

Characterising the Patrons of Traditional Maternal Healthcare Services in Southwestern Nigeria

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Abstract

It is evident that the preference for traditional maternal health care services is a significant component of high maternal mortality in the country. Hence, the need to examine characterizing the patrons of Traditional Maternal Health Care Services (TMHCs) in Southwestern Nigeria. Descriptive research design technique approach was used in the investigation. All pregnant women and nursing mothers who visited TMHCs in the Southwest made up the study's population. The sample size were 1020 pregnant women and nursing mothers. Information from the respondents was gathered using a self-made questionnaire. Data was analyze using frequency distribution, chats, ANOVA was used to test significance of the variable that were measured. The results indicated that low-income earners 378 (43.2%), young adult 718 (82.1%), attained tertiary education 322 (36.8%), traders 344 (39.3%) were the respondents who patronized TMHCs. Also, showed that factors influencing the patronage of traditional maternal healthcare services did not differ across ethnic groups ($F=.373$ sig =.688) in the study area. It that factors influencing the patronage of traditional maternal healthcare services differed based on educational status ($F=21.193$ sig=.000). The study concluded that patronage of traditional maternal services is a predisposing factor to high maternal mortality in Southwestern Nigeria.

Keywords: Faith-based home, indigenous healthcare, pregnant women, maternal death, conventional healthcare

Introduction

During these transitional periods, many women of childbearing age are at risk, especially with regard to labour and delivery, illness, and even death. Despite being a biological process, delivery carries risks that can be fatal. According to Ibrahim (2016) and the World Health Organization (WHO) (2010), maternal death is described as the death of a woman during pregnancy, childbirth, or within six weeks of the pregnancy's termination, regardless of the place or time of the pregnancy, for any reason connected to or exacerbated by pregnancy or its administration, but not as a result of incidental or accidental causes.

Globally, millions of women pass away annually because of difficulties during pregnancy and delivery, a vast bulk of these losses are avoidable (Hunt & Bueno de Mesquita, 2010). As such, maternal mortality is considered a communal wellbeing delinquent, growth issue, human privileges alarm as well as human catastrophe (WHO, 2020). Maternal death was relatively high in emerging countries, especially in Southern Asia

and Sub-Saharan Africa, accounting for about 86% (295,000) of global maternal death in 2017 (WHO, 2019). Given that 17 of the 22 nations with the highest maternal fatality ratios worldwide are located in Africa, the continent is severely impacted (Vandana et al., 2017). Approximately 56% of maternal deaths worldwide are thought to occur in Sub-Saharan Africa (Ogu & Ephraim-Emmanuel, 2018). In particular, Nigeria had the highest percentage of yearly maternal fatalities in 2010 (14%) of all maternal fatalities worldwide, in 2015, the maternal mortality rate was 19% per 100,000 live births (Gilda *et al.*, 2017). Nigeria accounted for 23% of global maternal fatalities in 2021 (Punch Newspaper, 2022).

The rise in maternal fatalities in Nigeria is due to several factors, including a lack of maternal health infrastructure, significant delays in seeking care, proximity and access to healthcare facilities, obtaining proper care upon arrival, and referral delays (Ogu & Ephraim-Emmanuel, 2018 and Catherine *et al.*, 2019). Unfortunately, the causes listed above not include the actual type of healthcare system being patronised by pregnant women. This is because, like other African countries, people in Nigeria have and seek options between modern (orthodox or conventional) and traditional (indigenous and faith-based) health care systems for various health services including maternal health services (Ozioma & Chinwe, 2019).

Traditional maternal wellbeing upkeep consists of Traditional Birth Attendants (TBAs) who are the main practitioners that render antenatal care and oversee the delivery of pregnant women who patronise them. The majority of TBAs are women. For instance, in Nigeria, especially in rural regions, 60-85% of deliveries are supervised by TBAs and religious homes. According to International Maternal & Child Health Care (2017), they therefore have a significant role in the public health system. According to the current maternal death ratios, Nigeria's maternal health status is still precarious due to a number of maternal health service deficiencies, including a lack of free prenatal care, a shortage of skilled delivery assistants, and a lack of resources (Ogu & Ephraim-Emmanuel, 2018). Women's endorsement of existing sources of child health treatments based on socio-cultural and economic variables is significantly linked to the continent's high maternal death rates (WHO, 2017, WHO, 2018, Olawale *et al.*, 2019 and Joseph *et al.*, 2019).

