maternal and infant mortality ratio.²⁻⁶

Table 3: Relationship between selected variables and utilization status of TBA services.

	Variables	TBA utilization status		Statistical indices
		Full utilizers n=185 (%)	Partial utilizers n=85 (%)	
Educational Status	Postsecondary	34 (51.5)	32 (48.5)	Chi ² =16.594, df=1, P< 0.001
	Secondary school or lower	151 (74.0)	53(26.0)	
Religion	Christianity	157 (68.6)	72 (31.4)	Chi ² =0.001, df=1, p=0.973
	Islam	28 (68.3)	13 (31.7)	
Marital Status	Never Married	10 (71.4)	4 (28.6)	Fisher's exact, p=1.000
	Married	175 (68.4)	81 (31.6)	
Social Class	Lower	145 (76.3)	45 (23.7)	Chi ² =18.13, df=2, p<0.001
	Middle	18 (51.4)	17 (48.6)	
	Upper	22 (48.9)	23 (51.1)	
TBA services cheaper	Yes	127 (72.2)	49 (27.8)	Chi ² =3.106, df=1, p=0.078
	No	58 (61.7)	36 (38.3)	
TBA Services culturally acceptable	Yes	130 (71.4)	52 (28.6)	Chi ² =2.192, df=1, p=0.139
	No	55 (68.5)	33 (31.5)	
Services proximity	Yes	94 (74.0)	33 (26.0)	Chi ² =3.359, df=1, p=0.139
	No	91 (63.6)	52 (36.4)	
TBA compassionate care	Yes	158 (72.5)	60 (27.5)	Chi ² =8.223, df=1, p=0.004
	No	27 (51.9)	25 (48.1)	
Source of Influence	Significant	108 (65.5)	57 (34.5)	Chi ² =1.842, df=1, p=0.174
	Others own decision	77 (73.3)	28 (26.7)	

Table 4: Logistic regression showing determinants of utilization TBA services among respondents.

Variables	TBA full utilisation n= 185 (%)		
	OR	95% CI	P
Educational status (Ref=sec. School and below Postsecondary)	0.5	0.42-0.94	0.02
Religion (Ref=Xtianity) Islam	0.25	0.22-1.82	0.324
Social Class (Ref=lower) higher	0.1	0.1-0.45	0.008
TBA services cheaper (Ref=No) Yes	2	0.52-2.35	0.542
TBA Services culturally acceptable (Ref=No) Yes	0.5	0.40-2.82	0.123
Services proximity (Ref=No) Yes	2.5	0.48-3.99	0.54
TBA compassionate care (Ref=No) Yes	2.12	1.39-5.87	0.003

A total of 270 pregnant women within the reproductive age group 15-49 years were included. The mean age of the respondents was 27.9±5.4 years. Most of the women fell within the age range of 20-29 years (55.2%). The low proportion of women in both extremes of reproductive life observed in this study is noteworthy because of the high-risk features associated with these age groups (≤20 and 40-49 years respectively). Previous studies observed similar findings.^{2,14} However, in a study done by

Akenzua et al reported by Salako, TBAs were found to be managing pregnancies of high risk in adolescents and elderly primigravida.¹⁵⁻¹⁷ Involvement of TBAs in managing pregnancies at the extremes of reproductive life which are beyond their scope indicates a lack of risk assessment and can result in high maternal and perinatal mortality and morbidity.

It was noted in this study that majority of respondents were of lower socioeconomic status and lower level of education (70.4% and 75.6% respectively). This finding was similar to that of the study done in the northern part of Nigeria where the majority of the pregnant women utilizing TBA services were of a lower socio-economic class and lower educational level.¹⁸ Also, the majority of the respondents lived within a distance of less than 1km from a health care facility. This was in contrast to previous studies where the long distance between patient's home and health care facility was a reason for utilizing TBA services.^{6,11,19}

The determinants of utilization of TBA services found in this study were: lower educational status, lower socioeconomic status and more compassionate care by the TBAs. It was noted that respondents with secondary school education or lower were 50% more likely to utilize TBA services only compared to those with higher education. Similar findings were reported in Malawi, Zambia, and Nigeria as well.^{2,20,21} Also, a similar study conducted in Sierra Leone agreed with this finding as it revealed that there is a positive association between low

literacy and utilization of TBA services.²² Contrary to this, however, a study done in Southwest Nigeria revealed that most mothers irrespective of their level of education still utilize traditional homes which to some are safer and have less complication.²³

In the same vein, the social class of the respondents was significantly related to the TBA utilization status. It was revealed that majority of the respondents (70.4%) belong to the lower socio-economic level. Doctor and Dahiru reported similar findings.¹⁸ The lower the socioeconomic level the more likely a woman is to opt for TBA services which she may think is cheaper than hospital services. With an increasing cost of health care and rate of unemployment, the future looks bleak for the low social class individuals. This finding is corroborated by a study that reported that women of higher socioeconomic status are able to make wiser decisions concerning their health than their counterparts in the lower social class.²⁴

The TBAs received a remarkable level of patronage from pregnant women by the majority of respondents, due to the fact that they provide compassionate care more than the orthodox health workers. This finding is not different from that of other studies where similar results were reported. In comparison, a study done in Ogun State South West Nigeria, about (43.5%) of the respondents claimed that TBA provides more compassionate care. These finding compared well with those of West Java province in Indonesia and studies conducted in several parts of Nigeria.¹¹ Other factors like service proximity, cultural acceptability and low cost of TBA services did not significantly influence utilization of TBA services. This was in contrast to findings of other previous studies where TBA services were considered culturally more acceptable, cheaper and were easily accessible (Mboye, Opiah, and Dorwie).

