Prevalence of Maternal Mortality among Women of Reproductive Age in General Hospital, Badagry, Lagos

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Abstract

Maternal mortality continues to be the major cause of death among women of reproductive age in many countries and remains a serious public health issue especially in developing countries. The study therefore, investigated the prevalence of maternal mortality in the general hospital badagry. Two research questions and two hypotheses were postulated for the study. The descriptive survey research design was used. The population consists of women of reproductive age attending General Hospital, Badagry. The research instrument used for the study was a four- point likert-type rating scale questionnaire. The test-retest method of reliability was adopted. The reliability of the instrument was ascertained by using the cronbach's method. The calculated cronbach's alpha coefficient was 0.86. A total number of one hundred and twenty (120) copies of questionnaires were distributed and same copies were collected and analyzed. Chi-square statistical tools were used in testing the stated hypotheses. The study shows that significant relationship exist between poor maternal health care and maternal mortality in general hospital Badagry and also there is significant relationship between maternal population growth and maternal mortality in general hospital Badagry. In conclusion the study found poor maternal health care during pregnancy leads to maternal mortality, Given birth to many children can increase maternal mortality. The findings recommended that pregnant women should treat any diseases and go for prenatal care while nursing mothers should attend postnatal care; pregnant women and nursing mothers should be given awareness on the need to visit hospital as soon as they notice any disease signs and symptoms.

Keywords: Maternal, Mortality, Nursing mothers, Pregnant women.

Introduction

The growing concern on improving reproductive health at the global level has created a demand for research especially in the area of maternal health. Maternal health is the physical well-being of a woman during pregnancy, childbirth, and postpartum period (Dutta, 2014). Maternal mortality, also known as maternal death, continues to be the major cause of death among women of reproductive age in many countries and remains a serious public health issue especially in developing countries (WHO, 2017). Globally, the estimated number of maternal deaths worldwide in 2005 was 536,000 up from 529,000 in 2010. According to the WHO Factsheet (2012), 1500 women die from pregnancy or pregnancy-related complications every day. Most of these deaths occur in developing countries, and most are avoidable. Of all the health statistics compiled by the World Health Organization, the largest discrepancy between developed and developing countries occurred in maternal mortality. Neonatal mortality in recent years has increased in developing countries with Nigeria having the third highest neonatal mortality in the world. Presently with the integrated Maternal and Newborn and Child Health (IMNCH) strategy, rolled out by the Federal Government in 2011, to accelerate reduction in MDGs 4 and 5, there is an increase focus on the neonates, which account for 40 percent of children fewer than five years of age, and have unfortunately been neglected in recent times. Maternal health is defined as wellbeing of a mother during pregnancy, childbirth and postpartum (WHO, 2010).

The status of maternal health is poor in Nigeria, defined by maternal mortality of 59,000 per annum due to pregnancy-related causes. Maternal Mortality is one of the leading cause of death among women of reproductive age in Nigeria (Idris, 2010). Unfortunately, the Beijing declaration has not been fully implemented in Nigeria despite its poor record of maternal health as many women still die prematurely or suffer debilitating ill-health from reproductive processes which are to a large extent, preventable (Alubo, 2010).

In developing countries Maternal Mortality is much worse, as studies from various countries of sub-Saharan Africa indicate that maternal mortality has not only continued to be high, but is indeed increasing after the launch of the Safe Motherhood Initiative (SMI) in Nigeria (Idowu, Osinaike, and Ajayi, (2011). Maternity care in Nigeria is organized around three tiers: primary, secondary and tertiary care levels. Primary health centres

are located in all the 774 local government councils in the country. Pregnant women are to receive antenatal care, delivery and postnatal care in the primary health centres nearest to them. In case of complications they are referred to secondary care centres, managed by states, or tertiary centres, managed by the federal government. The Nigerian health system as a whole has been plagued by problems of service quality, including unfriendly staff attitudes to patients, inadequate skills, decaying infrastructures, and chronic shortages of essential drugs (Omo-Aghoja, Aisien, Akuse, Bergstrom & Okonofua 2010).

The problem of poor organization and access to maternal health services has always been a major challenge in Nigeria (Idowu, Osinaike, & Ajayi, 2011). It is in view of this that the study investigated the prevalence of maternal mortality among Women of Reproductive age in General Hospital, Badagry, Lagos.

Objectives of the study were:

The study was designed to:

1. determine the prevalence of maternal mortality among women of reproductive age in General Hospital, Badagry, Lagos;
2. investigate the causes of maternal mortality; and
3. assess the relationship between maternal health care and maternal mortality.

