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CAUSES, CONSEQUENCES AND PREVENTION OF MATERNAL AND CHILD MORTALITY IN OBUDU LOCAL GOVERNMENT AREA OF CROSS RIVER STATE: IMPLICATION FOR SOCIAL WORK PRACTICE

PAULINUS S. OKAH, CHRISTIAN C. IYIANI
Department of Social Work, University of Nigeria, Nsukka
Corresponding author: chrysiyiani@gmail.com

Abstract
The rate of maternal and child mortality has continued to rise despite the efforts of the government and the concerned stakeholders to make the menace alien in society. Many women, especially pregnant women and children continue to die of preventable deaths because of complications relating to pregnancy and the inability to access adequate healthcare when needed. This study is an attempt to find out the causes, implications, and prevention of maternal and child mortality in Nigeria, and Obudu Local Government Area of Cross River State in particular. The study adopted multistage sampling methods to select communities, wards, and individual participants for the study. One hundred and ninety participants were selected for the study, using questionnaire instrument as means of data collection. The generated data were analysed electronically using the Statistical Package for the Social Sciences (SPSS). Findings revealed that distance to health facilities, illiteracy, and lack of funds to access the needed healthcare services are some of the causes of maternal and child mortality. The study equally found that a high death rate, increased number of orphans and vulnerable children, and loss of manpower constitute some of the negative implications of the menace. The study recommended that the government should among other things construct more health facilities, train and retrain health staff, and involve social workers in awareness creation on how to reduce the menace of maternal and child mortality and caregiving to those affected by the menace.

Keywords: Causes, Consequences, Maternal and child mortality, Nigeria, Prevention

Introduction

Maternal and child mortalities continue to represent severe burdens in many countries of the world. Every year, 527,000 women across the globe die of pregnancy-related complications and nearly 4 million children die during their first month, accounting for 40 percent of all deaths of under 5years children (World Bank Group, 2019). Women in low and middle-income countries have, on average, many more pregnancies than women in developed countries, and their lifetime risk of death due to pregnancy is higher (Pitterson, 2016). A woman's lifetime risk of maternal death is the probability that a 15-year-old woman will eventually die from a maternal cause. In high-income countries, this is 1 in 5400, as against 1 in 45 in low-income countries (Althabe et al, 2015). Women die as a result of complications during and after pregnancy and childbirth. Most of these complications develop during pregnancy and are preventable or treatable. Complications may exist before pregnancy but are worsened during pregnancy, especially if not managed as part of the woman's care (Ganchimeg et al, 2014). Mothers and children are at highest risk for disease and death. The death of a woman during pregnancy, labour, or puerperium is a tragedy that carries a huge burden of grief and pain and has been described as a major public health problem in developing countries Saraki, 2014).

In Africa, monitoring maternal mortality is difficult due to poor reporting and a lack of proper methods to measure actual death rates. Estimating the real figure is also difficult as only 31% of women deliver in health facilities (Lindros & Lukkainen, 2004). Nevertheless, the rate of maternal and child mortality seems to be higher in low-and-middle-income countries like Nigeria. Out of the 49 countries which recorded the highest number of maternal deaths, 34 of these countries are in Sub-Saharan Africa, where 1 in 16 women die from pregnancy or childbirth compared to 1 in 2800 in the developed world (Amankwah, 2011). Maternal

mortality ratios range from 55 per 100,000 live births in East Asia to 920 per 100,000 in sub-Saharan Africa (United Children Emergency Fund [UNICEF], 2016).

Nigeria has a population of over 200 million people with women of childbearing age constituting about 31 million and children less than five years of age constituting 28 million (National Bureau of Statistics, [NBS], 2019). Women of childbearing age and children under five years of age, therefore, constitute a significant percentage of the nation's population. Nigeria, which constitutes just 1% of the world's population, accounts for 10% of the world's maternal and under-five mortality rates (World Health Organisation [WHO], 2016). Annually, an estimated 52,900 Nigerian women die from pregnancy-related complications out of a total of 529,000 global maternal deaths (Pitterson, 2016). Further, a woman's chance of dying from pregnancy and childbirth in Nigeria is 1 in 13, compared with 1 in 35 in Ghana and 1 in 2800 in developed countries; and only about 40% of deliveries are attended to by skilled birth attendants (NBS, 2019).