According to Guardian newspaper (2018) factors that support traditional midwifery, such as low socioeconomic status, illiteracy, a lack of knowledge about modern maternal health (MCH) facilities, strong family influence, and easy access to TBA services, have been strongly linked to the use of traditional and faith-based health care services. According to Ugboaja et al. (2018), rural residency, poor economic position, skilled employment status, age, and large household size were all linked to an increase in the usage of traditional parental services. According to Adewuy *et al.* (2019), 70% of young moms aged 15 to 24 gave birth at home, which was more than the 63% national average for all Nigerian women of reproductive age. Nwankwo *et al.* (2019) and Sowunmi *et al.* (2020) found a strong correlation between TMHCS patronage and the clients' age, educational background, and economic standing.

Despite the implementation of programmes like Mother-care in Nigeria, exposure to doctors and public maternal health workers, new-borns and women healthcare (ACCESS), public maternal and child health policy (MCH), and Abiye project (Safe motherhood), Nigeria continues to have the greatest amount of home deliveries and births participated by traditional birth attendants in West Africa (Nigeria Demographic and Health Survey (NDHS), 2018). It was discovered that two-thirds of pregnant women (64%) never received antenatal care, and 58 percent of women were born at home or in spiritual houses (NDHS, 2018 and WHO, 2018).

Therefore, it is imperative that we focus on finding answers to this troubling subject in order to provide evidence about the prevention and reduce maternal fatality in the country. Hence, this study was therefore carried out to assess characterising patrons of traditional maternal healthcare services in southwestern Nigeria.

Objective of the Study

The following objectives were raised to guide this study

1. Assess the socio-economic characteristics of women patronising traditional maternity health care services in southwestern Nigeria.
2. Determine the factors influencing patronage of traditional maternal healthcare services based on socioeconomic characteristics.

Methodology

The descriptive design technique was adopted for the study. The research included all expecting women and nursing mothers who went to TMHCS in the study area. The study recruited pregnant women and nursing mothers who had given birth at TMHCS in Southwestern Nigeria during the study period.

The sample size of 1020 pregnant and nursing mothers were used for the study. This was derived from the Fishers' standard formula ($n=z^2pq/d^2$) which was used in calculating the minimum sample size based on proportion of population, confidence level and margin of error. To start with, based on the female population census figures for 2006, the projected female population for 2016 were 2,289,131, 2,305,739 and 3,842,023 for Oyo, Osun and Ondo States, respectively (National Population Commission [NPC], 2013). These figures were projected for 2021 using a population growth rate of 2.5% as published by (World Bank, 2022). Hence, the projected population of females for 2021 in the study area were respectively 2,589,941, 2,608,732 and 4,346,896 for Ondo, Osun and Oyo States. According to Ogbo *et al.* (2020), the prevalence rate, being the proportion of pregnant women utilising TBAs services in Nigeria for 2018 is 20.5%. Based on this prevalence rate, the calculated sample size of 340 was estimated for each state, indicating the minimum measurement or survey needed to have a confidence level of 95% that the true female population is within $\pm 5\%$ of the measured/surveyed value. The total calculated

sample size for the three states is therefore 828. While adjusting for respondents that would breach the study protocols, 25% of the calculated sample size (192) was determined. The sample size was 1020 respondents in the entire sample. The sampling method was multi-stage. Using simple random sampling, the Local Government Areas (LGAs) in each state are chosen in the first step. There are 18 LGAs in Ondo State, 33 in Osun State, and 30 in Oyo State. Twenty-five percent (25%) of the LGAs were selected from each State using simple random sampling technique. In total, twenty-two (22) LGAs were chosen for the research.

