

Research Article

International Journal of Women's Health Care

Attitude towards Access and Utilization of Maternal Health Services by Women at Sabon-Gari Local Government Area, Kaduna, Nigeria

A.O. Chris^{1, 2}, G. James², S.I.R. Okoduwa^{1, 3*}

¹Directorate of Research and Development, Nigerian Institute of Leather and Science Technology, Zaria, Nigeria.

²Department of Sociology, Kaduna State University, Kaduna, Nigeria.

³Infohealth Awareness Department, SIRONigeria Global Limited, Abuja, Nigeria

*Corresponding author

Dr. S.I.R. Okoduwa, Medical Biochemist/Toxicologist, Infohealth Awareness Department, SIRONigeria Global Limited, Abuja, Nigeria. Tel.: +234-909-964-0143; E-mail: stanley@sironigeria.com

ISSN: 2573-9506

Submitted: 11 Dec 2018; Accepted: 04 Jan 2019; Published: 31 Jan 2019

Abstract

Objective: Maternal deaths are alarmingly high globally due to relatively non-availability and non-use of maternal health services by a sizeable proportion of women in rural communities. Women in North-western Nigeria are presently experiencing the worst survival due to key components of maternal health services not being provided at Primary Health Centres (PHCs). The study, therefore, explores the attitude of women toward access and utilization of Maternal Health Services (MHS) provided by PHCs at Sabon-Gari Local Government area, Kaduna State, Nigeria.

Study Design: A cross-sectional survey.

Methods: A total of 392 women of reproductive ages (15-49 years) were administered questionnaires, out of which 389 were retrieved but only 385 correctly filled and were analyzed quantitatively. Quantitative method of data analysis was used to present the results.

Results: It was observed that the mean age of the respondents was 29-35 years. The mean score of mothers access to maternal health services was 4.2 while the mean point for none acceptance for use of modern health services at PHCs was 2.6.

Conclusion: Findings revealed that community encouraged women to access maternal health services available at primary health centres though most community members still do not fully accept the use of modern health services at primary health centres and this has posed a lot of problem to the health sector. Effective community enlightenment programmes should be put in place in the rural areas by government and non-governmental organizations to improve access and utilization of Maternal Health Services provided by Primary Health Centres.

Keywords: Attitude, Women, Maternal deaths, Primary health centers

Introduction

Maternal deaths are alarmingly high. Globally, 830 women die daily from preventable illness and maternal deaths occurs at 12 per 100 000 live births in developed countries while 239 per 100 000 in developing countries with more than half of these deaths occurring in sub- Saharan Africa and one third in South Asia [1]. Forty-nine countries record highest maternal deaths, 34 of these countries are in sub-Sahara Africa, where 1 woman in 16 dies from pregnancy-related problems compared to 1 in 2800 in the developed world [2, 3]. This high rate of maternal deaths has affected the health sector greatly. Nigeria has the second highest number of maternal deaths following after India [4, 5]. Approximately 59,000 of maternal deaths take place annually in Nigeria as a result of pregnancy, delivery and post-delivery complications [6]. This high rate of maternal mortality is partly as a result of inadequate access to maternal health services,

poverty, ethnic differences and non-utilization of available services by a sizeable number of women mostly in rural settlements [7-10].

According to Zinser an estimate of 15% of pregnancies experience complications world-wide, but in Nigeria, it stands at over 40% where major complications that account for 75% of maternal deaths are caused by severe bleeding, infections, high blood pressure, and complications from delivery and unsafe abortion [11]. Annual Maternal deaths varies between geo-political zones in Nigeria with 165 in South West, 286 in South east, 1025 in North West compared with 1,549 in the North-east and between 351 in urban and 828 deaths at rural areas [12]. The North-East and North-West geo-political zone have the worst occurrence of these deaths. This high rate of maternal deaths in the North-West had contributed to why this study intends to unveil the attitude towards access and utilization of maternal health services at primary health centres in the study area.