The under-five mortality ratio in Nigeria is 201 per 1000 live births meaning that one in five Nigerian children never attained the age of 5 (Partnership for Maternal, Newborn & Child Health [PMNCH], 2017). Although many of these deaths are preventable, the coverage and quality of healthcare services in Nigeria continue to fail women and children. Presently, less than 20 percent of health facilities offer emergency obstetric care and only 35 percent of deliveries are attended by skilled birth attendants (WHO, 2016). This shows the close relationship between the well-being of the mother and the child and justifies the need to integrate maternal, newborn, and child health interventions.

UNICEF (2016) observed that child and maternal mortality have many triggers. Poorly funded and culturally inappropriate health and nutrition services, food insecurity, inaccurate feeding practices, and lack of hygiene are direct causes of mortality in both children and mothers (Onumere, 2010). In addition, female illiteracy adversely affects maternal and child survival rates and is also linked to early pregnancy. In many countries, especially where child marriage is prevalent, the lack of primary education and lack of access to healthcare contribute significantly to child and maternal mortality statistics (Pitterson, 2016). UNICEF also notes that discrimination and exclusion of access to health and nutrition services due to poverty, geographic and political marginalization are factors in mortality rates as well (Saraki, 2014; World Bank Group, 2019). When a mother dies, her family and community suffer, and surviving children often face higher risks of poverty, neglect, and mortality. Maternal health and newborn health are closely linked. All births must be attended by skilled health professionals, as timely management and treatment can make the difference between life and death for the mother as well as for the baby (Marchie, & Ayanwu, 2013).

In developing countries like Nigeria, the high rate of maternal and child mortality poses a serious concern to both individuals and society and calls for the attention of health educators and medical social workers. Social workers can join the awareness creation campaigns on the need for pregnant women to attend antenatal and postnatal care in the hospitals to ensure safe delivery and well-being of their children. One of the functions of social work is to contribute to policy formulation and implementation including policies on maternal education and compulsory vaccination of babies. One of how social workers can help in bringing to the barest minimum the rate of maternal and child mortality rate is by carrying out public education campaigns to spread the awareness of causes of maternal and child death.

Several studies have been conducted on maternal and child maternity in Nigeria. Such studies include the ones carried out to ascertain the extent and nature of maternal and child mortality in Nigeria (Amankwah, 2011; Ogbonaya & Aminu, 2014), the impact of maternal and child mortality (Akowe et al, 2015), socio-cultural factors influencing the high level maternal and child mortality in Nigeria (Onumere, 2010; Saraki, 2014), trends and causes of maternal and child mortality in Nigeria (Muhammad., 2019), and factors influencing maternal mortality among rural communities in Southwestern Nigeria (Azuh, 2016). However, none of these studies have been carried out to investigate the causes, consequences, and prevention of maternal and child mortality in Obudu LGA of Cross River State, Nigeria. Considering the high level of maternal and child mortality in the area, this study is aimed at exploring the causes and consequences of maternal and child mortality in the area and recommending measures that would reduce its prevalence. Specific objectives include (1) What are the causes of maternal and child mortality in Obudu LGA? (2) What are the consequences of maternal and child mortality in Obudu LGA? (3) In what ways can maternal and

child mortality be prevented in Obudu LGA? (4) What roles can social workers play in preventing maternal and child mortality in Obudu LGA?