The second step entails selecting TMHCS centres from the chosen LGAs using simple random sampling. Ten percent (10%) of all traditional maternal health centres in each of the chosen LGAs were sampled, for a total of fifty-two (52) centres. Using a systematic sampling technique, women are chosen from the traditional maternity health centres that have been chosen for the third stage. Respondents were selected from the centre at the time of the survey at Nth intervals (1st, 2nd, 3rd, etc.). A self-designed questionnaire titled “Patrons of Traditional Maternal Health Care Services-Survey (PTMHCS-S)” with a 15-question item of multiple-choice answer was used for this study. The study used a five-point Likert scale with ratings of 5, 4, 3, 2, and 1, respectively, for strongly agree, agree, disagree, and strongly disagree. The instrument was assessed by experts in Nursing Science and the Department of Obstetrics and Gynaecology for instrument's validity.

The reliability of the instrument was assessed with the test-retest method which was conducted on fifty (50) respondents based on convenient sampling in Ekiti State. It was re-administered to the same group of participants after a 4-week break (only 18 were obtainable). The scores obtained at both time periods were analysed with Pearson Moment Correlational Analysis (PPMC), the reliability test score of $r = 0.78$ was obtained, this ascertain that the instrument was deemed reliable for the study. In the course of data collation, 145 questionnaires were discarded because the data were mutilated, result into 875 questionnaires used in the analysis.

IBM SPSS version 25 was used to analyse the data acquired for the study using frequency distribution, cross-tabulation, and chats, ANOVA was used to test significance of the variable that were measured

Results

What are the socioeconomic characteristics of women patronising traditional maternity health care services in the study area?

Figure 1 shows that most of the respondents are Yorubas in all the selected three states. This implies that respondents who are Yorubas highly proportionally constituted the majority patronising the TBCs. However, the Hausas accounted for the least of respondents in all the three states.

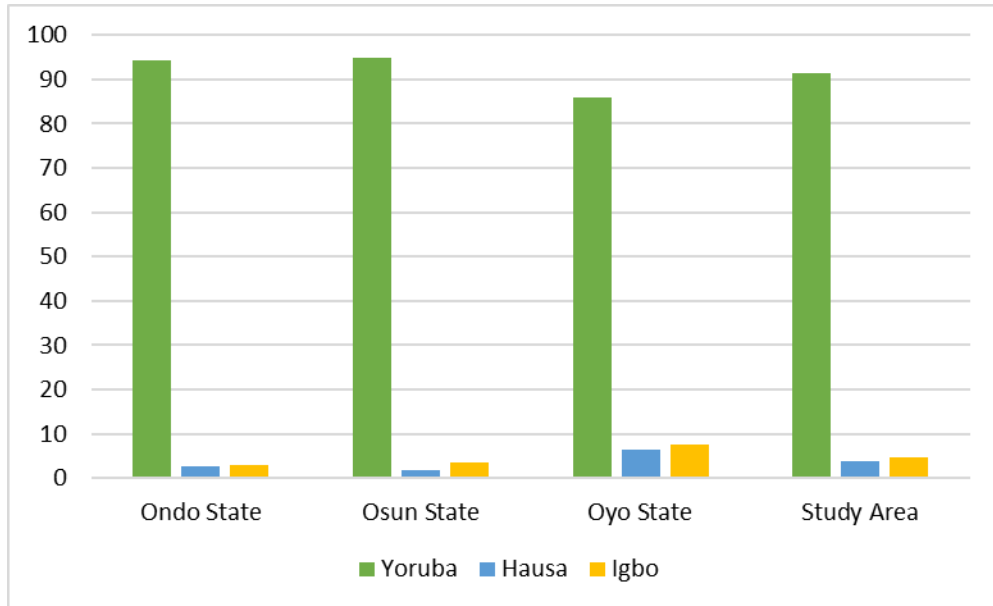


Figure 1: Ethnicity of Respondents

Figure 2 shows that respondents with tertiary education dominated the study. However, those who had primary education accounted for the least of respondents in Oyo State, while the singles accounted for the least in both Osun and Oyo States. Both groups however only accounted for a very few proportions of respondents in the study area.