In Kaduna state the maternal mortality ratio is 1025 per 100 000



and only 35.5% delivery are taken by health professionals [13]. These accounts for why over 103,000 women who die annually in Kaduna state suffer from inadequate access to antenatal checkup, poor medical facilities and inadequate medical personnel at health care facility [14]. In the North - West region where the study was carried out experiences averagely high maternal deaths compared to the South - West region where the risks of maternal deaths are lower [13]. In the study area, there are no studies conducted as to whether there are a high rate of maternal deaths due to non- access of available services.

About 150 pregnant women die monthly and 5 pregnant women daily from diverse maternal health complication in Kaduna State [15]. The major causes attributed to these deaths are due to long distance to PHCs, delay in accessing the facility which often result into excessive bleeding, hypertensive disorders in pregnancy, miscarriage and eventually death. Due to the distance to the facility and non-utilization of available services many pregnant women in North-West regions in Kaduna State deliver at home [16]. The high risks of maternal deaths further enhanced when the services are not utilized and not accessed.

Most Nigerian villages still experiencing women who give birth with traditional birth attendants, with no running water, no sterilization, no equipment and no skilled birth attendants capable of providing emergency obstetric care [6]. It is pertinent to conduct a study on how community attitudes can affect access and utilization of maternal health services. This study intended to further investigate the attitude of the community members in accessing and utilizing maternal health services provided by PHCs facilities in the study area. It focused on how recipient's attitude affects their ability to access and utilizes available maternal health services at PHCs in Sabon Gari LGA.

Materials and Methods Study Area

The study was conducted in Sabon Gari local government area which was created on 27th August 1991 from the defunct Zaria Local Government Area of Kaduna State. According to the Sabon Gari Local Government Profile [17], It has a population of 375,886 and 11 wards with population of women within childbearing age 15-49 years put at 18,794. It is an urban local government area consisting of various ethnic groups with Hausa as the predominant group, others being, Fulani, Yoruba, Igbo, Bajju, among others. The majority of this mostly Hausa populace practices Islam, although Christianity is also practiced.

Sabon Gari Local government area has a total of 11 political wards namely Angwuwar Gabas, Basawa, Bomo, Chikaji, Dogarawa, Jabi, Jushi, Jama'a, Hanwa, Muchia and Samaru. It has 25 primary health facilities consisting of 9 health clinics and 16 primary health centres with emphasis in provision of maternal health services with only 6 of these centres providing free antenatal services. These health facilities are distributed within the 11wards where they all provide maternal health services and they are PHC Samaru, PHC Audu Kwari, PHC Muchia, PHC Sakadadi, PHC Basawa, PHC Gwanda, PHC Zabi, PHC Shika Dam, PHC Bomo, PHC Hayin Dogo, PHC Palladan, PHC Hanwa, PHC Agwan Jaba, PHC Chikaji and PHC Jama'a consequently gaining the highest patient load (Sabon Gari Local Government Profile by ward 2016).

The population of this study is 18,794 women of reproductive age (15-49 years; the WHO recommended childbearing age) in Sabon Gari LGA. The sample size was determined using Yamane's simplified formula corrected to proportion to determine the sample size for the study [18]. It is defined as;

 $n=N/1+Ne^{2}$

Where: N: Total population; n: Sample size; e: Precision. Therefore, N = 18,794; e = 0.05; n = 18,794 / 1+18,794 (0.05)²= 18,79 /47.985 = 391.66

A sample size of 392 respondents was used for the study.

Ethical Considerations

All participants gave an informed consent for inclusion before they were allowed to participate in the study. The study was conducted in accordance with the declaration of Helsinki of 1975, revised in 2013 and the protocol was approved by the Ethic Committee of the Kaduna State University, Kaduna, Nigeria [19]. The Respondents decided for themselves whether or not to take part in the study after information was provided about the purpose of the study. The participants were assured that all information would be treated anonymously and confidentially. Permission to conduct the study was sought and obtained from the various community heads or districts heads. The survey required women to complete questionnaires. No harm or discomfort was inflicted on any respondent or any non-respondent. The researcher generated knowledge through honest conduct, reporting and publication of research results.

