

Knowledge and Practices of Quality Child Delivery Services among Traditional Birth Attendants in Ibadan Metropolis of Oyo State Nigeria.

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1.0 ABSTRACT

Maternal mortality remains high in many Low Middle-Income Countries and, in particular, sub-Saharan Africa with Nigeria having the third highest burden. With staggering statistics of national average of 1047 maternal deaths per every 100,000 live births as at 2022, calls for a national response. This quasi-experimental study aims to assess the impact of training in the knowledge and skills capacity of informal workers providing maternal child health services in Ibadan metropolis. The experimental research design was conducted with the probability sampling of 187 TBAs, using a modified structure questionnaire to assess their knowledge of pre-natal, intra-labour, immediate newborn care, managing infection and complication, referral and post-partum care. The study employed a mixed method of quantitative and qualitative structure design, using interviewer-administered questionnaires. The quantitative data collected was processed with SPSS version 27 software, and descriptive and inferential statistics were used to find answers to the 60 questions asked. Paired T-test was used to test the hypothesis of the study using a 0.05 level of significance. This study showed that the knowledge level of 92 respondents at baseline and end line across various domains of maternal child health care services showed notable changes for prenatal, intra-labor, management of infections or complications, postpartum, and referral systems. The level of overall knowledge improved from 28.5 +/- 6.8 at baseline to 32.4 +/- 5.0 at endline, and skills showed substantial improvement as the paired t-test revealed significant differences in knowledge and skills between the control and intervention group. Therefore, the intervention revealed that training TBAs as a purposive capacity-building effort is the surest way to improve maternal health outcomes, especially for the urban poor and rural community residents where TBA services are available, accessible, and affordable to the people.

Keywords: Child Delivery Practices, Maternal Mortality; Knowledge, Skills, Primary health Care.

1.1 INTRODUCTION

Informal healthcare service providers still play pivotal roles in the health care systems of many Low- and Middle-Income Countries (LMICs) of the world Kumah, E. (2022). They are responsible for many activities to provide basic health including maternal child health care services due to poor access to formal healthcare systems. A staggering 65% of births in sub-Saharan –Africa occur outside the confines of hospitals, predominantly overseen by these informal healthcare practitioners Oladeinde, H. B., et al., (2016). The World Health Organization (WHO) underscores the invaluable role played by these informal health workers in bridging gaps in accessing healthcare, particularly in LMICs World Health Organization. (2013) With the WHO's ambitious agenda of achieving Health for all by 2030, as articulated in Sustainable Development Goal 3 and Target 8 WHO (2022).it has become imperative to direct attention towards the contributions of this informal sector to the healthcare landscape. Despite concerted efforts by several nations to align with the 2030 target, Nigeria stands at a crossroads, yet to delineate a definitive strategy in addressing the prevalence of informal healthcare practices.

Informal healthcare providers encompass a spectrum of practitioners, ranging from traditional and complementary medicine experts like traditional birth attendants (TBAs), traditional healers, and patent medicine vendors to drug sellers and bone setters as well as those providing various voluntary community -based services in LMICs [Abdul-Mumin, Khadizah Haji. (2016). Abdul-Mumin, Khadizah Haji. (2016). Throughout Africa, TBAs have traditionally served as primary caregivers for women during childbirth These informal healthcare providers play a crucial role

in disseminating maternal, child, sexual, and reproductive health information and services, particularly in rural, marginalized, and hard-to-reach communities. While some informal service providers may possess varying degrees of skills, many operate without formal training, thereby emphasizing the diverse landscape of healthcare provision in these regions. Kisangala, E., L. et al., (2023). Traditional birth attendants often lack formal training, acquiring their skills through practical experience gained from delivering babies and undergoing apprenticeships with other TBAs. Christian, B.-I. N., Christian, N. G., Keshinro, M. I., & Olutade-Babatunde, O. (2023). Despite earnest endeavours to alleviate the toll of maternal and infant fatalities, nations with modest economic means, such as Nigeria, still wrestle with notable mortality statistics. One pivotal factor contributing to this plight is the deficient accessibility to skilled birth attendants within the professional medical services by the urban poor and rural dwellers. Aziato, L., & Omenyo, Cephas N. (2018). The inability to assimilate non-formal caregivers into established healthcare frameworks presents a formidable obstacle, impeding appropriate referrals and exacerbating the disintegration of healthcare provision. Sieverding, M., & Beyeler, N. Child delivery services among TBAs in the Ibadan metropolis Local Government Areas of Oyo State, Nigeria.

