DISCOVERY

58(323), November 2022

Utilization of traditional birth attendants in Ondo state, Nigeria

Oluwadamisi Tayo-Ladega[1*], Ilugbami Joseph Olanrewaju[2], Adetayo Olaniyi Adeniran[3]

To Cite:
Tayo-Ladega O, Olanrewaju IJ, Adeniran AO. Utilization of traditional birth attendants in Ondo state, Nigeria. DISCOVERY 2022; 58(323):1184-1193

Author Affiliation:
[1]University of Bangor, United Kingdom
[2]Rufus Giwa Polytechnic, Owo-Rector's Office, Nigeria
[3]Federal University of Technology Akure, Nigeria

[*]**Corresponding author**
University of Bangor, United Kingdom
Email: lwt19ypc@bangor.ac.uk

Peer-Review History
Received: 05 September 2022
Reviewed & Revised: 08/September/2022 to 21/October/2022
Accepted: 25 October 2022
Published: November 2022

Peer-Review Model
External peer-review was done through double-blind method.

© The Author(s) 2022. Open Access. This article is licensed under a Creative Commons Attribution License 4.0 (CC BY 4.0)., which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0/.

ABSTRACT

Background: Evidence from the Demographic and Health Survey of Nigeria found that significant number of pregnant women in Nigeria especially in rural areas seek maternal health care from traditional birth attendants (TBAs) than the skilled birth attendants (SBAs) because of certain factors. This high level of visit to TBAs was found to be among the cause of maternal death that occurs mostly in the rural areas. Due to the fact that there are few studies conducted to unravel the current situation, this study is conducted to determine the common reasons why women engage traditional birth attendants for prenatal care in selected Nigerian towns in Ondo State, and to provide policy suggestions. Qualitative approach using interviews was employed. The interview was targeted at men and women, and the major thematic research areas were explored. The study covered four towns: Isarun, Ero, Ipogun, and Ibulesoro, all in the Ifedore Local Government Area of Ondo State, Nigeria. Sixteen participants (women) were interviewed in the study. Those participants were those that made use of the TBAs. *Results:* It was revealed in this study that traditional birth attendants were consulted and utilized by the maternal patients in the study areas for different reasons, including ease of access to TBAs, cultural customs and traditions, the effectiveness of traditional medicines, the welcoming attitude of traditional birth attendants, and higher expenses of services in health facilities. *Conclusions:* The continuous consultation and utilisation of TBA is a significant impediment to Nigeria's efforts to attain sustainable development goals (SDGs) 3. Hence, critically addressing the reasons why traditional birth attendants were employed by the maternal patients in the study areas will enhance more utilisation of SBAs and reduce the rate of maternal mortality in Nigeria, especially in towns and villages.

Keywords: Traditional Birth Attendants; Maternal mortality; Rural Women; Nigeria

1. INTRODUCTION

In Nigeria, there was a report by the World Health Organization (WHO) that out of every 100,000 live birth, there is always 814 deaths (World Health Organization, 2015a). This is an issue that call for concern, and attempts made by previous scholars (Ariyo et al., 2017; Ntoimo et al. 2018) revealed that it is caused majorly by the lack of qualified maternal care givers. The World Health Organization (WHO) recommends that experienced delivery attendants be

present to increase the possibility that pregnancy concerns would be addressed effectively, reducing the risk of maternal death (Azuh, 2017; WHO, 2015b, 2016).

The WHO defines a Skilled Birth Attendant (SBA) as a pre-arranged clinical chaperone, maternity subject matter expert, or clinical trained professional, and no other individual (Bishai et al. 2016; WHO, 2016). Several studies have revealed that countries with high SBA speeds had reduced maternal mortality rates, while countries with low SBA speeds have higher maternal death rates (Allison et al., 2022; Erfina et al., 2022; Lorretta et al., 2022; Theodora et al., 2022; Makinde, 2020; Makinde et al., 2018).

As a result, the usage of SBA is presently one of the important intercessions for achieving Sustainable Development Goal 3, particularly in poor countries. According to the Nigeria Demographic and Health Survey (NDHS) conducted in 2018, 67% of women had prenatal care with an SBA at least once, and 43% had labour assistance from an SBA, with conventional delivery escorts supporting 20% of movements.

Regardless, the utilization of SBAs for antenatal thinking and work exceeded 70% in certain of Nigeria's 36 states. Between 70 and 97% of women got good prenatal care in 24 of the 36 states, and between 70 and 98% received competent mobility care in 14 states (National Population Commission (NPC) and ICF, 2019). The rate of advancement of unskilled standard providers for movement care fluctuates by locality and state, extending from 0.5% to 71.8%, and by place, with rural (25.5%) districts having a bigger proportion of typical birth escort clients than urban (12.4%) districts (NPC and ICF, 2019).