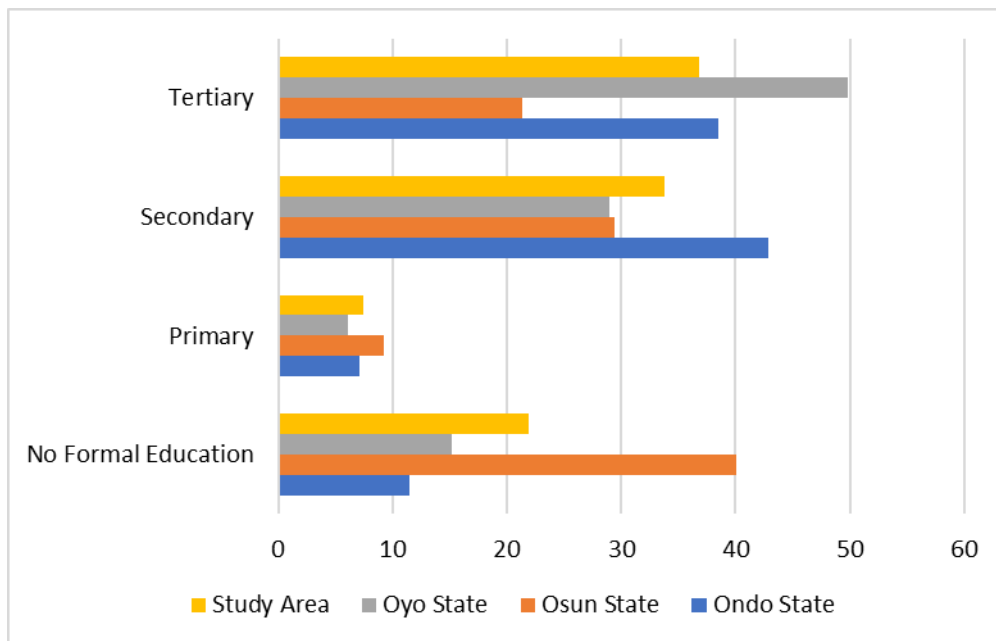


Figure 2: Educational Status of Respondents

Figure 3 indicated that traders make up the bulk of research participants. The majority of Oyo respondents are traders and civil servants, whereas Osun had the greatest percentage of non-active service members. While Oyo respondents who patronized TBCs have the least number of people not in service.

The age classification according to the National Population Commission [NPC] (2013) and ICF International (2014) indicated that youths are between 18 and 24 years, young

adults are between 25 and 54 years, old adults are between 55 and 64 years and 65 years while older are tagged aged.

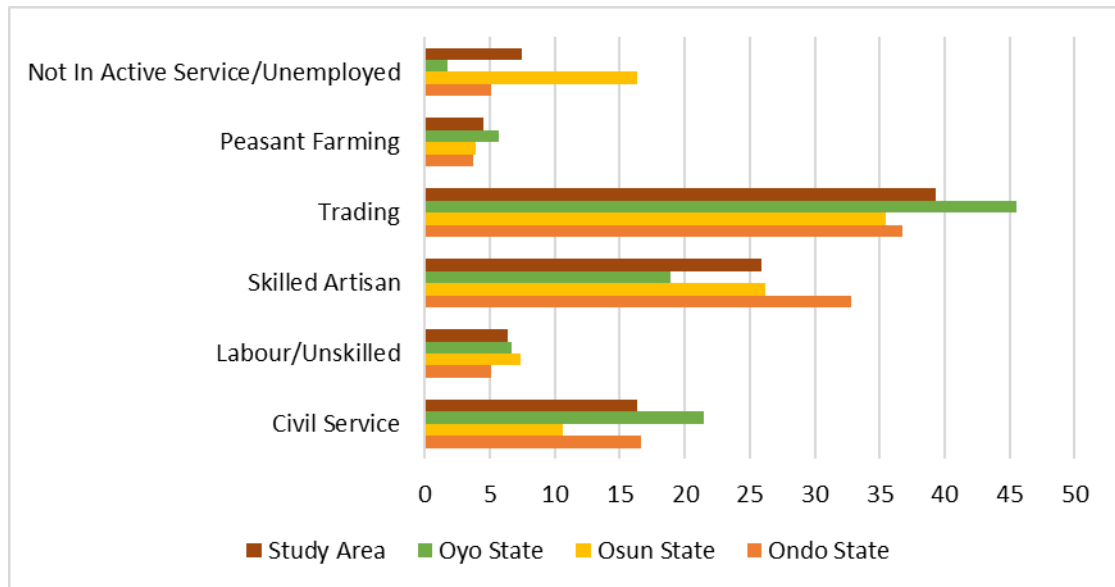


Figure 3: Occupation of Respondents

Figure 4 shows that 14.3% are youths, 82.1% are young adults, 3.4% are old adults while 0.2% is aged. This implies that, a large number of young adults are the major respondents who patronize TMHCs.