1.2 METHODS

Study Area

Ibadan, the capital of Oyo State is the largest city in West Africa by geographical area covering a total area of 3,080 square kilometer, and it is the third-largest city by population in Nigeria, with a total population of 2,649,000 as of 2021. There are 11 local government areas (LGA) in the Ibadan metropolitan area, which consist of five urban LGAs, and six semi-urban LGAs. This research study was conducted in Ibadan Metropolis communities with ward-level representation from the 42 wards of the 4 LGAs of Ibadan North East, Ibadan South East, Akinyele, and Ona Ara.

Ibadan Northeast: The LGA is predominantly urban and has a population of 220,110 based on the year 2006 projected population at 2.3% annual growth rate of 14.31 square kilometer area. The population is comprised of 75,410 males and 78,619 women. The Men and women of reproductive age 20-49 are 65,499 (NPC, 2022, and National Bureau of Statistics web). It has a total of 54 TBA/CBAs registered with the Oyo State Ministry of Health database and a year 2020 mapping exercise of practicing TBA/CBA in Oyo State of Nigeria.

Ibadan Southeast: One of the five urban LGAs with its headquarters at Mapo. It occupies an area of 17 Square kilometer with a population of 380,800 based on year 2006 Census. It is comprised of 130,334 men and 136,123 women, with men and women of reproductive age being 108,748. It has a total of 36 mapped TBAs/CBAs.

Akinyele: It has a population of 302,000 based on projections from the 2006 de facto census population of 211,811 growing at a 2.9% annual growth rate. Currently comprised of 12 rural and urban wards and over 182 communities. The headquarters is at Moniya and was recently upgraded to the new Ibadan city. It has a total of 97 Mapped Traditional/Community-Based attendants.

Ona Ara: The LGA is the agrarian community of Ibadan Metropolis LGAs. It has 11 wards and occupies a land mass space of 3570 Km. It has a population of 265,059 as of the 2006 Census and comprises some 131,471 men and 11,588 women. The LGA has a total of 56 mapped TBA/CBAs.

Research Design

This study utilized a quasi-experimental design and a mixed method was utilized for data collection. This study was carried out in three major phases comprising: assessment, intervention and evaluation phase.

Study Population

The population for this study comprises informal health services providers named Traditional Birth attendants (TBAs)/CBAs who render ante-natal, childbirth, and post-natal services for women of reproductive age.

Inclusion & Exclusion criteria

Anyone working as a Traditional / Community birth attendant and rendering services in the selected LGAs as a TBA.

Exclusion Criteria

Traditional/Community birth Attendant who have not operated for up to 6 months to time of data collection.

Sample Size

Sample size was calculated using the formula for calculating sample size with two proportions for Traditional Birth Attendants (TBAs).

$$N = \frac{\left(Z_{\alpha/2} \sqrt{2p(1-p)} + Z_{1-\beta} \sqrt{p_1(1-p_1)p_2(1-p_2)} \right)^2}{(p_1 - p_2)^2}$$

$$p = \frac{(p_1 + p_2)}{2},$$

p_1 = Proportion of TBAs without formal training; $p_1 = 34.1\%$ (Esan et al., 2023)

p_2 = Proportion of TBAs with formal training; $p_2 = 15.0\%$ (Atulomah et al., 2020)

$Z_{\alpha/2} = 1.96$

$Z_{1-\beta} = 0.84$ (80% power).

