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Research Article

FACTORS ASSOCIATED WITH THE CHOICE OF TRADITIONAL BIRTH ATTENDANTS FOR DELIVERY BY WOMEN OF CHILD BEARING AGE IN ISIALA NGWA SOUTH LOCAL GOVERNMENT AREA OF ABIA STATE, NIGERIA

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Abstract

Background: Traditional birth attendants known as TBAs have been the mainstay of maternal and child care in Africa. With the advent of modern methods of child delivery, emphasis has shifted over the years to skilled birth attendance. However, in most developing countries, including Nigeria, where traditional beliefs and cultural practices are still rife, TBAs are still playing a dominant role in child delivery especially in the rural areas. **Method:** We adopted a cross-sectional descriptive design to assess the perceptions, knowledge and practices about TBAs and the utilization of TBA services among a sample of 200 purposively selected married women of reproductive age, resident in Isiala Ngwa South Local Government Area of Abia State in South-Eastern Nigeria. **Result:** The finding of the study showed that 59% of the study subjects preferred TBA services to skilled birth attendants' services. Apart from cultural beliefs and practices, other factors that determined the TBA preference, included: exorbitant cost of hospital delivery, long waiting time in receiving attention in public hospitals, the humane and friendly services provided by the TBAs compared with the unfriendly disposition of nurses. **Conclusions and Recommendations:** The study has shown that there is high preference for TBA services in the study area and that to a large extent human and systemic factors are contributory to the higher TBA service uptake. The high proportion of complications reported is a cause for concern although the cases were referred to the hospital. TBAs in the local government area should be trained by the relevant health authorities to recognize danger signs of pregnancies and labour and to refer same on time for skilled management.

Keywords: TBAs, Place of delivery, Skilled birth attendance, Cultural beliefs.

INTRODUCTION

Worldwide, prior to the development, adoption and application of modern methods and practices of safe motherhood with emphasis on skilled birth attendance, traditional birth attendants or traditional midwives were the mainstay for pregnant women in labour. Globally, from ancient and medieval times, up until the advent of modern civilization, most evolving societies and cultures, whether in Europe, Asia or Africa have relied extensively on traditional midwives for child delivery. From the mid-19th century, when reliable record keeping began, to the mid-1930s, high maternal mortality was equally a feature of the Western world, with wide disparities between countries. However, from 1939, maternal mortality rates in most of the Western world began to decline, and within two decades, the intercountry disparities had almost disappeared. The main determinant of the dramatic decline in maternal mortality ratios in the developed countries is the overall high standard of maternal care provided by birth attendants (London, 2000). The evolution of human civilization and the growth of scientific knowledge as applied to medicine and health care delivery has contributed in no small way to the expansion of the scope of man's knowledge of the determinants of health especially in the prevention of previously prevalent morbidities and mortalities and their associated risks and the application of the requisite interventions for the protection and promotion of human health and well-being. The emergence of the field of obstetrics and maternal care services that are aimed at ensuring safe motherhood has to a large extent reduced the high morbidities and mortalities that were prevalent several decades prior to the modern science of safe motherhood. The hallmark of safe motherhood is the promotion of health facility births or deliveries that are attended by skilled providers who not only have the requisite knowledge and skills to identify possible risks prior to child delivery, during and after child delivery; but also have the capacity to respond appropriately to the risks (London, 2000). TBA practice in Africa also dates back several centuries and the skills are considered to be trans-generational; being passed from one generation to the next. Despite the transitions in global healthcare delivery systems, traditional birth attendants (TBAs) are still a major component of African traditional healthcare delivery systems. TBA practice still attracts high patronage in spite of the availability of modern health care services, especially in rural communities were access to health facilities and skilled health care services are limited. The limited skills of TBAs in recognizing high risk pregnancies and dangers signs of a difficult labour and their inability to deal with the challenges and complication that are associated with pregnancy and delivery has been well documented by various authors including: Van Lerberghe & De Brouwere (2001) and King (2013). Various direct obstetric causes of maternal deaths such as pre and post-partum hemorrhage, sepsis, hypertensive disorders of pregnancy (pre-eclampsia and eclampsia), obstructed labor, embolism and complications of unsafe abortion (Say *et al.,* 2014; WHO, 2019). Hemorrhage, however remains the leading cause of maternal mortality, accounting for over one quarter (27 %) of deaths. Similar proportion of maternal deaths can equally result indirectly from pre-existing medical conditions such as diabetes, heart or kidney disease that is aggravated by the pregnancy (NIH, 2020). Three quarters of maternal deaths in developing countries are attributed to these direct obstetric