Materials and Methods

Study Area

The study was carried out in Obudu Local Government Area of Cross River State, Nigeria, which is one of the 18 LGAs that make up the state. The location of Obudu (6˚20" - 6˚40"N; 8˚4" - 9˚0"E) and its climatic conditions are conducive for the cultivation of a large variety of agricultural products. The soil is loamy sand mixed with volcanic ash. The LGA covers an area of 379,164 square kilometers. The LGA is made up of five communities and 10 political wards. The inhabitants of Obudu are mostly farmers but the frequent occurrence of communal land conflict among communities in the area adversely affects farming activities. The rationale behind the choice of this study in Obudu LGA of the state is because of the persistent death of women and children as a result of a lack of antenatal and postnatal care and a limited number of trained birth attendants. The maternal and child mortality ratio remains high in referral health facilities in Nigeria due to institutional and patient-related factors (Ntiomo et al, 2018).

Sampling procedure

Multistage sampling methods were used in the selection of participants for the study. First, a purposive sampling technique was used to select two (Bette and Ukpe communities) out of five communities. Second, a simple random sampling technique was adopted in the selection of five (Obudu urban I ward, Ipong ward, Ukpe ward, Ipong ward, and Utugwang central ward) out of 10 political wards. Third, availability and convenient sampling techniques were used to select individual participants for the study. The reason behind the choice of simple random sampling was to allow all the political units equal chances of being included in the study, while purposive sampling was adopted because of the researchers' knowledge that the selected communities have high rates of maternal and child mortality in the area. The application of the availability and convenience techniques became necessary because we only interviewed participants who were on the ground and were willing to participate in the study; and where some persons declined our request to participate in the study because of inconvenience, we approached others who were more convenient for the interviews. Each selected ward produced 38 participants for the study. The participants were selected based on their knowledge about maternal and child mortality and their willingness to provide the researchers with the information sought. In all, 190 participants made up the study size.

Data collection

The instrument for the data collection was questionnaire. The instrument was pretested and reviewed for reliability and objectivity. The questionnaire contained open-ended and close-ended questions and consisted of two parts. The first part covered the demographic characteristics of the respondents such as age, religion, educational qualification, place of residence, marital status, and occupation among others, while the second part dealt with specific issues of the study. The aim of the study, as well as their choice of participation, was clearly explained to the participants through the consent forms. The consent of voluntary participation as well as the utmost confidentiality of their information was assured. In the administration of the instruments for data collection, the researchers self-administered the questionnaire to the respondents by visiting them at their various homes, offices, and meeting venues.

Data Analysis

The data from questionnaire were coded; computer processed and analyzed using the statistical package for the social sciences (SPSS) version 20. Descriptive statistics such as percentages and frequency distribution tables were used in characterizing the respondents, while research hypotheses were statistically tested with the use of chi-square (χ^2). The analysis was based on 190 questionnaires that were correctly filled and returned. The findings are presented in tables one and two below.

Results

Demographic characteristics of participants

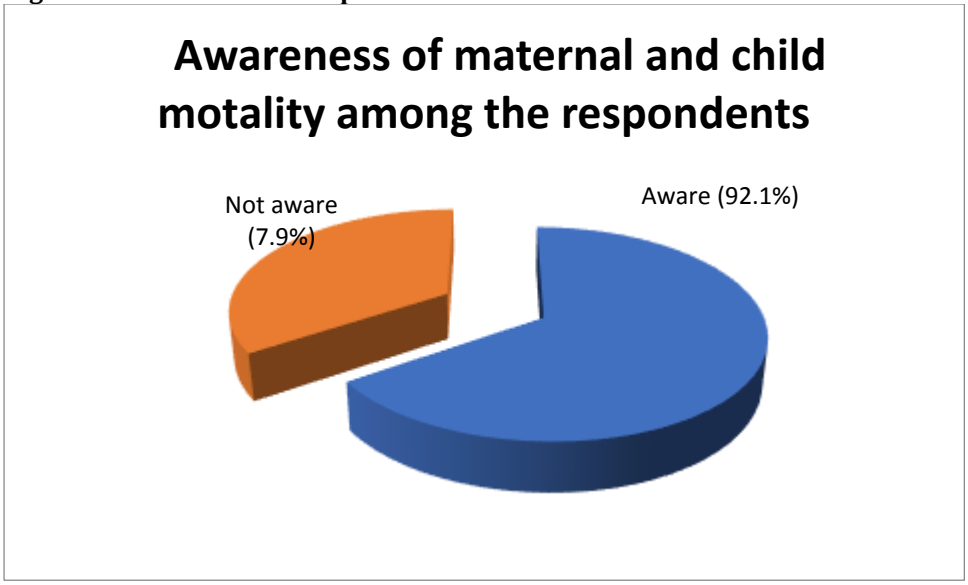
Table 1: Percentage distribution of respondents by socio-demographic variables