The study provided answers to the following research questions:

1. What is the prevalence of maternal mortality among women of reproductive age in General Hospital, Badagry, Lagos?
2. What are the causes of maternal mortality among women of reproductive age in General Hospital, Badagry, Lagos?

The following research hypotheses were formulated and tested:

1. There is no significant relationship between maternal health and maternal mortality among women of reproductive age in General Hospital, Badagry, Lagos.
2. There is no significant relationship between maternal population growth and maternal mortality among women of reproductive age in General Hospital, Badagry, Lagos.

Methodology

The descriptive survey research design was adopted because of its capability to examine the relationship between variables under study, hypotheses testing and development of generalization. The populations of this study consist of

women of reproductive age in General Hospital, Badagry, Lagos state of Nigeria. Simple Random Sampling Technique was used by the researcher in selecting the respondents for the study. One hundred and twenty pregnant and child bearing women who attending antenatal and infant welfare clinic was randomly selected for the study from the general hospital badagry. The research instrument is a self-developed, structured and validated questionnaire of modified four point likert attitudinal scale with sections A and B. The section A was demographic data while B contain the questions, the response opinions include: Strongly agree (SA); Agree (A); Strongly Disagree (SD); Disagree (D) to enable respondents provide answers depending on their opinions. The face and content validity of the questionnaires was ascertained in the department of human kinetics, sport and health education including my supervisor. The test-retest method of reliability was adopted. The reliability of the instrument was tested using the cronbach's alpha technique of the SPSS. In this study the calculated cronbach's alpha coefficient was 0.86.

The copies of the instrument were personally distributed with the help of two trained research assistants to the respondents. One hundred and twenty questionnaires was distributed and collected by the researcher at the spot and data collection lasted for four weeks at General Hospital Badagry. Copies of the administered questionnaire were checked to ensure that they were well completed before living the clinic. The investigator monitored the process of data collection throughout. Daily review meetings were held at the beginning and end of each day with the research assistances. The researcher monitor the process of data collection throughout. Data collected were analyzed using appropriate descriptive statistics of frequency counts and percentages for data presentation. While the inferential statistics of chi-squire was used to test all stated hypotheses at 0.05 alpha levels of significance. The statistical package for social science (SPSS) was used for analyzing the data collected.

Results

Data Presentation

Table 1: The socio-demographic characteristics of respondents

	Frequency	**%**
***Age in years**		
18-25	27	22.1
26-35	81	66.4
36-45	6	4.9
46-Above	6	4.9
Total	120	98.4
Missing System	2	1.6
Total	122	100.0
***Marital Status**		
Single	14	11.5
Married	101	82.5
Divorce/separated	5	4.1
Total	120	98.4
Missing System	2	1.6
Total	122	100.0
Educational status		
No formal	40	32,8
Primary	46	37.7
First Degree	12	9.8
Post Graduate	22	18.1
Total	120	98.4
Missing System	2	1.6
Total	122	100.0
Occupation		
Civil Servant	18	14.8
Business Woman	54	44.3
Full housewife	36	29.5
Other	12	9.8
Total	120	98.4
Missing System	2	1.6
Total	122	100.0
No of Pregnancy	34	27.9
One Pregnancy	45	36.9
Two Pregnancy	41	33.6
Three Pregnancy	120	98.4
Total	2	1.6
Missing System	122	100.0
Total		

Table 1 shows that a total of 27(22.5) % respondents were between 18-25 years, 81(67.5) % respondents were between 26-35 years and a total of 6(5) % were 46 years and above while on marital status 14(11.7) % respondents are singles, 101(84.2) % respondents were married, 5(4.2) % were divorcees. On educational status a total of 40(33.3) % respondents has no formal education, 46(38.3) respondents were first school leaving certificate, 12(10) % respondents were first degree holders and a total of 18(15) % respondents were postgraduates holders while on occupation a total of 18(15.0) % respondents were civil servant, 54(45) % respondents were business women, a total of 36(30) % respondents were housewives and a total of 12(10) % respondents were other occupation and number of pregnancy, 34(28.3) % respondents had got pregnant once, 45(37.5) % respondents had got pregnancy twice while a total of 29(24.2) % had got pregnant thrice and above.

Hypothesis 1

Hypothesis one stated that there is no significant relationship between poor maternal health care and maternal mortality in general hospital Badagry

Table 2: Maternal health care and mortality.