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causes (WHO, 2014). Most of these causal factors to a large extent be prevented if births are attended by skilled health personnel such as doctors, nurses or midwives, who are regularly supervised, and have the proper equipment and supplies to deal with pre-existing or emerging risks, and can refer pregnant women at risks in a timely manner to emergency obstetric care when complications are diagnosed. It is a known fact that the complications leading to maternal death can occur without warning at any time during pregnancy or childbirth and require prompt access to quality obstetric services equipped with life-saving drugs, including antibiotics, and the ability to provide blood transfusions needed to perform Caesarean sections or other surgical interventions. (NIH, 2020) Deriving from the medical advancements of the past few decades, most Western societies have developed state of the art facilities that ensure labour and childbirth is safe.

The adoption of modern midwifery practices and the provision of the services by trained and skilled health personnel; has made the role of erstwhile traditional birth attendants (TBAs) or traditional midwives obsolete. To a large extent TBAs have been eliminated in Western societies and every woman in labour can have access to skilled birth attendance. This use of skilled birth attendants has drastically reduced maternal deaths to the barest minimum, not only in Western countries (King, 2013), but in most countries in Asia, the Middle East, and North Africa (WHO, 2020). Currently, from the global perspective, two regions in the world, sub-Saharan Africa and South Asia, account for 86 per cent of maternal deaths. Worldwide, two-thirds (68%) of all maternal deaths per year occur in sub-Saharan Africa, which bears the greatest burden of maternal deaths, with a maternal mortality ratio (MMR) of 533 maternal deaths per 100,000 live births, or 200,000 maternal deaths a year. This is followed by South Asia, with a MMR of 163 per 100,000 live births, equivalent to 57,000 maternal deaths a year and representing 19 per cent of the global total of maternal deaths (WHO, 2019). Although the global lifetime risk of maternal death between 2000 and 2017, was nearly halved from 1 in 100, to 1 in 190; which indicates a considerable reduction in the risk of a woman dying from childbirth, from a comparative regional perspective, the narrative is quite gloomy for the low income countries, especially in the sub-Saharan African region (WHO, 2019).

The lifetime risk of maternal death in high-income countries is 1 in 5,400, compared to 1 in 45 in low-income countries. Evidently, the regional and global averages of MMR tend to mask the large disparities both within and between countries. The huge disparities found across regions and between the richest and poorest countries provides an evidence that if the low and middle income countries (LMICs) can adopt similar safe motherhood interventions that the upper-middle and high income countries have adopted to prevent maternal deaths, then these pregnancy and obstetric-related deaths can equally be prevented in the LMICS (WHO, 2019). Most high income countries as well as some middle income countries have succeeded in reducing maternal deaths; through the adoption various safe motherhood interventions through the adoption of modern health care methods and practices, and the acquisition of the requisite facilities for skilled birth delivery. However, the levels of maternal mortality remain unacceptably high in sub-Saharan Africa, particularly in some countries in West and Central Africa, because most countries in sub-Saharan Africa, traditional healthcare delivery systems and particularly, traditional birth attendants still play a prominent role in child delivery in most countries in sub-Saharan Africa in this 21st Century (WHO, 2019). Nigeria currently ranks fourth in the world after South Sudan, Chad and Sierra Leone among countries with high MMR. Nigeria's MMR has decreased slightly from 978/100,000 in 2010 to 917/100,000 in 2017 (WHO, 2017). In spite of the efforts made by the government in improving access to safe motherhood services, by enhancing access to skilled birth attendance especially in the rural areas, through the Midwives Services Scheme, the uptake of facility-based skilled birth delivery is still abysmally low. In Nigeria, evidence from the Nigeria Demographic and Health Survey (NPC, 2019) report, showed that from 2008 to 2018, there has only been a marginal increase in deliveries attended by skilled health personnel in Nigeria. From the NDHS reports, assisted delivery increased from 38% in 2008 to 43% in 2018. Moreover, only 39% of the deliveries took place in a health facility. 28% of births were assisted by a skilled provider, and only 25% of deliveries took place in a health facility.