Sampling Technique

A cross-sectional survey was adopted in this study at Sabon-Gari Local Government Area. The quantitative method of analysis was adopted by the study, frequency tables was used to analyze the results obtained from the survey. Wards were selected, purposively based on the women of reproductive ages at the ward to equally represent rural and urban wards. In each of the selected wards in the LGA, two of the main streets were randomly selected, from which houses were systematically chosen and households randomly selected to make up the sample for each particular area. The streets that had highest number of vehicular or pedestrian movement were tagged as main streets. Every 3rd numbered house on both sides of the major streets were selected for questionnaires administration. At least one woman per house was randomly selected for the survey.

Attitude towards Utilization of Maternal Health Services

Attitude towards utilization of maternal health services among women were ranged from 5(Strongly disagree), 4(Agree), 3(Undecided), 2 (Disagree), 1(Strongly Disagree) with 3 as mid-point average mean score of 3.0 and above indicates positive attitude while mean scores below 3.0 indicates negative attitude.

Statistical Analysis

A total of 392 questionnaires were administered to women of reproductive ages (15-49 years) out of which 389 were retrieved but only 385 were valid with complete data from the respondents. Therefore, for the purpose of this study, the 385 correctly filled questionnaires were analyzed quantitatively. They were coded and analyzed using frequencies and percentages.



Results

The demographic characteristics of the respondents such as age, ethnic group, religion, marital status and highest educational attainment are presented in Table 1. It was observed that the mean age of majority of the respondents was 29-35 years. Fifty three percent were Hausa while other ethnic groups (excluding the Yorubas and Igbos) were 9.9%. Fifty seven percent of the respondents were Islam, 1% practice traditional religion and 42.3% practice Christianity. It further indicates that 74.5% of the respondents were currently married, another 4.9% divorced or separated, while 6.2% were widowed. Forty five percent of respondents had tertiary education, 11.4% of the respondents had primary education and 18.2% had no formal or Koranic education, this implies a higher proportion of women were illiterate without formal education.

Table 1: Socio-Demographic Characteristics of Respondents

Liante 1. Socio-Demographic Characteristics of Responde							
Items	Category	Frequency	Percentage				
Age (Years)	15 -21	58	15.1				
	22-28	84	21.8				
	29-35	124	32.2				
	36-42	85	22.1				
	43- 49	34	8.8				
	Total	385	100				
Ethnic Group	Hausa	204	53.0				
	Yoruba	96	24.9				
	Igbo	47	12.2				
	Other	38	9.9				
	Total	385	100				
Religion	Islam	218	56.6				
	Christianity	163	42.3				
	Traditional	4	1.0				
	Total	385	100				
Marital Status	Single	55	14.3				
	Married	287	74.5				
	Divorced	19	4.9				
	Widow	24	6.2				
	Total	385	100				
Highest Educational Attainment	No formal /Koranic Education	70	18.2				
	Primary	44	11.4				
	Secondary	96	24.9				
	Tertiary	175	45.5				
	Total	385	100				

The assessment of the attitudes of the respondents towards access and utilization of maternal health services is presented in the Table 2. It was observed that community encourages mothers to access maternal health services with a mean score of 4.2 while community does not fully accept use of modern health services at PHCs with a mean point of 2.6

Table 2: Community Attitude towards Access and Utilization of Maternal Health Services

Community's attitude towards access and utilization of MHS	5(SA)	4(A)	3(U)	2(D)	1(SD)	Mean		
Community encourages mother to access MHS at PHCs	1080	392	63	32	34	4.2		
Community does not fully accept use of modern health services at PHCs	275	340	96	154	136	2.6		
Pregnant mothers are encouraged to seek care from PHCs	795	600	105	52	15	4.1		
Community supports antenatal care services offered at PHCs	690	728	87	52	10	4.1		
Community leaders support vaccines given to mothers and infants at PHCs	580	848	114	32	3	4.1		
My community accepts immunization services offered at PHCs	680	752	93	42	9	4.1		
My community prefers mothers to give birth at home/ TBA to the use of PHCs	490	404	111	94	102	3.1		
Check up after delivery is accepted by my community	645	712	102	46	19	3.9		
Community leaders enlightens mothers on the benefit of using MHS provided by PHCs	730	632	123	44	18	4.1		