This high number of untrained standard providers may be one of the important tests that should be crushed to reduce the country's already high risk of maternal mortality. When the concept of overuse of incompetent standard birth subject matter experts (TBAs) was first developed in the 1990s, it was viewed as a socio-social aberration based on the assumption that women socially preferred conventional births above common births (WHO, 1992). This idea prompted a spate of therapies concentrating on TBA readiness and preparation, to degrade their talents and capacities in monitoring direct motions and suggest more difficult transportation to common prosperous employment (Lane and Garrod, 2016; WHO, 2015c).

Despite TBA re-planning, maternal mortality remains high in countries that employ them. Unquestionably, a couple of dispersions from different parts of Nigeria revealed a correlation between high maternal passing rates and women who intended to talk with TBAs yet were advised late to clinical consideration workplaces (Erfina et al., 2022; Ntoimo et al., 2018;). The absence of TBA re-planning became startling (Lorretta et al., 2022), and it was not surprising that the WHO labelled TBA re-planning activities as inadequate in improving maternal mortality in horticultural nations (WHO, 2015a, 2017).

As a result, Nigeria's Federal Ministry of Health has amended its TBA re-planning strategy and is now concentrating on extending the utilisation of SBAs throughout the country (Makinde, 2020). This was owing to a rising recognition that the use of TBAs is a result of women's lack of access to qualified providers and evidence-based maternity and young person prosperity groups, rather than a social trend. Even though maternity and youth prosperity groups don't yet exist in Nigeria, efforts have been made to increase the prosperous workforce and work on the clinical benefits movement in the country.

Nigeria has one of the greatest concentrations of human capital in Africa, with 38.9 and 148 trained professionals for every 100,000 inhabitants, respectively. These values are significantly higher than the Sub-Saharan African averages of 15 and 72 per 100,000 people for skilled professionals and clinical experts, respectively (Federal Government of Nigeria [FGN], 2018). Despite this abundant resource, Nigeria needs enough prosperous workers to satisfy the needs of its more than 201 million people, particularly those who live in natural regions. The Nigerian government has conducted intercessions to address the personnel shortfall, notably to provide appropriate maternal and adolescent clinical consideration, for instance, the Midwives Services Scheme (MSS), Subsidy Re-adventure and Empowerment Program (SURE-P), and task shifting, among others, to diminish the openness of orderlies and birthing associates for mother and child prosperity, particularly in rural and disadvantaged areas.

The Basic Health Services Scheme (BHSS), which was part of the National Development Plan from 1975 to 1980, and the accelerated implementation of fundamental clinical consideration from 1986 to 1992, resulted in extended work readiness and duplication of fundamental prosperity workplaces in organizations and towns (National Primary Health Care Development Agency, 2012). Several measures, including the PHC Under One Roof Act, the National Health Act, and the National Strategic Health Development Plans, have been initiated to reinforce the nation's prosperity framework (FGN, 2013; 2018; Federal Ministry of Health, 2010; the FGN, 2014).

Before long, Nigeria had more than 34,000 prosperity posts for people of 500 or less, fundamental prosperity habitats, and fundamental prosperity places arranged in each political/prosperity ward - Nigeria's most minor administrative level with a general population of somewhere between 5000 and 10000; reference clinical facilities are arranged in every Local Government Area (LGA), and State, with some restricted prosperity workplaces where commuting is prohibited (Makinde *et al*., 2018). Nonetheless, reports have been established on the ineffective operation of PHC (Ntoimo *et al*., 2019; Lambo, 2015), including the constraints encountered

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

in the adoption of prosperity workplaces that hinders fundamental aspects of the right to prosperity such as appropriateness, transparency, kindness, a good treat, and accessibility (Homer *et al*., 2018).

Focuses on the country have identified impediments such as the super-ideal nature of care, transparency bottlenecks such as distance, cost of transportation, the sensibility of the quick and distorted cost of care, inconsiderate thought, and massive deferral, among other things (Lorretta et al., 2022; Adewuyi *et al*., 2018). In any case, there hasn't been a substantial adjustment in the thinking of maternal patients in Nigeria who are aided during transportation by regular delivery orderlies in a long time (Koblinsky *et al*., 2016). The proportion increased from 19.4% in 1990 to 22% in 2013 before declining to 20% in 2018, with a significant difference between urban and rural regions.