The low patronage of health facilities for delivery by expectant mothers in Nigeria is a major contributing factor to the unacceptably high maternal mortality in Nigeria. Several factors including, high cost of health delivery, cultural and religion have been adduced as key determinants of the low patronage of health facilities for delivery by pregnant women (NPC, 2019). Apart from the NDHS narratives, there has not been a focused study in the South Eastern part of Nigeria to explore the rationale for the low utilization of skilled birth attendants by expectant mothers. This therefore informed the need to explore the reasons for TBA service utilization in Isiala Ngwa LGA of Abia State in the South East of Nigeria. The study was conducted between January –June 2016.

Study objective

The main objective of this study was to determine the rationale for the utilization of traditional birth attendant's services by married women of child-bearing age in Isiala Ngwa South Local Government Area of Abia State.

Research questions

To guide the exploring of the objective the study, the following research questions were formulated:

1. What are the services offered by the traditional birth attendants in the study area?
2. What are the perception of the community on traditional birth attendants' services?
3. What are the factors that influence utilization of traditional birth attendants' services?

METHODS

Study Design /Setting

A cross-sectional design was employed for this study. The study setting was Isiala-Ngwa South Local Government Area (LGA) of Abia State, which covers an area of 100 square miles (258/km^2). The LGA is divided into eight (8) political wards with a total population of 134,762 inhabitants, spread across 46 communities. The inhabitants are mostly Christians and their main occupations include business and farming. The LGA has three comprehensive health centers, one health clinic, eight health centers and several health posts and private hospitals.

Study Population and Sampling procedures

The study population consisted of married women of child bearing age living in Isiala Ngwa South Local Government Area of Abia State. A multi-stage sampling technique was adopted in selecting the study subjects. The first stage involved the selection of five out of the total of eight political wards using a simple random sampling technique.

A simple random sampling technique was equally applied in the second stage to select two (2) villages from each of the selected wards. In the third stage of the sampling process a purposive sampling approach was adopted in selecting twenty (20) eligible women from each of the selected villages. The women were interviewed during their village women meetings.

Sample size determination

The sample size was calculated by using the Lutz 's formula (Lutz, 1982)

Sample size = $n = \frac{Z^2PQ}{d^2}$

We chose a critical value ($Z_{\alpha/2}$) of 1.96 at 0.05 level of significance; (95% confidence interval); and a margin of error of 7%. The prevalence of TBA service utilization, p of 34.5%, was obtained from a previous study by Oshonwoh et al. (2014). The parameters were imputed into the Lutz's formula as follows:

$$n = \frac{(1.96)^2 x\ (0.345) x (0.655)}{(0.07)^2} = \frac{0.8681}{0.0049} = 177.2$$

Adding 10% as non-response rate gave a sample size of 195 which was rounded off to 200.

Instrument for data collection

An interviewer administered semi-structured pretested and validated questionnaire comprising both open and close ended questions was used for the survey. The questionnaire was divided into four sections. Section A captured socio-demographic characteristics of the respondents, section B consisted of questions related to the respondents' perceptions about the role and functions of TBAs in the community. Section C covered the respondents' knowledge and utilization of TBA services; while section D was on the respondents' reasons for patronizing TBAs.