$N = 76$ for each group ($N = n_1 + n_2$)

$= 76 + 76 = 152$

20% non-response/attrition rate $= 152 / (1-0.2) = 190$ participants

One hundred and ninety (190) TBAs was engaged in this study

1.3 FINDINGS

This study engaged one hundred and eighty-seven (187) participants comprising ninety-five (95) participants control and ninety-two participants (92) intervention group with an attrition rate of 3.2%. All (100%) of the control group respondents were female, while in the intervention group ($N=92$), had (98.9%) as female. The age range for respondents is between 41-50 years old, with (35.8%) in the control group and (41.3%) in the intervention group; some were within the same age range. In terms of religion, most (88.4%) of the control group identified as Christians, while in the intervention group, many (77.2%) identified as Christians. Marital status showed that most (94.7%) of the control group were married, compared to (87.0%) in the intervention group. Regarding education, many (72.6%) of the control group had completed secondary education, whereas in the intervention group, most (68.5%) had the same level of education. Training background showed that many (73.7%) of the control group were mostly clerics trained through Christian religious missions, while in the intervention group, many (79.3%) were trained through apprenticeship. In terms of ethnicity, almost all (97.9%) of the control group were Yoruba, while all in the intervention group (100%) were Yoruba. About half (58.9%) of the control group had 1-4 children, similar to the intervention group, where many (67.4%) had 1-4 children. Lastly, working experience revealed that some (35.8%) of the control group had 21-30 years of experience, while in the intervention group, some (38.0%) had 11-20 years of experience.

The Table 2 describes the findings of improvements between the baseline and endline as reflected in the increased knowledge scores about the critical issues that a pregnant woman must access during pregnancy.

The Prenatal care domain showed a substantial mean difference of 0.326 (95% CI: 0.191 to 0.460, $t = 4.83$, $p < 0.001$), reflecting a significant improvement. These ranged from the number of visits, the type of assessments, the nutritional intakes, immunizations etc. This suggested improvement in the understanding of the TBAs on how to care for a pregnant woman for early detection of complications for which they should refer to skilled birth attendants at the formal health centres.

Table 2: Knowledge of maternal and child health care services (Prenatal)

Variables	Control (N=95)		Intervention (N=92)	
	Frequency	Percentage	Frequency	Percentage
World Health Organization (WHO) recommends minimum ANC visits				
3	10	10.5	5	5.4
4	72	75.8	66	71.7
5	9	9.5	13	14.1
6	4	4.2	6	6.5
Don't know	0	0.0	2	2.2
Stage pregnant women require the most comprehensive assessment during antenatal care				
First visit	66	69.5	74	80.4
Subsequent visit	8	8.4	3	3.3
Women with a blood pressure of 1400mmHg	6	6.3	2	2.2
Don't know	15	15.8	13	14.1
Danger signs of pregnancy				
Severe nausea and vomiting	19	20.0	19	20.7
Severe belly pain that doesn't go away	30	31.6	35	38.0
Baby's movement stopping or slowing during pregnancy	22	23.2	23	25.0
Vaginal bleeding or fluid leaking during pregnancy	53	55.8	47	51.1
Severe swelling, redness, or pain in your leg or arm	51	53.7	50	54.3
Overwhelming tiredness	43	45.3	48	52.2
Others	2	2.1	0	0.0
Necessity of giving tetanus injection during pregnancy				
Yes	60	63.2	61	66.3
No	12	12.6	18	19.6
Don't know	23	24.2	13	14.1
Pregnant women require iron and folic acid supplements during pregnancy				
Yes	63	66.3	62	67.4
No	10	10.5	16	17.4
Don't know	22	23.2	14	15.2
Pregnant women should often get their weight and blood pressure checked				
Yes	59	62.1	68	73.9
No	23	24.2	16	17.4
Don't know	13	13.7	8	8.7
Stage of labor is divided into latent and active phases				
First stage	66	69.5	68	73.9
Second stage	16	16.8	8	8.7
Third stage	10	10.5	11	12.0
Don't know	3	3.2	5	5.4

Table 3. The Intra-labour score exhibited a remarkable increase with a mean difference of 1.793 (95% CI: 1.536 to 2.051, $t = 13.82$, $p < 0.001$), demonstrating a highly significant improvement. They were taken through the essentials of managing the labor processes from an optimal sitting position, monitoring the contractions to assess progress, to monitoring the fetal heart as well as the dilatation of the cervix to assure ensure progress or otherwise until the delivery of the placenta. Responses indicated good knowledge of those essential activities as shown in the table below.