Socio-demographic variables	Frequency	Percentage
Sex		
Male	20	10.5
Female	170	89.5
Age		
18-27	18	9.5
28-37	31	16.3
38-47	128	67.4
48-57	8	4.2
58 and above	5	2.6
Marital status		
Single	1	.5
Married	135	71.1
Widowed	51	26.8
Separated	3	1.6
Religion		
Christian	184	96.8
Traditional religion	2	1.1
Islam	4	2.1
Occupation		
Civil servants	15	7.9
Students	18	9.5
Traders	134	70.5
Farmer	9	4.7
Artisans	4	2.1
Housewives	10	5.3
Education		
No formal education	1	.5
Primary education	7	3.7
Secondary education	29	15.3
Ordinary National Diploma	39	20.5
BSc/HND	87	45.8
MSc/PhD	27	14.2
Place of residence		
Urban	135	71.1
Rural	55	28.9

Analysis from the above Table revealed the demographic characteristics of respondents. The analysis showed that the majority of the respondents constituting 89.5% were females while 10.5% were males. This showed that more women participated in the study than men. From the above table also, it was revealed that respondents were aged between 18-27 (9.5%), 28-37 (16.3%), 38-47 (67.4%), 48-57 (4.2%), and 58 and above (2.6%). The analysis showed that a greater percentage of the respondents (67.4%) were aged between 38-47 years. The analyses also showed that married respondents constituted the highest number of the participants (71.1) %), while those within the categories of single, widow, and separated were .5%, 26.8%, and 1.6% respectively. This means that the majority of the study respondents were married at the time of the study.

The data equally revealed that the majority of the students constituting (96.80%) were Christians, 2.1% were Muslims, and 1.1 were traditionalists. About their occupation, a greater percentage of 70.5 were traders, 9.5% were students, 7.9% were civil servants, 5,3% were housewives, 4.7% were farmers, and 2.1% were artisans. The analysis revealed that the majority of the respondents were traders. The table also showed that the educational qualifications of the respondents were .5%, 3.7%, 15.3%, 20.5%, 45.8%, and 14.2% for those that had no formal education, completed primary education, completed secondary education, possessed Ordinary National Diploma, BSc/HND, and MSc/PhD respectively. The data equally showed that most of the respondents representing 71.1% were living in urban areas, while 28.9% were living in rural areas.

Figure 1: Distribution of respondents' views on the awareness of maternal and child mortality



A critical look at the pie chart in Fig 1 shows the response of respondents on whether they are aware of maternal and child mortality. From the figure, it can be observed that the majority of the respondents (92.1%) indicated awareness of maternal and child mortality with only a little proportion (7.9%) indicating a lack of awareness. They stated that maternal and child mortality is the death of a pregnant woman during childbirth (17.1%). Death of a child (25.7%), and death of both the mother and child as a result of complications during pregnancy. The high level of awareness shows that the respondents were aware of the subject under investigation and were ready to share their knowledge with the researchers. Further probing revealed that respondents' sources of awareness included mass media (68.6%), seminars (17.1%), peers and friends (10.3%), and school (4%).