Procedure for data analysis

The data was analysed using the scientific package for social sciences (SPSS), software, and the results were presented using bar chart, simple percentages and tables.

Ethical consideration

Permission to carry out the study was obtained from the Ethical Committee of the Department of Public Health, University of Calabar as well as the women leaders of the participating communities. The respondents also gave their verbal informed consent to participate in the study after the purpose, content and significance of the study were explained to them and they were assured of their confidentiality.

RESULTS

Socio demographic variables

Majority, 80 (40%) of the respondents were in the (26-35) years age bracket, and 142 (73%) have attended secondary school. Most 67 (33.5%) of the women were business women. On religion, 182 (91%) of the TBAs indicated they were Christians. See Table 1.

Table 1. Demographic variables of the respondents

Variables	Frequencies	Percentages (%)
Age		
18-25	72	36.0
26-35	80	40.0
36-45	48	23.0
Total	200	100
Occupation		
Civil servants	58	29.0
Business	67	33.5
Farming	48	21.5
Others	32	16
Total	200	100
Education		
Primary	31	15.5
Secondary	142	73.0
Tertiary	23	11.5
No formal education	4	2.0
Total	200	100
Religion		
Christian	182	91.0
Moslem	6	3.0
Other	12	6.0
Total	200	100

Respondents perceptions about the roles and services of TBAs in their communities

As shown in Table 2 below, majority 89 (44.4%) of the women considered the TBAs to be herbalist; 69 (34.5%) saw TBAs as nurses, while 42 (21%) of them were of the opinion that TBAs are community midwives. With respect to the types of services the TBAs being rendered by TBAs in the community, the following services were signified in their ranked order as follows: counseling (87%), delivery (80%), treatment 74.5%) and referral 43.5%). Most, 156 (78%) of the respondents also indicated that the TBAs should be allowed to continue with their services in the community.

Table 2. Respondents perceptions of the roles and services of TBAs in the communities

Variables	Frequencies	Percentages (%)
Perception of TBAs by the respondents		
TBAs are herbalists	89	44.5
TBAs are nurses	69	34.5
TBAs are community midwives	42	21.0
Total	200	100
Types of Services Provided by TBAs	Multiple responses	
Counseling	174	87.0
Delivery	160	80.0
Treatment	149	74.5
Referral	87	43.5
TBAs should continue with their services in the communities	Frequency	Percentage (%)
Yes	156	78
No	44	22
Total	200	100

Knowledge and utilization of TBA services

All the 200 respondents were knowledgeable about TBA activities. Majority, 166 (83%) of them have patronized and

utilized TBA services at least once during the course of a past pregnancy, while 119 (59.5%) of them have had a baby delivered by a TBA. See Table 3.

Table 3. Respondents knowledge and utilization of TBA services

Variables	Frequency	Percentages (%)
Do you have knowledge of TBAs		
Yes	198	99.0
Total	200	100
Have you ever utilized TBA services		
Yes	166	83.0
No	34	17.0
Total	200	100
Have you ever been delivered by a TBA		
Yes	119	59.5
No	81	40.5
Total	200	100

Respondents reasons for patronizing TBAs

As shown in Table 4 below, 166 (83%) of the 200 respondents had utilized TBA services at least once. Of these 166 subjects, 58 (35%) said they preferred the TBAs because they derived satisfaction from the services provided by the TBAs; 49 (29.5%) of the subjects indicated that it was culturally or traditionally acceptable to be delivered by a TBA. 38 (23%) of the subjects cited cheap services as a motivation for patronizing TBAs, while 15 (9%) of them indicated that the proximity of TBAs was a factor.