Table 3: Knowledge of maternal and child health care service (Intra-labour)

Variables	Control (N=95)		Intervention (N=92)	
	Frequency	Percentage	Frequency	Percentage
The optimal position for a woman during the first stage of labor				
Sitting upright	62	65.3	82	89.1
Lying on her back	12	12.6	10	10.9
Lying on her side	6	6.3	0	0.0
Squatting	6	6.3	0	0.0
Don't know	9	9.5	1	1.1
significance of monitoring contractions during labor				
To assess progress	56	58.9	74	80.4
To relieve pain	18	18.9	4	4.3
To Control (N=95) bleeding	10	10.5	12	13.0
Not important/ Don't know	11	11.6	2	2.2
Frequency of checking fetal heart rate during active labour				

Every 15 minutes	60	63.2	80	87.0
Every 30 minutes	13	13.7	0	0.0
Every hour	11	11.6	1	1.1
Only when requested by the mother	11	11.6	10	10.9
Purpose of performing vaginal examinations during labour				
To assess cervical dilation	54	56.8	75	81.5
To check for infections	14	14.7	11	12.0
To monitor fetal position	12	12.6	3	4.3
Not necessary	15	15.8	3	3.3
Benefit of perineal massage to a woman during labour				
Reduce the risk of tearing	56	58.9	72	78.3
Speed up labour	10	10.5	8	8.7
Increase pain tolerance	17	17.9	7	7.6
No benefit/Don't know	12	12.6	5	5.4
Activities to be done if the umbilical cord prolapses during labour				
Push it back inside the vagina	13	13.7	7	7.6
Refer	59	62.1	74	80.4
Ignore it until delivery	12	12.6	4	4.3
Don't know	11	11.6	7	7.6
Assistance made in managing pain during labour				
Encourage deep breathing	60	63.2	78	84.8
Administer epidural anaesthesia	0	0.0	0	0.0
Apply pressure to the abdomen	7	7.4	0	0.0
Offer herbal remedies	28	29.5	13	14.1
I don't know			1	1.1
Activities that facilitate delivery of the placenta				
Rub the lower part of the abdomen to dislodge the placenta	16	16.8	3	3.3
Apply gentle traction, pull out and down	65	68.4	79	85.9
Just observe and wait till natural expulsion	14	14.7	10	10.9
Steps to carry out if placenta delivery is delayed				
Call for help from other TBAs	23	24.2	22	23.9
Apply traditional method	15	15.8	4	4.3
Refer to the hospital or trained specialist	57	60.0	66	71.7

NB: With regards to the care given to the newborn, the variables on Table 4 indicated good knowledge of what the TBA does for the neonate. The changes in the score also demonstrated their understanding of the essentials that a newborn must receive to ensure survival and a good head start in life. Such care ranged from the separation from the mother through cutting the cord to the bathing and skin-to-skin contact to establish bonding and the establishment of breast feeding breastfeeding.