These women who have been abandoned from the route of integration are hampered by several challenges arising from their isolated circumstances, such as obliviousness and impoverishment. The emotional assessments were undertaken in this context to grasp the accumulating justifications for the use of TBAs, particularly in ordinary Nigeria, where its usage is significantly more widespread. The data will be useful in developing realistic intercessions and strategies for reducing TBA usage, improving SBAs, and lowering maternal mortality in Ondo State, Nigeria, and extended to African nations with similar peculiarities on the prevalent of TBAs' utilisation.

2. METHODS

Study area

This study was carried out using participants that resides in Isarun, Ero, Ipogun, and Ibulesoro which are all situated in the Ifedore Local Government Area of Ondo State. The Local Government Area is headquartered in Igbaraoke, and is bounded to the North and East by Akure South Local Government Area to the south by Osun State, and to the west by Ekiti State. Ondo State is located at a longitude of 4.89° E and latitude of 6.89° N (Akinneye *et al*., 2018).

Research design and study setting

This study is based on a qualitative research approach carried out in Ondo State, Nigeria. The interview was conducted with women (nursing mothers), and the primary theme study areas were investigated. The research focused on four towns in Ifedore Local Government Area, Ondo State, Nigeria: Isarun, Ero, Ipogun, and Ibulesoro. In the study, sixteen participants (nursing mothers) were interviewed.

Phenomenological research design was applicble in this study to obtain individuals' perceptions about the phenomenon. It is adopted in research that focuses on individuals rather than examining the organizational implications of the data and conclusion (Eno and Dammak, 2014). Information was obtained from participants' experience based on what they encountered in the past. The research design was used in this study to investigate the frequent reasons why women seek maternal care from TBAs in selected Nigerian communities in Ondo State. The headquarter of Ifedore is Igbara-Oke.

Four participants were purposively selected from each of the four towns which are geographically situated beside each other. Those participants were those that made use of the TBAs. The towns have similar socio-economic attributes.

Data collection

Key Informant Interview (KII) guides with relevant probes were created and utilized for data gathering (Trainor, 2018). Field assistants who speak the local languages, Yoruba dialects, were sought for several places. Before the fieldwork, which took place between August 10 and September 8, 2022, all research assistants and supervisors were trained. A member check was performed on the data to confirm the veracity of the qualitative data (Trainor, 2018).

Key informant interview

Fourteen (14) key informant interviews were designed to collect information on pregnant women's perceptions of the utilization of TBAs vs. SBAs in the towns. The interviews were semistructured, and they were all done in Yoruba before being translated into English for reporting purposes. The key informants replied to questions on women's preferences for usage of traditional birth attendants and how their experience influence their choices. Each interview lasted around 30 minutes.

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

3. RESULTS

Utilization of traditional birth attendants

All of the interviewees spoke openly about the continued usage of TBAs in their communities. Participants who utilize TBAs for maternity care were unequivocal in stating their reasons. Health practitioners and policymakers who participated in the study verified the majority of the women's reasons. According to the information, some women were sensitized, causing them to switch from using TBAs to traditional maternity care.

Some of the patients visit hospitals and health centres, but the majority choose TBAs for financial reasons, and some believe that using traditional medications enhances the quick and robust growth of the babies (KII, Women 1, 3, 3, 7, 8, 9, 11, 12, 13, and 16).

In addition, the participants described why they use TBAs. The reasons ranged from the conviction that modern health care and medicine are insufficient, costly, and inaccessible, and the unfriendly attitude of health practitioners. Some participants perceived that issues regarding obstetric haemorrhage and placenta may lead to maternal morbidity are best-taken care of using modern medicine. The perception that modern medicine cannot treat all diseases is a major determinant that spurs the high rate of maternal visits in both hospitals and TBAs.

Confidence in modern medicine

The participants' reliance on both modern and traditional medicine was prevalent in all of the accounts. They do not feel that modern medicine is capable of addressing all aspects of maternal health care. It was typical that a pregnant woman will register antenatal care at both hospital and TBA centre. Some ascribed maternal death to the use of solely modern medication, while others showed a great conviction in the efficiency of traditional medicine, claiming that it is just as effective as modern therapy.