Table 4. Reasons for expectant mothers patronizing TBAs (N=166)

Variables	Frequencies Multiple responses	Percentages (%)
Reasons for TBA patronage		
Satisfaction with care provided	58	35.0
Tradition	49	29.5
Cheap services	38	23.0
Proximity	15	9.0
Decision of husband's family	13	8.0

Respondents reasons for not going to the hospital to deliver

The reasons given by the 116 respondents for not going to the hospital to deliver in order of ranking are as follows: Cost, 56 (34%); rudeness of health staff, 41 (25.6%); Traditional belief, 40 (24.1); delay in receiving attention in the hospital 28 (17%); and the high tendency of the hospital staff to be quick in suggesting caesarean section for child delivery; as shown in Table 5 below.

Table 5. Reasons for the non-patronage of the hospital by expectant women (N=166)

Reasons for not patronizing the hospital	Frequency Multiple responses	Percentages (%)
Costly	56	34.0
Rudeness of health staff	41	25.6
Traditional belief	40	24.1
Delay in receiving attention	28	17.0
High tendency of health staff to Suggest a C/S	15	9.0

Experience of complications during /after delivery by a TBA and measures carried out by TBA

As shown in Figure 1, below, out of the 119 subjects who were delivered by TBAs, 98 (59%) had no complications, while 68 (41%) of them had complications. Of the 68 subjects who had complications, 63 (93%) of them were referred to the hospital, while 5 (7%) of them were prayed for. See Figure 2

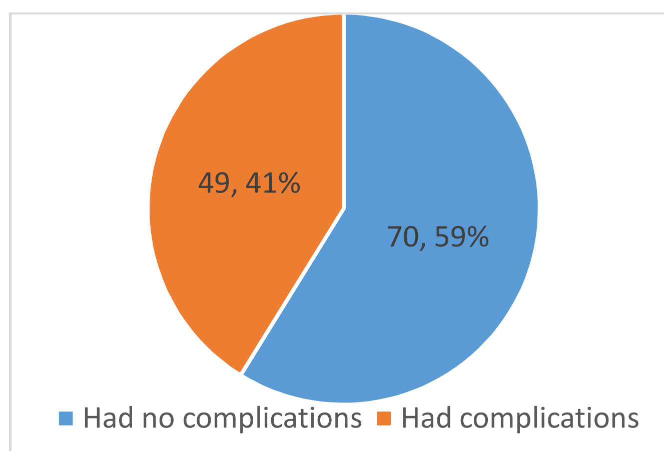

Figure 1. Report of complications by the respondents during /after delivery by TBA

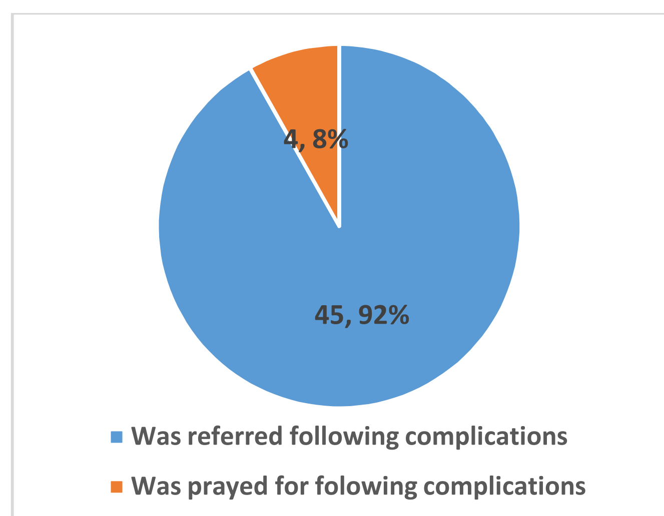

Figure 2. TBA action resulting from complications during or after delivery

DISCUSSION

In most developing countries confronted with inadequate human resource for health, TBAs are still an important part of the informal community health care system (Adegoke & Jegede, 2016). In most low and middle income countries (LMICs), that still hold to entrenched traditional and cultural beliefs and practices, there are still strong attachments by community members to TBAs. This strong cultural attachment promotes the patronage of TBAs despite the inherent risks that expectant mothers are exposed to when obstetric emergencies arise which cannot be handled by the TBAs often leading to untimely but preventable deaths of the women. TBAs still play a key role in child delivery in several developing countries including Nigeria despite the availability of skilled birth attendants such as midwives and doctors in public and private hospitals, health facilities and modern methods for the promotion of safe motherhood. TBA patronage in Nigeria is still high, although the prevalence of TBA service utilization varies across the six (6) geopolitical regions of Nigeria. Incidentally, the preference for TBAs is restricted to rural women in Nigeria, because urban women who are considered