Discussion

Out of the 392 respondents, it was observed that the mean age of respondents was 29-35 years. As this is the most fertile period in a woman's lifespan, other studies too have similar findings, a study by Sufiyan et al [20]. Most of which were 57% Muslim and 53% Hausa, which is not surprising as they are the predominant tribe and religion in the northern part of Nigeria. One proven effective strategy to improve maternal health services utilization is to provide easy access to the services [21, 22]. It was observed that PHCs were available in all the communities at Sabon Gari LGAs. The distance from the PHCs to the place of residents varied from community to community in this study. This variation also influenced the community attitude towards utilization as observed by previous investigators [23-25]. Data shows that a higher proportion of women were encouraged by their community to access available MHS. This implies that community had knowledge on the importance of the services rendered by PHCs and encouraged its users. The community members were not fully accepting the use of modern health services and are thereby influenced by other negative factors such as long waiting hours in the PHCs, high cost of delivery, lack of staff and medicines among others. These observations were consistent with previous reports [26-29]. Other factors according to a study conducted by Rashmi and Kumar [30] in India shows that duration for waiting for service providers was not satisfactory. A lot of hours spent on waiting to access health services motivate women to utilize other services [5]. In developed countries, virtually all the women have access to antenatal services provided by skilled health workers while in less developed nations, only 40% of pregnant women receive antenatal care [12, 31, 32]. High maternal deaths are seen mostly in the areas that have little access to available health services.



Community leaders support vaccines, antenatal care and immunization in a study conducted by Sufiyan et al [20]. Women are willing to patronize health facility. Reasons postulated to this effect are proximity of the facility to their homes [24]. In the present study respondents do not utilize antenatal services due to lack of adequate equipment, high cost of drugs and long waiting time in PHCs facility [33, 34]. Lack of access to healthcare is mostly experienced in the Northern part of Nigeria where Kaduna State is located at the North - West region which constitutes the study area of Sabon Gari. This study discovered the availability of maternal health services in PHCs with low utilization of services as a result of distance to the health facility. Therefore, there is need to enhance and provide access roads to encourage utilization.

Similarly the study discovered that mothers prefer to give birth at home. In this study additionally, a higher proportion of women were encouraged by their community leaders to access and utilize available services offered by primary health centres though the high cost of delivery made women to use traditional or other alternative means. In most communities mothers attend any health institution irrespective of the level of the health institution, indication for care or their identified health needs. This observation is dissimilar to reports from previous studies that show household perceived distance, lack of advanced transportation and communication between patients and doctors, patient waiting time and modes of transportation to and from the facilities as an obstacle [35-37]. Mothers were encouraged by their community to access MHS available at PHCs, though mothers in rural communities of Sabon-Gari LGAs utilized other traditional and alternative means of health care in the area.

Checkup after delivery is accepted by various communities this is in line with a study conducted by Oladipo, that showed that 85% of respondents return for checkup services and were also willing to recommend the services of the health facility to others [38]. Community leaders enlighten mothers on the benefits of using antennal and post-natal care services. This enlightenment put in place was to further encourage the recipient of maternal health services since it is beneficial to their wellbeing. Adepoju also revealed that the barriers to accessing quality maternal health services are created by many factors including poverty, women's access to education and income, nutritional problems and poor non-existent transport, road and communication infrastructure in conflict or post-conflict situation [39]. The Primary health centers (PHCs) plays a pivotal role in the area of community health provision varies across communities. PHCs play a vital role in the provision of maternal and child health services to every community. PHCs are designed to ensure coverage at the community level through the participation of the community in improving their healthy living. Community defined dimensions of quality of maternal health care include: Access to a maternal facility in the community; treatment that is delivered in a respectful and timely fashion; respect for traditional practices and use of indigenous language; a clean and well-equipped facility, transportation, and free services Maternal and neonatal health program [40].

Despite the fact that operating hours and other public health facility schedules remain limited to access and use, especially at the PHCs level as most of the LGA facilities do not open on weekends and run only one shift. Community attitude towards access to information about maternal services should be available in the community to help women make choices about who to see and where to go, as well as decide the type of care they require. Information about family

planning services can help reduce unwanted pregnancies and their adverse consequences. Access to healthcare particularly at the critical time of birth, can help ensure that childbirth is a joyful event [41]. Based on these findings attitudes towards access and utilization of maternal health services was majorly influenced by community members and access to the services available at health facility.