Me, when I had my first pregnancy, I registered in the Federal Medical Center Annex in Oda Road, Akure, despite the early registration for my antenatal care and doctor's monitoring on monthly basis and the fact that I delivered there through a cesarean section (CS), I lost the baby boy and I completely lose hope in the modern medicine. It was indeed a difficult moment such that the medical practitioners couldn't accept the blame of negligence on their part because my baby was completely sound during pregnancy, but they delayed me during childbirth to the extent that my baby was weak and there were traces of meconium aspiration syndrome (MAS). She continued that *"during my second birth and the third birth, I made use of traditional medication to have a safe delivery even without a CS. As you can see, my babies are doing excellently. I believe in traditional medicine since the medicines provided there are superior to and more effective than those accessible in hospitals. I made certain that when it was time for me to receive the conventional medicine, I would get it, and when it was time for me to get the one from the hospital, I would get them as well, and if there was any complaint, I would inform them and they would provide the necessary medication. A herbal treatment will be delivered to the lady in the traditional care centre, and blood will be drawn. To avoid difficulties and unforseen issues, any pregnant woman should register with both TBA and hospital.*

Maternal care can benefit more from traditional medicine. We are all aware that only God can help someone give birth anyplace. I've previously given birth in a traditional medical environment which was quite beneficial to me. When a lady is pregnant, it is quite beneficial to employ indigenous medicine. That is why, to help myself and my child, I used both traditional and modern medicine.

Most of us in Ipogun prefer TBAs because it works.

Some women begin bleeding shortly after birth, while for others, the placenta fails to emerge in time. That is why we go to a regular care facility. They have placenta medication, bleeding medicine, and other varieties, which is why we want to include them in hospital medicine.

Many of the participants that are aged under 30 stated that they vote TBAs since it is effective. Many participants verified the notion that traditional treatment is quite preferable for the prevention and management of bleeding that may arise during the course of delivery, as well as placenta-related disorders. They futher rated higher confidence in the effectiveness of traditional medicine being provided by TBAs.

Despite their great belief in TBAs' services, some participants noted the issues connected with the use of conventional medications for pregnancy care, such as:

I recall well, around 2017 to 2018, when I gave birth to my first kid, that despite going to the health centre, I was using local herbs diligently. It became a major issue after I gave the baby. As I speak, the youngster has perished.

Some women are unable to birth on their own because of the size of the baby. This will cause a tear when they try to deliver with a TBA. During this occurrence, the TBA cannot suture her body back together, but if she is at a hospital, they will repair it instantly and she will be alright.

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

Traditional practices

In terms of traditional maternity care methods, some respondents believe that it is preferable to use both TBAs and hospitals. It was also revealed that participants are typically more comfortable with TBAs since they reside in their communities and are familiar with them, and they urged for integration of TBA services into the typical maternal health care system, and training the care givers in the TBA.

Where there is no healthcare facility

TBAs are widely utilized for maternity care in areas where there is no nearby health facility. They use TBAs not just because of the distance to health care, but also because of poor transportation, a poor road network, and a long distance. Some participants stated that when they engaged I logn distant trip to visit a hospital, it took them longer time to see the health practitioner, and there are sometimes that there will not be any drug prescriptions. However, with TBAs, they do not have to wait, and the meds are immediately available.

TBA services are appealing to me because, in the absence of a hospital, I relied on the available option.

I dislike the services of TBAs, but I don't have a choice because there is no health centre here and the mode of transportation is very poor (2 people sit in the front and 4 people sit in the back of the vehicle), which would be inconvenient for me during pregnancy, so I use the TBA to avoid death during childbirth.

Poverty

Aside from the distance to a health centre, participants also mentioned cost. Many respondents stated that a lack of funds is a key impediment to the usage of TBAs in their areas. Those who would have attempted to travel the vast distance to a health institution are limited by the cost of transportation and the medical bill.

If my husband wants to help me, he can go to TBA to get me drugs because the health centre is not close to us here.

Sometimes those who have money can go to neighbouring towns that have health facilities for antenatal care but those who do not have the money go for TBA.

Mode of payment

TBAs are also used for pregnancy care because of the flexible and affordable mode of payment for their services. The payment of TBA can be made in various dynamics, whether in installments, in kind, and in whole, it is meant for the entire services, and there are situations whereby they do not charge a fee. Some participants noted revealed that TBA does not create any financial burden on the patients, making it a realistic choice, especially for the poor.

Many pregnant women go to TBA, the TBA will charge you before they commence the care, they will collect the deposit before the start, and collect the balance after the successful delivery.

The couple can decide to give the TBA additional money based on their financial capability.

In some cases, those that do not have financial means can go to the TBAs with their agricultural produce and other commodities (within their capacity) in exchange for care.

Unavailability of health workers

TBAs become the realistic alternative when health service professionals are unavailable or insufficient to operate health facilities in communities, sometimes as a consequence of poor motivation or strike activities. The majority of PHCs in the research regions have few nurses and few midwives, while some have no nurse, no medical doctor, and no residential housing for health care professionals.