as better informed, with more access to hospitals and better financial capabilities also prefer TBA above midwives and hospital deliveries (Olaore *et al,* 2020). We therefore conducted this study to determine the perceptions and knowledge about TBA roles and practices in Isialangwa South of Abia State as well as TBA service utilization by women of reproductive age in the study area and the rationale for the patronage of TBA services.

Perception of the roles and services of TBAs

The result of our study showed that most of our respondents (44.5%), viewed TBAs as herbalist. There is a strong attachment by African and indeed Nigerians to the use of herbal preparations and medicines for treating health conditions (Ekor, 2014; Ezekwesili-Ofili and Okaka, 2019). Herbal medicines are equally used during pregnancy, for the induction of labour and for postpartum care after the delivery of the baby (Karemore & Avari, 2017; Laelago, 2018). About 35% respondents were of the opinion that the TBAs were nurses while and 21% of them felt TBAs are community midwives. The perception of the roles of TBAs as midwives with the capability to conduct deliveries is shared by rural community dwellers in parts of Africa such as Ethiopia (Gurara et al. 2020) and in some Asian countries such as Pakistan (Tabbassam & Menhas, 2014) and Timor Litse (Ribeiro, 2014); however, in both Asian countries, the TBAs are trained and supervised by qualified midwives. With regards to the services provided by the TBAs in the community, 174 (87%) affirmed that TBAs provide counseling to pregnant women, 180 (80%) of them indicated that the TBAs conduct delivery, while 149 (75%) stated that TBAs provide treatment for pregnant women during and after delivery. These findings are in consonance with those obtained in Sierra Leone by Dorwie and Pacquiao, (2014). The role of TBAs in referral is very crucial, however only 87 (44%) of the respondents mentioned the role of TBAs in referrals. In South Sudan, where TBAs were mandated to refer expectant mothers to the hospital, the study found that many TBAs were referring women to health facilities for delivery, but some were still attending to deliveries at home. (Wilunda *et al.,* 2017)

Respondents opinion about sustaining the TBA practices /system of care

Majority, (78%) of the respondents were of the opinion that TBAs should continue with their services in the LGA. This opinion has equally been expressed by some proponents who argue that TBAs should not be banned out rightly but rather they should be trained and integrated into the community/rural health systems of developing countries trained (Byrne 2016; Atieno, 2020).

Prevalence of TBA service utilization in the study area

The findings of our study shows that about 60% of deliveries in our study area was conducted by TBAs while only 40% of deliveries were supervised by skilled providers in health facilities. This is in consonance with the findings of the 2018 national demographic survey data (NPC, 2019) which showed that 43% of the births in the 5 years that preceded the survey were undertaken by a skilled provider and 39% of the deliveries were conducted in a health facility. The findings lend credence to the fact that despite the availability of modern health facilities in Nigeria, there is still a high prevalence of home or TBA assisted deliveries in Nigeria (Oshonwor et al 2014, Otorkpa, 2018).

Rationale for TBA service utilization

1. **Availability and accessibility of TBAs within the community**

Majority (87%) of our respondents indicated that TBA services were readily available and accessible in the study area and that they are attended to promptly by the TBA even at night compared with the long period of delay at the health facility and the possibility of not meeting any health staff on duty when one goes into labour at night. In contrast, 17% of the respondents attributed their non-patronage of the health facilities to the delay in receiving care in the health facility due to the long waiting documentation procedures which they consider as “unnecessary protocols”.