Table 4: Knowledge of maternal and childcare services (Immediate newborn care)

Variables	Control (N=95)		Intervention (N=92)	
	Frequency	Percentage	Frequency	Percentage
Removing meconium during the first hour after birth				
Scrubbed away in a bath of warm water	58	61.1	20	21.7
Wiped away with clean cloth	26	27.4	63	68.5
Scrubbed with a cloth containing alcohol	11	11.6	6	6.5
Don't know	0	0.0	3	3.3
Time to dry baby, clear airway & stimulate breathing				
<1 minute	49	51.6	31	33.7
2 – 3 minutes	23	24.2	14	15.2
5 minutes	14	14.7	20	21.7
> 10 minutes	9	9.5	15	16.3
Don't know	0	0.0	12	13.0
Care of the umbilical cord important after delivery				
Cut the cord with a clean instrument (for example, a blade)	56	58.9	47	51.1
Use any sharp instrument for cutting the cord	16	16.8	15	16.3

After cutting the cord, apply traditional herbs/medicines	13	13.7	12	13.0
Always put a bandage on the cord	10	10.5	15	16.3
I don't know	0	0.0	3	3.3
Time to clamp or tie the umbilical cord of a crying baby				
Immediately	20	21.1	14	15.2
Wait 1 – 3 minutes	33	34.7	39	42.4
Can extend till 15 – 30 minutes	26	27.4	20	21.7
Don't know	16	16.8	19	20.7
Time for the baby first bath				
As soon as the baby is born	13	13.7	16	17.4
At least 6 hours following birth	74	77.9	71	77.2
As soon as the baby has a normal temperature	8	8.4	5	5.4
Time to begin skin-to-skin care				
After delivery of the placenta	40	42.1	39	42.4
Immediately after drying the baby following birth	13	13.7	5	5.4
After being shown to the relatives	42	44.2	48	52.2
Keeping baby warm after skin-to-skin care				
Bathing in warm water	21	22.1	24	26.1
Wrapping in a clean, dry blanket or cloth	53	55.8	46	50.0
Exposing the baby to direct sunlight	0.	0.0	0	0.0
Don't know	21	22.1	22	23.9
Initiation of breastfeeding should be after				
within the first hour	61	64.2	67	72.8
1- 6 hour after birth	11	11.6	14	15.2
6 – 12 hours after birth	8	8.4	4	4.3
More than 12 hours after birth	15	15.8	7	7.6
Time-healthy babies should feed				
Every one hour	12	12.6	11	12.0
About every 3 hours, 8-12 times a day	71	74.7	62	67.4
Every 6 hours	12	12.6	16	17.4
I don't know	0.	0.0	3	3.3
Time after birth for weighing the baby				
Sometime during the first day	38	40.0	33	35.9
Any time before the mother and baby leave the birth facility	2	2.1	6	6.5
Within 90-minutes after birth	55	57.9	53	57.6

Table 5: Association between control and intervention group on domains of knowledge, skill level, and quality of care on maternal and child health care services

Variables	Paired Differences			t	p – value
	Mean Difference	95% Confidence Interval Lower	Upper		
Knowledge Domain					
Prenatal Care	0.326	0.191	0.460	4.83	<0.001*
Intra-labour score	1.793	1.536	2.051	13.82	<0.001*
Immediate Newborn Care	0.119	0.137	0.376	0.93	0.357
Managing Infection Complication	0.467	0.269	0.665	4.69	<0.001*
Postpartum score	0.250	0.141	0.359	4.55	<0.001*
Referral system score	1.543	1.280	1.807	11.66	<0.001*
skill score	2.457	2.088	2.825	13.22	<0.001*
Quality of care score	0.609	0.429	0.788	0.43	<0.001*
Final endline knowledge	4.500	3.709	5.291	3.71	<0.001*

* Statistical significance

The paired T-test analysis revealed significant improvements across various domains of knowledge, skill levels, and quality of care in maternal and child health services following the intervention. The prenatal care domain showed a mean difference of 0.802 (95% CI: 0.257 to 1.347, $t = 2.90$, $p = 0.004$), indicating a significant improvement. Similarly, post intra-labour score showed an increase with a mean difference of 0.231 (95% CI: 1.777 to 2.830, $t = 8.65$, $p < 0.001$), showing a highly significant improvement. However, post-immediate newborn care domain did not demonstrate a statistically significant change, with a mean difference of 0.776 (95% CI: 0.444 to 0.289, $t = 0.41$, $p = 0.674$). In contrast, post-managing infection complications domain showed a significant improvement, with a mean difference of 0.479 (95% CI: 0.276 to 0.681, $t = 4.67$, $p < 0.001$). Postpartum Score also reflected significant progress, with a mean difference of 0.301 (95% CI: 0.132 to 0.470, $t = 3.51$, $p = 0.001$).