Sometimes, you may visit the health centre and the nurses will not be willing to attend to you, they may ask you to visit the State Hospital or the Ondo State Mother and Child Hospital which is geographically far. Some nurses may be sleeping on duty and react aggressively to the maternal patients. Hence, it is better to visit the TBA.

I once went into labour at a PHC, but the baby died within me and I was transferred to the State Hospital. My husband managed to get me there, and due to the delay in the State Hospital, my husband brought me to the private hospital where the procedure to remove the deceased baby was performed. It is only the TBAs that we have here and run to; there is money but no nurses, and some of the available nurses are not motivated or have a nonchalant attitude toward the maternal patients. Some of the nurses do ask unnecessary questions if the baby is the fifth or sixth child.

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

Competency and friendliness

One of the primary reasons that TBA services are used is their competence and client-friendly approach. TBAs are willing to have ladies delivered to their houses and are available at any time.

Many nurses are not friendly and incompetent, but the TBAs are friendly and competent. I gave birth at the PHC two weeks ago; my experience of how the nurse shouted at me was a bad one. I will visit the TBAs in future if things continue this way.

The TBA pet me during childbirth, and help me deliver successfully without stress, in the twinkle of an eye, the baby is out like magic.

4. DISCUSSION

The study was carried out to find out why some Nigerian women in the selected towns of Ondo State made use of TBAs rather than SBAs for pregnancy care. Questions were specifically posed to elicit the reasons for their choice of maternal health care services because many previous studies by AmutahOnukagha *et al*. (2017), Chukwuma *et al*., (2017), revealed that women use TBAs, but the studies may not have provided or assessed the reasons. Women in Nigeria have grown increasingly aware of the need of using SBAs as a result of a significant number of public health programs and advocacy (Lorretta et al., 2022; Adewuyi et al., 2018). Nonetheless, the usage of TBAs subsists.

This study surveyed the perception of women that made use of TBAs in recent times, to have a broader knowledge of the reasons that women use TBAs instead of SBAs, even in communities that have existing healthcare facilities.

According to the study's findings, there was an irresistible unanimity among participants on the reasons why some women in Ondo State utilize TBAs over SBAs. Some of the reasons given were that modern medicine was not deemed suitable for proper maternity care; TBAs were more accessible than SBAs; SBA services were more expensive; TBAs were more friendly than SBAs, and health providers were not always available. Among these factors, the belief that current medications are unable to cure all maternal health issues shines out clearly and consistently among the people interviewed. As a result, it is a usual practice in the rural areas for pregnant women to register with both hspitals and TBAs.

This practice is reinforced by long-held cultural beliefs about the usefulness of some traditional herbs, which are thought to be more beneficial than contemporary pharmaceuticals in the treatment of specific pregnancy problems. For example, several participants claimed that bleeding during pregnancy was more efficiently treated with herbal remedies than with standard drugs. Indeed, several participants suggested that maternal fatalities in the community are frequently caused by women who take contemporary medicines alone without mixing them with traditional treatments.

Further examination of the findings revealed that the preference for TBAs may be exacerbated by the absolute and relative scarcity of SBAs and health facilities in the areas. It is normal for patients in a particular community where they have utilized TBAs for numerous years to be more used to the traditional ways of birth. This view was bolstered by reports that health facilities are frequently far distant, and women frequently have difficulty reaching them due to terrible roads and transportation issues, particularly when labour begins at night. In such instances, women will have little choice except to use readily available TBAs for birth.

4. CONCLUSIONS

This study concludes that Nigerian maternal women in the towns and communities utilize TBAs rather than SBAs due to several factors, the most important of which include perceptions that traditional medicines work better, lack of access to health facilities and SBAs, higher costs of services in health facilities, and unfriendly attitude of health providers. Efforts to address these issues will increase the utilisation of SBAs and minimize the mortality rate in Nigeria among maternal patients.

Based on the earlier findings, it is recommended that the government should increase the provision of effective primary maternal health services with SBAs in towns and all communities. The government should ensure that women have the necessary public health education and information to receive basic health services. Government should post nurses and midwives to underserved areas, which is the primary aim of establishing the Midwifery Corp (Lorretta et al., 2022).

Furthermore, SBAs who work in health facilities situated in towns and villages should be retrained to ensure that they are friendly and can address the needs of maternal women. The results of the study also showed that women use TBAs because of the reduced costs of TBA services and the flexibility in the mode of payment. Among the approaches to achieve more subscription to the adoption of SBAs in Nigeria is the removal of user fees (Adewuyi et al., 2018), with some encompassing novel interventions such as conditional cash transfers (Okoli *et al*. 2014). The periodical evaluation of monetary initiatives should be conducted as Okoli (2016) found that it enhances the utilisation of orthodox facilities by pregnant women, although Onwujekwe et al. (2019) and

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

Uzochukwu et al. (2015) noted that the financial interventions have not always been sustained because of corruption and inadequate funding by government.