Table 2: Percentage distribution of respondents' views on major research questions/issues

Variables	Frequency	Percentage
Causes of maternal and child mortality		
Distance to health centres	40	26.5
Lack of funds to access healthcare	38	25.2
Illiteracy/ignorance	53	35.1
Cultural/religious belief	20	13.2
No idea	39	
Consequences of maternal and child mortality		
High death rate	45	38.5
Low manpower	33	28.2
Increased number of orphans	20	17.1
Economic setback	19	16.2
No idea	73	
Government efforts towards the reduction of maternal and child mortality in the area		
Construction of new health centres	55	34.6
Provision (occasionally) of free birth services and mosquito nets	87	54.7
Sensitization programmes/information dissemination	17	10.7
Strategies for reducing maternal and child mortality		
Abolishment of insensitive cultures	33	17.4
Intensify awareness creation/publicity	47	24.7
Constant training and retraining of healthcare staff and birth attendants	70	36.8
recruitment of more community health workers	40	21.1

The result of the study as presented in Table 2 above showed that 26.5% of the respondents indicated that distance is one of the major causes of maternal and child mortality in Obudu LGA of Cross River State, 25.2% indicated a lack of funds to access healthcare including antenatal and postnatal care as a causative factor, 35.1% mentioned illiteracy and ignorance, while 13.2% indicated that cultural and religious beliefs are also causes of maternal and child mortality. The finding revealed that a greater proportion of the respondents indicated illiteracy and ignorance as the leading causes of maternal and child mortality. The data also found that 38.5% of the total respondents indicated a high death rate as one of the consequences of maternal and child mortality, 28.2% indicated low manpower as a consequence, 17.1% indicated an increased number of orphans, and 16.2% indicated economic setbacks. The analysis showed that a greater proportion of the respondents indicated an increased death rate as the most serious consequence of maternal and child mortality.

Results from the table equally showed that the government has made some efforts towards the drastic reduction of maternal and child mortality both in the study area and the entire nation. Data revealed that 34.6% of the respondents used for the study stated that the construction of new health centres in Obudu LGA is one of the efforts of the government to tackle maternal and child mortality, 54.7% of the respondents mentioned the occasional provision of free birth services including mosquito nets to pregnant women as an attempt by the government to curb maternal and child mortality, while 10.7% of the respondents indicated stated that information sharing through sensitization programmes is also another strategy adopted by the government to stem the prevalence of maternal and child mortality in the area. However, a greater proportion of the respondents were of the view that the provision of free birth services by the government is a strategy to lure pregnant women to health facilities for safe delivery and adequate mentoring to curb issues of maternal and child mortality in the area. The study suggested ways of tackling the lingering case of maternal and child mortality in the study area. Responses from the respondents revealed that 17.4% of the respondents

suggested the abolishment of gender-insensitive cultures as a way of controlling the menace of maternal and child mortality, 24.7% suggested that more publicity and awareness creation need to be made, a greater proportion of the 36.8% recommended the training and re-training of healthcare staff of various health facilities and birth attendants, while 21.1% suggested the employment of more community health workers.

Discussion

The study explored the causes, consequences, and prevention of maternal mortality in Obudu LGA of Cross River State, Nigeria. Findings from the study revealed that the majority of the respondents knew what constitutes maternal and child mortality. This finding is in tandem with the findings of Okechukwu (2013), which reported the awareness of maternal and child mortality is high in sub-Sahara Africa including the study area.

Some factors cause maternal and child mortality both in the study area and beyond. Such factors include distance to healthcare facilities, lack of funds, unplanned pregnancy and abortion, and illiteracy. This finding is in agreement with the study conducted in Ghana by Eshan (2019), which revealed that social-cultural factors such as age, educational level, income level, and place of residence are all associated factors with maternal and child mortality. This finding is also consistent with the findings of Ogunjimi, et al (2012), which stated that educational level, marital status, and income level influence maternal and child health in Nigeria, including Obudu LGA. WHO (2018) indicates that globally, about 80 percent of maternal deaths are due to four major causes including severe bleeding, infections, hypertensive disorders in pregnancy (eclampsia), and obstructed labour. Among the indirect causes of maternal death are diseases that complicate pregnancy or are aggravated by pregnancy, such as malaria, anaemia, hepatitis, anesthetic death, meningitis, HIV/AIDS, sickle cell anemia, and acute renal failure, which could be a complication of eclampsia (WHO, 2018). Women also die because of poor health at conception and a lack of adequate care needed for the healthy outcome of the pregnancy for themselves and their babies.