Conclusions

Women's access towards maternal health services at PHCs are generally high, but the utilization of certain health services especially modern delivery is low and has low utilization due to the high cost of delivery services. The PHCs are mainly tailor-made for the people at community level. It requires the participation of community members, nurses, village health workers so that they interrelate and interconnect to eradicate poor access and reduce health problems. Therefore to enhance adequate utilization of the available services capacity building and empowerment of community women will enhance proper utilization and access.

Acknowledgments

The Authors appreciate the staff at the Primary Health Centres used in this study for their technical assisting during the administration of the questions and subsequent collation. Thanks to the Infotech unit of SIRONigeria Global Limited, Abuja for the typesetting of this paper.

References

- WHO, World Health Organization (2016) World Population Fact Sheet. Available online: http://www.who.int/mediacentre/ factsheets/fs348/en/.
- 2. Christopher K, Aminu F, Onwenu I (2015) An evaluation of maternal and child mortality in Africa with Nigeria as a case study. African Journal of Midwifery 2: 585-590.
- 3. Cham M, Sundby J, Vangen S (2005) Maternal mortality in the rural Gambia, a qualitative study on access to emergency obstetric care. Reproductive Health 2: p.3.
- Ujah LAO, Aisien OA, Mutihir JT, Vanderjag DJ, Glew RH, et al. (2005) Factors Contributing to Maternal Mortality in North-Central Nigeria. A Seventeen year Review, African Journal of Reproductive Health 9: 27-40.
- Navaneetham K, Dharmalingam A (2002) Utilization of maternal health care services in Southern India. Social Science and Medicine 55: 1849-1869.
- Titaley CR, Hunter CL, Dibley MJ, Heywood P (2010) Why do some women still prefer traditional birth attendants and home delivery?: a qualitative study on delivery care services in West Java Province, Indonesia. BMC Pregnancy and Childbirth 10: 43.
- Simkhada B, Teijlingen ERV, Porter M, Simkhada P (2008)
 Factors affecting the utilization of antenatal care in developing countries: systematic review of the literature. Journal of Advanced Nursing 61: 244-260.
- 8. Peters DH, Garg A, Bloom G, Walker DG, Brieger WR, et al. (2008) Poverty and access to health care in developing countries. Annals of the New York Academy of Sciences 1136: 161-171.
- 9. Mayberry RM, Mili F, Ofili E (2000) Racial and ethnic differences in access to medical care. Medical Care Research and Review 57: 108-145.
- Birmeta K, Dibaba Y, Woldeyohannes D (2013) Determinants of maternal health care utilization in Holeta town, central Ethiopia.



- BMC Health Services Research 13: 256.
- 11. Zinser R (2017) Final Reports on Maternal Health, 2007.
- 12. Ladipo OA (2009) Delivery of an Effective Maternal and Child Health Services in Nigeria. Report 3: 1-5.
- 13. Nigerian Bureau Statistics (2012) Maternal Mortality Ratio.
- 14. Nasir E (2016) Presentation of 2016 budget to the state house of assembly. Available online www.channelstv.com/2015/12/02/kaduna-records-103000-maternal-deaths-annually-el-rufai/.
- 15. Nigerian Urban Reproductive and Health Initiative (2016) 150 pregnant women die monthly in kaduna state. Available online: https://www.today.ng/.../150-pregnant-women-die-monthly-kaduna-nurhi.
- Nigeria Demographic and Health Survey (2012) Maternal deaths rate.
- 17. Sabon Gari, Local Government Profile (2016) Population among the wards from Local government Records in 2016.
- 18. Yamane T (1967) Statistics, an introductory analysis, 2nd ed, New York, Harper and Row.
- 19. General Assembly of the World Medical Association (2014) World medical association declaration of Helsinki: ethical principles for medical research involving human subjects. The Journal of the American College of Dentists 81: 14.
- Sufiyan MB, Umar AA, Shugaba A (2013) Client Satisfaction with Antenatal care services in Primary Health Care Centres in Sabon Gari Local Government Area, Kaduna State Nigeria. Journal of Community Medicine and Primary Healthcare 25: 12-22.
- Ensor T, Cooper S (2004) Overcoming barriers to health service access: influencing the demand side. Health Policy and Planning 19: 69-79.
- 22. Yakong VN, Rush KL, Bassett Smith J, Bottorff JL, Robinson C (2010) Women's experiences of seeking reproductive health care in rural Ghana: challenges for maternal health service utilization. Journal of Advanced Nursing 66: 2431-2441.
- 23. Babalola S, Fatusi A (2009) Determinants of use of maternal health services in Nigeria-looking beyond individual and household factors. BMC pregnancy and childbirth 9: 43.
- 24. Gabrysch S, Campbell OM (2009) Still too far to walk: literature review of the determinants of delivery service use. BMC Pregnancy and Childbirth 9: 34.
- 25. Ye Y, Yoshida Y, Harun-Or-Rashid MD, Sakamoto J, Sakamoto J (2010) Factors affecting the utilization of antenatal care services among women in Kham district, Xiengkhouang province, Lao PDR. Nagoya J Med Sci 72: 23-33.
- 26. Finlayson K, Downe S (2013) Why do women not use antenatal services in low-and middle-income countries? A meta-synthesis of qualitative studies. PLoS Medicine 10: 1001373.