Finally, the Safe Motherhood Program in Ondo popularly referred to as "Abiye" (Ajayi and Akpan, 2020; Mimiko, 2017) signifies what can be well improved upon if the program is critically looked into to ensure that all women within the active reproductive age in towns and villages are enrolled. It can also be adopted in other states.

For this study, the major strength was premised on the fact that the study was conducted in selected towns, hence, the results may be generalizable to other towns but may not be suitable for urban areas of the country. Previous studies in Nigeria, Indonesia, Zambia and Bangladesh have also identified some of the reasons for the utilisation of TBAs by maternal patients (Sarker *et al*., 2016; Akpabio *et al*., 2014). It is supposed that the results will be useful for policymakers to address the low utilisation of SBAs in rural areas (towns and villages) in Nigeria and other African nations that has similar peculiarities.

List of abbreviations

CS: Cesarean Section
FGN: Federal Government of Nigeria
KII: Key Informant Interview
LGA: Local Government Area
MSS: Midwives Services Scheme
NPC: National Population Commission
NPHCDA: National Primary Health Care Development Agency
NDHS: Nigeria Demographic and Health Survey
PHCs: Primary Health Centres
SBAs: Skilled Birth Attendants
SURE-P: Subsidy Re-adventure and Empowerment Program
BHSS: Basic Health Services Scheme
SDGs: Sustainable Development Goals
TBAs: Traditional Birth Attendants
WHO: World Health Organization

Authors' contribution

All authors have read and approved the manuscript

Acknowledgements

We thank the Editor and Reviewers for their insightful contributions to the improvement of this article. We also appreciate the individuals who have released relevant information for the conduct of this research.

Ethical approval

Not applicable.

Funding

This study has not received any external funding.

Informed consent

Not applicable.

Conflicts of interests

The authors declare that there are no conflicts of interests.

Data and materials availability

The datasets generated and/or analysed during the current study are available from the corresponding author on reasonable request, but cannot be made publicly available in order not to go against the declaration of confidentiality made to the participants.