Income categories as documented by Odunsi (2020) based on the national minimum age. People who earn below ₦30, 000 are low-income earners, ₦31, 000 and ₦90, 000 are lower middle-income earners, (₦91, 000 and ₦210, 000 upper middle-income earner and high-income earners ₦210,000.

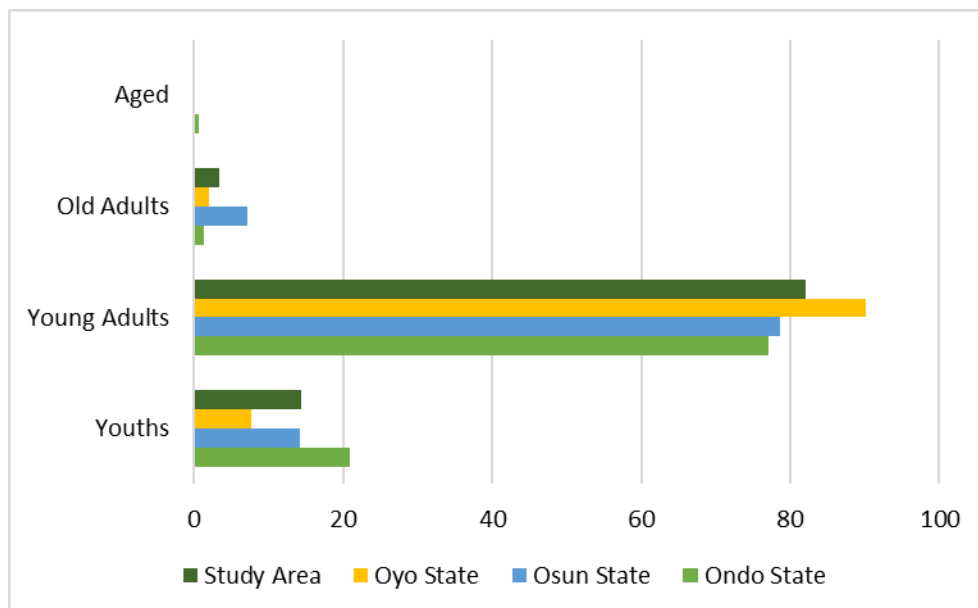


Figure 4: Age Group of Respondents

Figure 5 shows that majority of the study respondents across the three selected states are low-income earners. More so, Osun respondents who patronize TBCs are the lowest income earners.