- 27. Abosse Z, Woldie M, Ololo S (2010) Factors influencing antenatal care service utilization in hadiya zone. Ethiopian Journal of Health Sciences 20.
- 28. WHO, World Health Organization (2010) Trends in maternal mortality: 1990 to 2008. Estimates developed by WHO, UNICEF, UNFPA and The World Bank.
- 29. Kruk ME, Paczkowski M, Mbaruku G, de-Pinho H, Galea S (2009) Women's preferences for place of delivery in rural Tanzania: a population-based discrete choice experiment. American Journal of Public Health 99: 1666-1672.
- 30. Rashmi K, Vijay Kumar B (2010) Client Satisfaction in Rural India for primary Health care. A tool for quality Assessment. Al-Ameen Journal of Medical Science 3: 109-114.
- 31. Ochako R, Fotso JC, Ikamari L, Khasakhala A (2011) Utilization of maternal health services among young women in Kenya: insights from the Kenya Demographic and Health Survey, 2003. BMC Pregnancy and Childbirth 11: 1.
- 32. Sharma SK, Sawangdee Y, Sirirassamee B (2007) Access to health: women's status and utilization of maternal health services in Nepal. Journal of Biosocial Science 39: 671-692.
- 33. Manuela DA, Ridde V, Louis VR, Sarker M, Tiendrebéogo J, et al. (2011) Determinants of utilization of maternal care services after the reduction of user fees: a case study from rural Burkina Faso. Health Policy 99: 210-218.
- 34. Mannava P, Durrant K, Fisher J, Chersich M, Luchters S (2015) Attitudes and behaviours of maternal health care providers in interactions with clients: a systematic review. Globalization and Health 11: 36.
- 35. Wyss K (2003) Access of the urban poor and vulnerable to health care in Africa. Switzerland: Swiss Agency for Development and Cooperation.
- Perry B, Gesler W (2000) Physical access to primary health care in Andean Bolivia. Social Science and Medicine 50: 1177-1188.
- 37. Hjortsberg CA, Mwikisa CN (2002) Cost of access to health services in Zambia. Health Policy and Planning 17: 71-77.
- 38. Oladipo OT, Iyaniwura AI., Sule-odu AO (2008) Quality of Antenatal services at the Primary care level in Southwest Nigeria. African Journal of Reproductive Health 12: 3.
- 39. Adepoju P (2016) Maternal Mortality remains static and high in Nigeria.
- 40. Maternal and neonatal health program (2017) Country profiles: Guatemala 1. Asp. On April 23, 2003. In Nanci Franco de Mendez. June 2003. Maternal Mortality in Guatamela.
- 41. Beck S, Wojdyla D, Say L, Betran AP, Merialdi M, et al. (2010) The worldwide incidence of preterm birth: a systematic review of maternal mortality and morbidity. Bulletin of World Health Organization 88: 31-38.

Copyright: ©2019 S.I.R. Okoduwa, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.