This present study should be interpreted in the light of some limitations. Being a cross-sectional study, causality may be difficult to ascertained. Also, Paucity of local data on utilization of TBAs services by pregnant women possibly as a result of difficulty in penetrating the TBAs circle could be a limiting factor.

CONCLUSION

The TBAs play central roles in the present state of maternal and child health in Nigeria. Lower educational and socio-economic status among others has been found to strongly influence utilisation of TBA services in this study. There is, therefore, the need to improve the educational and socioeconomic status of women in order to allow them to access quality health care services that will safeguard their well-being. Inculcating compassionate care into orthodox healthcare delivery will go a long way to improving uptake of orthodox health care delivery.

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REFERENCES

1. Bryce J, Daelmans B, Dwivedi A, Fauveau V, Lawn J, Mason E, et al. Countdown Coverage Writing Group; Countdown to 2015 Core Group. Countdown to 2015 for maternal, newborn, and child survival: the 2008 report on tracking coverage of interventions. *Lancet.* 2008;371(9620):1247-58.
2. Ebuehi OM, Akintujoye I. Perception, and utilization of traditional birth attendants by pregnant women attending primary health care clinics in a rural Local Government Area in Ogun State, Nigeria. *Int J Womens Health.* 2012;4:25-34.
3. Chou D, Inoue M, Mathers C, Moller A, Oestergaard M, Say L, et al. Trends in maternal mortality: 1990 to 2010. WHO-UNICEF UNFPA and the World Bank estimates. 2012.
4. Lawn JE, Lee AC, Kinney M, Sibley L, Carlo WA, Paul VK et al. Two million intrapartum-related stillbirths and neonatal deaths: where, why, and what can be done? *Int J Gynecol Obstet.* 2009;107:S5-S19.
5. Monjok E, Essien E, Smesny A, Okpokam S. A training need for rural primary care in Nigeria. *J Obstet Gynaecol.* 2010;30(8):833-5.
6. Opiah M, Osayi T, Afolayan J, Adeyanju AB UA. Factors influencing patronage of traditional birth attendants for delivery and newborn care in amassoma community, Southern IJAW local government area, Bayelsa State. *Bull Sci Assoc Nigeria.* 2010;29:27-32.
7. Ofili A, Okojie O. Assessment of the role of traditional birth attendants in maternal health care in Oredo Local Government Area, Edo State, Nigeria. *J Comm Medicine Prim Health Care.* 2005;17(1):55-60.
8. M'Cormack-Hale FA, Beoku-Betts J. General Introduction. *Afr Asian Studies.* 2015;14(1-2):8-17.
9. Abuja N. National Population Commission and ICF Macro; 2009. National Population Commission (NPC)[Nigeria] and ICF Macro Nigeria Demographic Health Survey. 2008.
10. Abimbola S, Okoli U, Olubajo O, Abdullahi MJ, Pate MA. The midwives service scheme in Nigeria. *PLoS Med.* 2012;9(5):e1001211.
11. Titaley CR, Hunter CL, Dibley MJ, Heywood P. 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(1):1.
12. Commission NNP. Legal notice on the publication of 2006 Census final results In: Federal Republic of Nigeria official Gazette No 2. Abuja; 2009.
 13. Araoye MO. Research methodology with statistics for health and social sciences. Ilorin, Nigeria: Nathadex Publishers; 2004.
 14. Kirchengast S, Hartmann B. Advanced maternal age is not only associated with newborn somatometric but also with the mode of delivery. *Annals Human Biol.* 2003;30(1):1-12.
 15. Okafor CB. Availability and use of services for maternal and child health care in rural Nigeria. *Int J Gynecol Obstet.* 1991;34(4):331-46.
 16. Akenzua GI, Akpovi SU, Ogbeide O. Maternal and child care in rural areas: the role of traditional birth attendants in the Bendel State of Nigeria. *J Trop Pediatr.* 1981;27(4):210-4.
 17. Salako AA. Letter to the Editor: The traditional birth attendant and the high Nigeria's maternal mortality. *Nigerian J Clini Prac.* 2002;5(1):69-70.
 18. Doctor HV, Dahiru T. Utilization of non-skilled birth attendants in Northern Nigeria: a rough terrain to the health-related MDGs. *Afr J Reprod Health.* 2010;14(2):37-45.
 19. Onah HE, Ikeako LC, Iloabachie GC. Factors associated with the use of maternity services in Enugu, southeastern Nigeria. *Social Sci Medicine.* 2006;63(7):1870-8.
 20. Oshonwoh E, Nwakwuo G, Ekiyor C. Traditional birth attendants and women's health practices: A case study of Patani in Southern Nigeria. *J Community Health.* 2014;38(2):349-56.
 21. Mpembeni RN, Killewo JZ, Leshabari MT, Massawe SN, Jahn A, Mushi D et al. Use pattern of maternal health services and determinants of skilled care during delivery in Southern Tanzania: implications for achievement of MDG-5 targets. *BMC pregnancy Childbirth.* 2007;7(1):1.
 22. Dorwie FM, Pacquiao DF. Practices of traditional birth attendants in Sierra Leone and perceptions by mothers and health professionals familiar with their care. *J Transcultural Nursing.* 2013;1043659613503874.
 23. Ewa E, Lasisi C, Maduka S, Ita A, Ibor U, Anjorin O. Perceived factors influencing the choice of antenatal care and delivery centres among childbearing women in Ibadan North South-Western, Nigeria. *Ethiopian J Environ Studies Managem.* 2012;5(4):373-83.
 24. Mbonye AK, Neema S, Magnussen P. Preventing malaria in pregnancy: a study of perceptions and policy implications in Mukono district, Uganda. *Health Policy Planning.* 2006;21(1):17-26.

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