Further, referral system score had an increase, with a mean difference of 1.795 (95% CI: 1.384 to 2.207, $t = 8.63$, $p < 0.001$), while the final endline knowledge score showed a significant improvement with a mean difference of 4.993 (95% CI 3.412 to 6.573, $t = 6.21$, $p < 0.001$). The post-skill score also demonstrated a significant increase, with a mean difference of 0.230 (95% CI: 1.598 to 3.007, $t = 6.45$, $p < 0.001$). Finally, the quality-of-care score demonstrated a significant improvement, with a mean difference of 0.637 (95% CI: 0.143 to 1.131, $t = 2.54$, $p = 0.012$). Overall, the findings indicate that the intervention was effective in improving knowledge, skills, and quality of care in maternal and child health services.

Table 6: Association between control and intervention group on domains of knowledge, skill level and quality of care on maternal and child health care services

Variables	Paired Differences			t	p-value
	Mean Difference	95% Confidence Interval Lower	95% Confidence Interval Upper		
Knowledge Domain					
Post Prenatal Care	0.802	0.257	1.347	2.90	0.004*
Post Intra-labour score	0.231	1.777	2.830	8.65	<0.001*
Post Immediate Newborn Care	0.776	0.444	0.289	0.41	0.674
Post Managing Infection Complication	0.479	0.276	0.681	4.67	<0.001*
Postpartum score	0.301	0.132	0.470	3.51	0.001*
Post Referral system score	1.795	1.384	2.207	8.63	<0.001*
Final endline Knowledge score	4.993	3.412	6.573	6.21	<0.001*
Post skill score	0.230	1.598	3.007	6.45	<0.001*
Post Quality of care score	0.637	0.143	1.131	2.54	0.012*

* Statistical significance

1.4 DISCUSSIONS

This study generated findings from an intervention study with 187 practicing TBAs in the study population of 4 LGAs of Ibadan metropolis in Oyo state, Nigeria. A total of 95 respondents were in the control group and 92 for the intervention group, following a 3.1% attrition rate. These respondents were tested across six domains of maternal and neonatal health. The knowledge scores from the intervention study have demonstrated the impact of training as reflected in Tables 2 and 3. This corroborated the findings from the studies conducted with similar purposes in Sierra Leone and Somaliland that trained TBAs have capacity to deliver pregnant women and reduce maternal mortality and morbidity Orya, E., Adaji, S., Pyone, T. et al., (2017)

Implications for practice. The qualitative study, which harvested post-training capabilities of the TTBA's, highlighted the possible gains of such training, which suggested increased knowledge about quality child delivery practices, and the implications of their availability as experienced workforce at the community level. This may have positive implications for their role at reducing the high maternal mortality rates and their likelihood of integration into the formal health system. (Sowunmi, C. O., Olajide, A. O., Olorunfemi, O., Iwaola, O. M., & Adeyemo, O. F. (2021). It further argued the importance of such integration as critical in promoting universal health coverage in low-resource settings and fragile states coming out of conflicts that had resulted in the killing of many skilled health workers. This study also corroborated a study carried out in Ogbomoso, Oyo state Nigeria which suggested that training TBAs will reduce the rate of maternal mortality [12] Several other studies conducted in LMCI countries consistently revealed that when TBAs receive training on high-risk issues of pregnancy, the maternal outcomes on mortality and morbidity are grossly reduced. However, a major resistance to this offer remains the fear of trained providers about the inability to TBAs to keep to their limitation, unfortunately, these skilled birth attendants- doctors, nurses, midwives, etc. are still unavailable due to critical shortage of the human resources for health across developing countries. Other studies since year 2014 by numerous authors have consistently reported that training TBAs is a likely solution to improving the quality of care rendered by TBAs. All the studies indicated improved knowledge and skills when TBAs were trained or exposed to the right things to do. (Wilunda, C., et al., (2014).