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

REFERENCES AND NOTES

1. Adeniran AO. Application of Likert Scale's Type and Cronbach's Alpha analysis in an airport perception study. *Scholar Journal of Applied Science Research* 2019; 2(4):01-05.
2. Adewuyi EO, Auta A, Khanal V, Bamidele OD, Akuoko CP, Adefemi K, Tapshak SJ and Zhao Y. Prevalence and factors associated with underutilization of antenatal care services in Nigeria: A comparative study of rural and urban residences based on the 2013 Nigeria demographic and health survey. *PLoS One* 2018; 13(5):e0197324.
3. Ajayi AI and Akpan W. Maternal health care services utilisation in the context of the 'Abiye' (Safe Motherhood) Programme in Ondo State, Nigeria. *BMC Publ Health* 2020; 20(1):362. doi:10.1186/s12889-020-08512-z.
4. Akinneye JO, Fasidi MM, Afolabi OJ and Adesina FP. Prevalence of Urinary Schistosomiasis among Secondary School Students in Ifedore Local Government, Ondo State, Nigeria. *Int J Trop Dis* 2018; 1:004.
5. Akpabio II, Edet OB, Etifit RE and RobinsonBassey GC. Women's preference for traditional birth attendants and modern health care practitioners in the Akpabuyo community of Cross River State, Nigeria. *Health Care Women Int* 2014; 35(1):100-109.
6. Allison A, Parsons AR L, Rule D, Cheruiyot CS, Cynthia R, Dominic M, Joshua S and Beena D. Perceptions of barriers and facilitators to disinfection of basic neonatal resuscitation equipment in a rural hospital in Kenya: A qualitative study *Midwifery*
7. 2022; 104, 103200 https://doi.org/10.1016/j.midw.2021.103202
8. Amutah Onukagha N, Rodriguez M, Opara I, Gardner M, Assan M, Araba H, Rodney P, Jesus P and Kimberly FE. Progress and challenges of utilizing traditional birth attendants in maternal and child health in Nigeria. *Int. J. MCH AIDS*, 2017; 6(2):130.
9. Ariyo O, Ozodiegwu ID and Doctor HV. The influence of the social and cultural environment on maternal mortality in Nigeria: evidence from the 2013 demographic and health survey. *PLoS One* 2017; 12(12).
10. Azuh DE. The role and challenges of ward development committees in promoting grassroots health awareness in Ogun State Nigeria. *J Bus Manag* 2017; 19(7):41-48.
11. Bishai DM, Cohen R Natalia AY, Adam T, Kuruvilla S and Schweitzer J. Factors contributing to maternal and child mortality reductions in 146 low-and middle-income countries between 1990 and 2010. *PLoS One* 2016; 11(1):e0144908.
12. Chinawa JM. Factors militating against effective implementation of primary health care (PHC) system in Nigeria. *Annal Trop Med Public Health* 2015; 8(1).
13. Chukwuma A, Mbachu C, Cohen J, Bossert T and McConnell M. Once the delivery is done, they have finished: a qualitative study of perspectives on postnatal care referrals by traditional birth attendants in Ebonyi State, Nigeria. *BMC Pregnancy. Childbirth* 2017; 17(1), 429.
14. Eno M and Dammak A. Debating the case study dilemma: Controversies and considerations. *Veritas: The Academic Journal of St Clements Education Group*, 2014; 5(3):1-8.
15. Erfina E, Widyawati, Lisa M, Sonia R and Djauhar I. Becoming an adolescent mother: The experiences of young Indonesian new mothers living with their extended families. *Midwifery* 2022; 104, 103170; https://doi.org/10.1016/j.midw.2021.103170
16. Eshiet UI, Jackson IL and Akwaowoh AE. High patronage of traditional birth homes: a report from Akwa Ibom, Southern Nigeria. *Am J Health Policy Manag* 2016; 1(1):1–6.
17. Fagbamigbe A, Francis I and Erhabor S. Barriers to antenatal care use in Nigeria: evidence from non-users and implications for maternal health programming. *BMC Pregnancy Childbirth* 2015; 15(95).
18. Federal Government of Nigeria (2013). Integrating Primary Health Care Governance in Nigeria (PHC under One Roof): Implementation Manual. National Health Care Development Agency.
19. Federal Government of Nigeria (2018). The second national strategic health development plan, 2018-2022.
20. Federal Ministry of Health (2010). National Strategic Health Development Plan (NSHDP) 2010-2015.
21. Federal Ministry of Health (2021). Nigeria health facility registry. Retrieved (https://hfr.health.gov.ng/statistics/tables).
22. Federal Republic of Nigeria (2014). National Health Act.
23. FOS and IRD Macro (1992). *Nigeria Demographic and Health Survey 1990*. Columbia Maryland: Federal Office of Statistics. Lagos, Nigeria and IRD Macro International Inc.
24. Fusch PI and Ness LR. Are we there yet? Data saturation in qualitative research. *Qual Rep* 2015; 20(9):1408.
25. Homer CS E, Lopes SC, Nove A, Michel-Schuldt M, McConville F, Moyo NT, Bokosi M and HoopeBender P. Barriers to and strategies for addressing the availability, accessibility, acceptability and quality of the sexual, reproductive, maternal, newborn and adolescent health workforce: addressing the post-2015 Agenda. *BMC Pregnancy. Childbirth* 2018; 18(1):1-11.
26. Koblinsky M, Moyer CA, Calvert C, Campbell J, Campbell O, Feigl AB, Graham WJ, Hatt L, Hodgins S and Matthews Z. Quality maternity care for every woman, everywhere: a call to action. *Lancet North Am Ed* 2016; 388(10057):2307-2320.
27. Lambo E. Primary health care: realities, challenges and the way forward. a paper presented at the first annual primary health care lecture, in Abuja 2015;