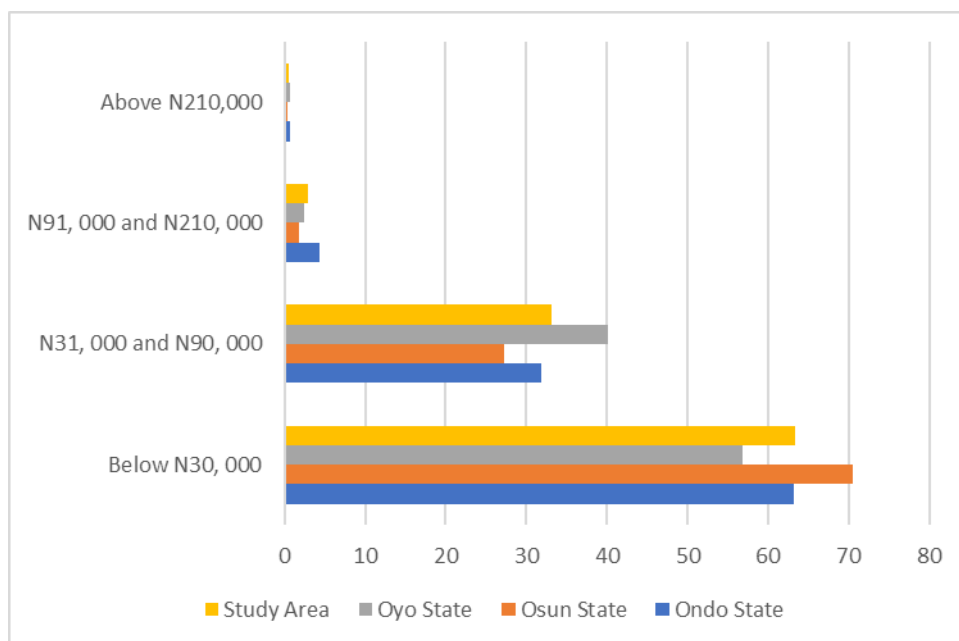


Figure 5: Income Group of Respondents

Table 1: Factors influencing the Patronage of Traditional Maternal Healthcare Services based on Ethnicity

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	195.837	2	97.919	.373	.688
Within Groups	228632.992	872	262.194		
Total	228828.830	874			

p>0.05

Result presented in Table 1 showed that p value (ANOVA) of .688 is greater than 0.05. This inferred that factors influencing the patronage of traditional maternal healthcare services did not across differ ethnic groups in Southwest Nigeria.

Table 2: Factors influencing the Patronage of Traditional Maternal Healthcare Services based on Educational Status

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15567.408	3	5189.136	21.193	.000
Within Groups	213261.422	871	244.847		
Total	228828.830	874			

p<0.05

Table 2 revealed that p value (ANOVA) of 0.000 is less than 0.05. This implied that the result is statistically significant. It is therefore concluded that factors influencing the patronage of traditional maternal healthcare services differed based on educational status. The post-hoc analysis is further depicted in Table 3

Table 3: Post-hoc Analysis on Factors influencing the Patronage of Traditional Maternal Healthcare Services based on Educational Status

Multiple Comparisons

Dependent Variable: FACTORS

	(I) educational status	(J) educational status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Scheffe	no education	formal primary	11.90224*	2.24547	.000	5.6128	18.1917
		secondary	6.81700*	1.44997	.000	2.7557	10.8783
		tertiary	10.78351*	1.42676	.000	6.7872	14.7798
	Primary	no education	-11.90224*	2.24547	.000	-18.1917	-5.6128
		secondary	-5.08524	2.14337	.132	-11.0887	.9183
		tertiary	-1.11873	2.12774	.964	-7.0784	4.8410
	Secondary	no education	-6.81700*	1.44997	.000	-10.8783	-2.7557
		primary	5.08524	2.14337	.132	-.9183	11.0887
		tertiary	3.96651*	1.25999	.020	.4373	7.4957
Tertiary	no education	-10.78351*	1.42676	.000	-14.7798	-6.7872	
	primary	1.11873	2.12774	.964	-4.8410	7.0784	
	secondary	-3.96651*	1.25999	.020	-7.4957	-.4373	

*. The mean difference is significant at the 0.05 level.

Table 3, factors influencing patronage of traditional maternal healthcare services differed between non-formal education and primary, secondary and tertiary education categories. However, while primary education differed from non-formal, its difference between secondary and tertiary education was not significant. Also, the difference between secondary education, non-formal education and that of tertiary education was significant while between secondary and primary education was not significant. Conclusively, while there was no difference between tertiary and primary education, difference existed among tertiary, non-formal and secondary education.

Discussion

The purpose for carrying out this research was to assess the patrons of traditional maternity health care services in study area. The socioeconomic features of women using traditional maternity health care services in the research area were presented by the study's findings. The results demonstrated that the majority of women in the study region who use traditional maternity healthcare facilities are young, married, traders, and low-income earners.