Interestingly from this study, it was discovered that those with secondary level education working as Traditional birth attendants are also using advantage of modern technology to strengthen their knowledge and skills. MacDonald ME. (2022) previous study had proposed the return of the TBAs given their high tacit knowledge that makes them a ready workforce at communities where skilled birth attendants are in short shortage Lane K, Garrod J. (2016). Furthermore, establishing partnership with TBAs for improved maternal and new born health services have been proved to help in similar studies conducted around the factors that influences the promotion of quality pregnancy care and childbirth practices. Miller T, Smith H. (2017). This study has therefore, highlighted the findings about the changing roles of TBAs working as informal health service providers on maternal and neo natal healthcare space in Ibadan Metropolis LGAs of Oyo State.

1.5 CONCLUSION

In conclusion, as maternal health outcomes remain poor and the health workforce remains a key building block which underpins the possibilities of access to health for all, developing countries should be willing to explore how to strengthen the existing human resources for health needed to provide minimum care at the very community level. This may be trained volunteers or the TBAs who are forever available in every community to become a critical stopgap and solution to the unavailable health resources in remote areas. This requires strategic community-based interventions by the Government.

1.6 RECOMMENDATIONS

Given the present critical shortage of the skilled birth attendants, government should design appropriate workable interventions using available resources at their disposal.

In addition, government should also explore how to promote age-long health promotive behaviors among the local population, in addition to fostering workable partnerships between community-based informal health practitioners and trained health workers at the formal health facility level.

This also suggests mandatory trainings and periodic refreshers updates for all TBAs operating within each community. Such training should be done using local languages.

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Conflict of Interest

There is no competing interest. The study was undertaken to explore how to stop the high maternal mortality rates in Oyo State and Nigeria and ensure access of women of reproductive age to quality Maternal Child Health Care services.

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APPENDIX 1

Table 1: Socio-Demographic Characteristics

Variables	Control (N=95)		Intervention (N=92)	
	Frequency	Percentage	Frequency	Percentage
Sex				
Male	0	0.0	1	1.1
Female	95	100.0	91	98.9
Age				
Up to 30	6	6.3	9	9.8
31 – 40	14	14.7	15	16.3
41 – 50	34	35.8	38	41.3
51 – 60	29	30.5	21	22.8
Above 60	12	12.6	9	9.8
Religion				
Christianity	84	88.4	71	77.2
Islam	11	11.6	20	21.7
Traditional	0	0.0	1	1.1
Marital status				
Single	2	2.1	6	6.5
Married	90	94.7	80	87.0
Separated	0	0.0	1	1.1
Divorced	1	1.1	1	1.1
Widow	2	2.1	4	4.3
Facility managing authority				
Private	88	92.6	65	70.7
Faith-Based	7	7.4	27	29.3
Highest level of education completed				
None	3	3.2	1	1.1
Primary	21	22.1	20	21.7
Secondary	69	72.6	63	68.5
Tertiary	2	2.1	8	8.7
Where did you train				
Family training/ Inheritance	1	1.1	5	5.4
Apprenticeship	22	23.2	73	79.3
Government	2	2.1	4	4.3
God's gift/ talent/calling	70	73.7	10	10.9
Ethnicity				
Igbo	2	2.1		
Yoruba	93	97.9	92	100.0
Number of children				
None	4	4.2	5	5.4
1 – 4	56	58.9	62	67.4
5 – 8	35	36.8	25	27.2
Working experience (in years)				
Up to 10	21	22.1	31	33.7
11 – 20	32	33.7	35	38.0
21 – 30	34	35.8	20	21.7
Above 30	8	8.4	6	6.5

Source: Authors Research Note 2024.

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