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

28. Lane K and Garrod J. The return of the traditional birth attendant. *J Glob Health* 2016; 6(2).
29. LanreAbass BA. Poverty and maternal mortality in Nigeria: towards more viable ethics of modern medical practice. *International Journal of Equity Health* 2008; 7, 11. doi:10.1186/1475-9276-7-11.
30. Lorretta F CN, Friday EO, Chioma E, Tosin OS, Brian I, Wilson I and Sanni Y. Why women utilize traditional rather than skilled birth attendants for maternity care in rural Nigeria: Implications for policies and programs. *Midwifery* 2022; 104:103158. https://doi.org/10.1016/j.midw.2021.103158
31. Makinde K. Is there a role for traditional birth attendants in combating maternal deaths in Nigeria? Retrieved from (www.healththink.org/combating-maternal-deaths-in-nigeria/) 2020;
32. Makinde OA, Sule A, Ayankogbe O and Boone D. Distribution of health facilities in Nigeria: implications and options for universal health coverage. *International Journal of Health Planning and Management* 2018; 33(4):e1179-e1192.
33. Mimiko O. Experiences with universal health coverage of maternal health care in Ondo state, Nigeria, 2009-2017. *Afr J Reprod Health* 2017; 20(3):1-18.
34. National Population Commission (2019). Nigeria and ICF.
35. Nigeria Demographic and Health Survey (2018). NPC and ICF, Abuja, Nigeria, and Rockville, Maryland, USA.
36. National Primary Health Care Development Agency (2012). *National Guidelines for the Development of Primary Health Care System in Nigeria*. Fourth Revised Edition.
37. National Primary Health Care Development Agency (2014). Federal Republic of Nigeria, Abuja, Nigeria. NPC, and ICF International.
38. Nigeria Demographic and Health Survey 2013.
39. National Population Commission (2009). Nigeria and ICF International, Abuja, Nigeria, and Rockville, Maryland, USA. NPC, and ICF Macro.
40. Nigeria Demographic and Health Survey (2008). National Population Commission, Nigeria and ICF Macro, Abuja, Nigeria.
41. Ntoimo LF, Okonofua FE, Ogu RN, Galadanci HS, Gana M, O, Ola N, A Kingsley N, AbdusSalam RA and Durodola AA. Prevalence and risk factors for maternal mortality in referral hospitals in Nigeria: a multicenter study. *International Journal of Women's Health* 2018; 10,69.
42. Ntoimo L, Favour C, Okonofua FE, Igboin B, Ekwo CI and Wilson YS. Why rural women do not use primary health centres for pregnancy care: evidence from a qualitative study in Nigeria. *BMC Pregnancy. Childbirth* 2019; 19(1):1-13. doi: 10.1186/s12884-019-2433-1.
43. Okoli U, Morris L, Oshin A, Pate MA, Aigbe C and Muhammad A. Conditional cash transfer schemes in Nigeria: potential gains for maternal and child health service uptake in a national pilot Programme. *BMC Pregnancy Childbirth* 2014; 14(1):408.
44. Onwujekwe O, Ezumah N, Mbachu C, Obi F, Ichoku H, Uzochukwu B and Wang H. Exploring the effectiveness of different health financing mechanisms in Nigeria; what needs to change and how can it happen? *BMC Health Servi*ces and Research 2019; 19(1):661.
45. Sarker BK, Rahman M, Rahman T, Hossain J, Reichenbach L and Mitra DK. Reasons for preference of home delivery with traditional birth attendants (TBAs) in rural Bangladesh: a qualitative exploration. *PLoS One* 2016; 11(1).
46. Sialubanje C, Massar K, Hamer DH, Ruiter R. Reasons for home delivery and use of traditional birth attendants in Rural Zambia: a qualitative study. *BMC Pregnancy Childbirth* 2015; 15(1):1-12.
47. Theodora Hei T L, Shuk TK, Weilan W, Mimi TY S and Ka WC). Fear of childbirth: Validation study of the Chinese version of Wijma delivery expectancy/experience questionnaire version A. *Midwifery*, 2022;104,103188 https://doi.org/10.1016/j.midw.2021.103188
48. Trainor AA). Community conversation as a method of gathering and analyzing qualitative data. *J Disab Policy Stud* 2018; 29(1):2-6.
49. UN Committee on Economic Social and Cultural Rights. CESCR general comment no. 14: the right to the highest attainable standard of health 2000; (Art. 12)
50. Uzochukwu U, Etiaba E, Okwuosa C, Envuladu E and Onwujekwe OE. Health care financing in Nigeria: implications for achieving universal health coverage. *Nigerian J Clin Pract* 2015; 18(4):437-444.
51. World Health Organization (1992). Traditional Birth Attendants: A Joint WHO/UNFPA/UNICEF Statement. World Health Organization.
52. World Health Organization (2015a). Recommendations on Partnerships with Traditional Birth Attendants (TBAs). WHO Reproductive Health Library, Geneva, Switzerland.
53. World Health Organization (2015b). Trends in Maternal Mortality: 1990 to 2015. Estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. World Health Organization, Geneva, Switzerland.
54. World Health Organization (2015c). WHO Recommendations on Health Promotion Interventions for Maternal and Newborn Health 2015. World Health Organization, Geneva, Switzerland.
55. World Health Organization (2016). Standards for Improving Quality of Maternal and Newborn Care in Health Facilities. World Health Organization, Geneva.
56. World Health Organization (2017). *Draft statement on skilled birth attendants*.

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS

57. Yaya S, Bishwajit G, Uthman OA and Amouzou A. Why some women fail to give birth at health facilities: a comparative study between Ethiopia and Nigeria. *PLoS One* 2018; 13(5):e0196896.

ISSN 2278–5469 EISSN 2278–5450 I OPEN ACCESS