2. **The quality of service delivery provided by the TBAs**

The perceived good quality of care provided by TBAs was cited by 35% of our respondents for their patronage of TBAs. The respondents indicated that the TBAs treat them with respect and dignity as opposed to the harsh and inhumane treatment that 26% of them reportedly received from health workers. About one-tenth (9.0%) of the respondents disclosed that for financial reasons, the health providers were quick in suggesting caesarean section (CS) and often compelled expectant mothers to undergo coerced CS, without doing proper assessment of the woman in labour to ensure there was a genuine indication for the CS. Moreover, the cost of the operation was quite excessive and out of reach of the rural poor.

3. **The contrasting costs of care at the TBA versus the health center**

Another factor identified as contributing to the utilization of TBA services is the lower more affordable cost of TBA services. 23% of the respondents said that they spend less money when they patronize TBAs as opposed to the public health facility where 34% of the respondents said charged exorbitant bills. Moreover, with the TBA they have an option of paying in instalments. The respondents conceded that the TBAs charges are moderate because the TBAs are considerate and understand that their clients do not have much money. This finding is a corroboration of previous studies by Kumbani et al. (2013) and Yaya et al. (2018). The findings of these studies identified low cost of care by TBAs as a strong determinant of TBA service patronage by community members.

4. **Religious and cultural influences**

As has been observed by Okeshola & Sadiq (2013), religious and cultural beliefs and practices are quite prevalent and dominant in most third world countries and cannot be easily wished away. In our study, about 30% of the women stated that their religious beliefs prohibit their use of the modern health system, and that they preferred the use of local herbs and traditional medicine which the TBAs give them before, during and after delivery. With regards to culture, 8% of the women said that their husband or members of his family took them to the TBA for delivery because they believed that it was the best place to go for child delivery.

5. The location of the health facility from the community

Physical distance and the lack of infrastructure such as roads is a major obstacle in accessing maternal health services (Davidson, 2015; Ekpenyong, 2019). The location of health facilities at a location that is too far to reach in a short time can cause pregnant mothers who are in labour to resort to patronizing the readily accessible TBAs who live within the community. for delivery instead of taking the pains to get skilled birth attendance in the health facility located several miles away. Proximity to the place of health care delivery is therefore a major determinant and incentive for health service utilization. When patients who require immediate care contemplate on the long distance they have to travel to access that care, they become easily discouraged when they also consider the possibility of not meeting any health personnel at the facility. They are therefore more inclined to opt for the nearest place of care even if it is sub-standard. In our study, the distance to the available health facility was seen as a deterrent to health facility delivery as was reported by 9% of our respondents.

6. Respondents report of some untoward experiences during delivery with TBAs

As shown in Figure 1, about 41% of the 119 respondents who were delivered by TBAs corresponding to 49 women stated that they had experienced some form of complication in the course of child delivery at the TBAs home. Some of the complications included obstructed labour and post-partum hemorrhage. Fortunately, as shown in Figure 2, most (92%), of the 49 subjects, which corresponds to 45 women were referred for skilled intervention, while 4 of them were prayed for. The latter response is not unexpected since some church denominations in Nigeria have prayer homes that run TBA services as well.

Conclusions and recommendations

In conclusion, as succinctly posited by Van Lerberghe and De Brouwere (2001), and reaffirmed by WHO (2006), the provision of physical, geographic or financial access to proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may lead to death or serious illness for the mother and/or baby. Moreover, the patronage of skilled birth attendants for child delivery, would ensure that any emergency arising during labour is adequately attended to without delay, thereby saving the mother and child. In this regard it is recommended that TBAs be trained and retrained to appreciate their limits and also learn to identify pregnancies that are likely to become complicated early enough and be willing to refer same on time to the hospitals for proper management with a view to ensuring safe delivery and securing the life of both the mother and baby. The TBAs should therefore see their roles as complimentary to the health system rather than being in competition with orthodox health care providers.

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