Furthermore, findings from the study revealed that there are negative consequences of maternal and child mortality. Respondents stated that the high death rate of mothers and children, the increased number of orphans and vulnerable children, and economic setbacks are some of the negative implications of maternal and child mortality. This finding is consistent with the findings of Hong (2011), which stated that the consequences of maternal and child mortality are felt heavily on the economy, stemming from low manpower as a result of increased death.

The government was reported to have initiated efforts at curbing the prevalence of maternal and child mortality. The study found that the government has constructed some health centres and carried out awareness creation campaigns to educate the public, especially pregnant women on the need for antenatal and postnatal care; as well as the need for approaching trained birth attendants during delivery to avoid preventable complications and death. In Anambra state, the State House of Assembly approved a bill in 2005, guaranteeing free maternal health services to pregnant women (Shiffman & Okonofua, 2007). However, the findings in the study of Ekechi (2019), which maintained that government efforts targeted toward maternal and child mortality across the country are not yielding positive results are in contrast with the finding of the study

The construction of more healthcare facilities in both rural and urban areas will help reduce the prevalence of maternal and child mortality in Nigeria. These health centers, if constructed will bring healthcare facilities closer to the people including the women and pregnant teenagers, and avail them the opportunity to access more easily the needed healthcare services. Stakeholders in the health sector should ensure that policies and programmes aimed at improving the living conditions of pregnant women and children are put in place. Policymakers and stakeholders in health care should provide for improved living standards to achieve good life expectancy and meet sustainable development goals (Yaya et al, 2017). Efforts to reduce maternal and child mortality in health facilities should include the improvement of emergency obstetric care, public health education so that women can seek appropriate and immediate evidence-based pregnancy care, the socioeconomic empowerment of women, and the strengthening of the health care system (Ntiomo et al, 2018).

Awareness creation on the causes, consequences, and implications of maternal and child mortality would go a long way to reducing the level of occurrence of the menace. Government, organizations, institutions, social workers, and the general public should be quickly awakened to their separate responsibilities in providing proper information about maternal and child mortality to the appropriate authorities and the general public. This will go a long way in reducing the high rate of maternal and child mortality particularly in Obudu local government. The government should also make room for care to be rendered to families and individuals who are affected by maternal and child mortality. They can do this by incorporating social workers into the team, as they act as caregivers, who render counselling, advocacy, linkage, support, and therapeutic services.

The researchers do not claim to have carried out a comprehensive study on maternal and child mortality because the study has some limitations. The fact that this study was conducted in one out of the 18 LGAs that made up the state is one of the limitations. This means that the views of the respondents only reflected those of the people of Obudu LGA and did not include the opinions of the people from the remaining LGAs. We suggest that similar studies that will cover more LGAs or the entire state be further conducted to sample wider opinions of the people on the subject under investigation. Irrespective of this shortcoming, the study has contributed to the existing literature on maternal and child mortality and provided information that aided the researchers in finding out the causes, consequences as well as recommending measures that will help reduce the occurrence of maternal and child mortality in the study area in particular and Nigeria in general.

Conclusion

The study explored the causes, consequences, and preventive strategies for the occurrence of maternal and child mortality in Obudu LGA, of Cross River State. The study found that though the government has made frantic efforts in curbing the prevalence of maternal and child mortality, the ugly menace persists. The study made some recommendations, which if implemented by the government and the concerned agencies and stakeholders would go a long way in reducing the untimely death of our women and children in the society.

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