This result agreed with that of Joseph *et al.* (2019), whose findings shows that poverty and other problems have a significant impact on maternal health decisions. Additionally, these results corroborated earlier research published in The Guardian newspaper (2018), which found that factors that support traditional midwifery such as low socioeconomic status, illiteracy, a lack of knowledge about conventional maternal health (MCH) facilities, strong family influence, and easy access to TBA services have a strong correlation with the use of traditional and faith-based health care services. Furthermore,

this study supported the earlier findings of Ugboaja *et al.* (2018) which showed that rural residency, poor economic status, skilled employment status, and big household size were all linked to an increase in the usage of traditional parental facilities.

The study found that traditional maternity health care services were being used in the study area by young married women. The results were consistent with those of Adewuyi *et al.* (2019) who discovered that 70% of Nigerian young mothers aged 15 to 24 gave birth at home as against conventional maternal health centres.

According to the study's findings, there is a correlation between women's income group and how frequently they visit traditional maternal health centres. This is consistent with Nwankwo *et al.* (2019) which found a strong correlation between the economic standing of clients and their use of TMHCS. Their results clearly show that women from lower socioeconomic classes make up the majority of respondents who use TMHCS. Also, age of women and the frequency of patronage of traditional maternal health centres is another characteristic that influence each other. This study supported the findings of Ugboaja *et al.* (2018) and Sowunmi *et al.* (2020) whom revealed that there is a significant relationship between women's age and their patrons of TMHCS.

Conclusion and Implications

The study focused on characterizing the Patrons of TMHCs in Southwestern Nigeria. In summarising the findings, it was revealed that married women, women with tertiary education, traders and civil service workers, young adult, low-income earners were the socioeconomic characteristics of women patronising TMHCs in the study area. The study further revealed that factors influencing the patronage of traditional maternal healthcare services did not across differ ethnic groups and the frequency of patronage of TMHCs. Also, the study confirmed that factors influencing the patronage of traditional maternal healthcare services differed based on educational status and the frequency of patronage of TMHCs. Conclusively, while there was no difference between tertiary and primary education, difference existed among tertiary, non-formal and secondary education.

In light of this findings, it is recommended that the government should support women's and young girls' access to education and economics opportunity. Understanding the significance of region-specific determinants of maternal mortality incidence necessitates initiatives that specifically target their influence in the relevant regions.

Last but not least, the variation seen in this study may have been influenced by the unique cultural and religious customs of southwest Nigeria. Therefore, more research is needed to validate the underlying causes in various geopolitical zones.

Ethical considerations

The necessity of ethical concern in this investigation was noted. The research participants (the chosen childbearing women) provided written consent. Each questionnaire included a consent form that the study participants were asked to sign. As stated in the consent form, confidentiality of the data was also guaranteed. This study received ethical approval (IPH/OAU/12/1903) from Obafemi Awolowo University's Institute of Public Health in Ile-Ife, Osun State.

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Reference

- Adewuyi, E. O. Khanal, V. Zhao, Y. David, L. Bamidele, O. D. & Auta, A. (2019). Home childbirth among young mothers aged 15–24 years in Nigeria: A national population-based cross-sectional study *BMJ Open* 9:9, Article 95 e025494. <https://doi.org/10.1136/bmjopen-0254>
- Catherine, M. Amardeep, T. Bridget, R. & Amanda, T. (2019). Levels and determinants of maternal mortality in northern and southern Nigeria *BMC Pregnancy and Childbirth* 19:417.
- Gilda, S. Henshaw, S. & Susheela, S. (2017). Induced abortion: estimated rates and trends worldwide. *Lancet*, 1338–45
- Joseph, O. U. Charlotte, B. O. Emmanuel, O. O. & Anthony, O. I. (2019) Factors associated with the use of traditional birth attendants in Nigeria: a secondary analysis of 2015 Nigeria National Demography and Health Survey, NDHS, Nigeria.
- Hunt, P. & Bueno de Mesquita J. (2010) Reducing maternal mortality: the contribution of the right to the highest attainable standard of health.2010; England: University of Essex.
- Ibrahim, D. O. (2016). Social-economic determinants of maternal mortality in rural communities of Oyo State, Nigeria. *International Journal of Scientific Research Publications*, 6:9, 280-285.
- International Maternal & Child Health Care (2017). A practical manual for hospitals worldwide. Radcliffe Publishing Ltd St Mark's House Shepherdess Walk London N1 7BQ United Kingdom
- National Population Commission [NPC] (2013) . *Nigeria demographic and health survey 2013*; Abuja, Nigeria and Rockville, Maryland, USA: NPC and ICT International.
- Nigeria Demographic and Health Survey (2018). In: National Population Commission.2018; Rockville, MD: Abuja and ICF International. Maryland, USA. Accessed 2021

- Nwankwo, O. Ani, O. E. Akpoke, M. & Ugwa, E. A. (2019). Determinants of choice of place of delivery among women attending two referral hospitals in Kano North-West Nigeria. *Nigerian Medical Journal*. 60(2):68.
- Ogbo, F. A. Trinh, F. F. Ahmed, K. Y. Senanayake, P. Rwabilimbo, A. G. Uwaibi, N. E. & Agho, K. (2020). Global Maternal and Child Health Research Collaboration GloMACH. Prevalence, Trends, and Drivers of the Utilization of Unskilled Birth Attendants during Democratic Governance in Nigeria from 1999 to 2018. *Int J Environ Res Public Health*. 2020; 17:372-382. doi: 10.3390/ijerph17010372. PMID: 31935928; PMCID: PMC6981726.
- Ogu, R. N. & Ephraim-Emmanuel, B.C. (2018). Prevention of Maternal Mortality in Nigeria: *Journal of Gynecology Women's Health Public Health to the Rescue*; 10:1
- Olawale, O. Tomike, I. O. Oluwatobi, J. A. & David, I. (2019). Maternal Mortality and Maternal Health Care in Nigeria: Implications for Socio-Economic Development, *J Med Sci*. 7(5):849-855.
- Ozioma. E. O.J. Chinwe, O. A. N. (2019). Herbal medicines in African traditional medicine. *Herbal Medicine* 10 :191-214.
- Punch Newspaper (2022). Nigeria's maternal deaths worry specialists, experts recommend adequate care, facilities. 14th August 2022.
- Sowunmi, C. O. Olajide, A. O. Akodu, C. O. Sodimu, J. O. & Ajibade, B. L. (2020). Factors influencing patronage of Traditional Birth Attendants (TBAs) among pregnant women attending TBAs centres in Epe, Lagos, Nigeria. *International Journal of Nursing, Midwife and Health Related Cases* 6(2): 46-56.
- The Guardian newspaper. (2018). Traditional birth clinics: Old practice in need of modernization; (29 April 2018) Available at: <https://guardian.ng/features/health/traditional-birth-clinics-old-practice-in-need-of-modernisation/amp/>
- Ugboaja, J. O. Oguejiofor, C. B. Oranu, E. O. & Igwegbe, A. O. (2018). Factors associated with the use of traditional birth attendants in Nigeria: a secondary analysis of 2013 Nigeria national demography and health survey. *The Nigerian Journal of General Practice* 2018; 16:45-52. doi: 10.4103/NJGP.NJGP_27_17
- Vandana, S. Willa, B., Muhammad A. K. Jessica, L. & Martina, B.N. (2017). High maternal mortality in Jigawa State, Northern Nigeria estimated using the sisterhood method. *BMC Pregnancy and Childbirth*, 17:163 DOI 10.1186/s12884-017-1341-5
- World Bank (2022). Population growth (annual %) Nigeria <https://data.worldbank.org/indicator>
- World Health Organisation. (2020). Trends in maternal mortality. 2000 to 2017: estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division 2020; Geneva: World Health Organisation.

World Health Organisation (2019). WHO global report on traditional and complementary medicine 2019; Geneva: World Health Organization

World Health Organization (2017). Maternal and new-born health. Copenhagen: WHO Regional Office for Europe. <http://www.euro.who.int/en/health-topics/Life-stages/maternal-and-newborn-health/maternal-and-newborn-health>.

World Health Organisation (2018). Estimation, Levels & Trends in Child *Mortality: Report 2018*; Estimates developed by the United.

World Health Organisation (2018). Estimation, Levels & Trends in Child *Mortality: Report 2018*; Estimates developed by the United.

World Health Organization. (2010).WHO guidance for measuring maternal mortality from a census. Geneva; World Health Organization.