Maternal Mortality Poor Health care

Count

		Maternal Mortality			Total
		Disagree	Agree	Strongly Agree	
Poor Health Care	Strongly Disagree	6	2	5	13
	Disagree	0	24	0	24
	Agree	6	14	10	30
	Strongly Agree	7	14	32	53
Total		19	54	47	120

Table 2 shows that a total of 53(44.2) % respondents strongly Agree with the items on the questionnaire, 30(25) % respondents agree with the items statement, 24(20) % respondents disagreed with the items while a total of 13(10.8) % respondents strongly disagree with the items statement.

Results in table 2 further revealed that the Pearson Chi-square statistic X^2 (6)

= 50.412, and p is less than 0.05. The hypothesis which states that there is no significant relationship between poor maternal health care and maternal mortality in general hospital Badagry is hereby rejected.

This implies that relationship exist between poor maternal health care and maternal mortality in general hospital Badagry.

Hypothesis 2

Hypothesis two stated that there is no significant relationship between maternal population growth and maternal mortality in general hospital Badagry.

Table 3: Results of Chi-square analysis on decline maternal population growth and mortality.
Maternal Mortality * Maternal Population

Count

		Maternal Population				Total
		Strongly Disagree	Disagree	Agree	Strong Agree	
Maternal Mortality	Strongly Disagree	3	0	0	0	3
	Disagree	9	0	3	7	19
	Agree	4	0	33	16	53
	Strongly Agree	0	6	24	15	45
Total		16	6	60	38	120

Table 3 shows that a total of 45(37.5) % respondents strongly Agree with the items on the questionnaire, 53(44.2) % respondents agree with the items statement, 19(15.8) % respondents disagreed with the items while a total of 3(2.5) % respondents strongly disagree with the items statement.

Chi-Square Test

	Value	Df	Asymp. Sig. (2-sided)
Pearson Chi-Square	59.566[a]	9	.000
Continuity Correction			
Likelihood Ratio	54.913	9	.000
Linear-by-Linear Association	15.527	1	.000
N of Valid Cases	120		

a. 8 cells (50.0%) have expected count less than 5. The minimum expected count is .15.

Results in table 3 further revealed that the Pearson Chi-square statistic X^2 (9) = 59.566, and p is less than 0.05. The hypothesis which states that there is no significant relationship between maternal population growth and maternal mortality in general hospital Badagry is hereby rejected. This implies that there is relationship between maternal population growth and maternal mortality rate in general hospital Badagry.

Discussion

Hypothesis one states that there is no significant relationship between poor maternal health care and maternal mortality in general hospital Badagry was rejected since $p \leq 0.05$ level of significance. This implies that relationship exists between poor maternal health care and maternal mortality in general hospital Badagry. This finding is in line with World health organization, (2017) asserted that, in a seventeen-year review of factors contributing to maternal mortality in North-Central Nigeria found a bimodal pattern of maternal deaths occurring at both extremes of the reproductive age range. They found that the greatest risk of maternal death was among early teenagers and older women. They also found that ethnic group of the women was also an important risk factor for maternal mortality. (Alubo, 2010) examined that the background factors that predisposed women to maternal mortality The study investigated their socio-demographic characteristics, their use of prenatal care, and the incidence of delay in clinical management. The study also found that maternal mortality in the study population can be reduced through improved transportation and institutional management, and, on a long-term basis, through the adoption of measures to improve the socioeconomic status of women.

Idris, (2010) estimated that in Nigeria, more than 70 percent of maternal deaths could be attributed to five major complications: haemorrhage, infection, unsafe abortion, hypertensive disease of pregnancy and obstructed labour. Also, poor access to and utilization of quality reproductive health services contribute significantly to the high maternal mortality level in the country. As explained in Dutta, (2014) the causes of maternal deaths can be classified into medical factors, health factors, reproductive factors, unwanted pregnancy and socioeconomic factors. Omo-Aghoja, Aisien, Akuse, Bergstrom and Okonofua (2010) asserted that maternity care in Nigeria is organized around three tiers: primary, secondary and tertiary care levels. Primary health centres are located in all the 774 local government councils in the country. Pregnant women

are to receive antenatal care, delivery and postnatal care in the primary health centres nearest to them. In conclusion adequate prenatal and post natal care prevent maternal mortality rate among nursing mothers.

Hypothesis two states that there is no significant relationship between maternal population growth and maternal mortality in general hospital Badagry was rejected since $p \leq 0.05$ level of significance, indicating that relationship exists between maternal population growth and maternal mortality in general hospital Badagry. This finding corroborates with Garenne, (2011); Idowu, Osinaike, and Ajayi, (2011) pregnancy needs continual monitoring because it is associated with major physiological changes that may increase susceptibility to infectious and noninfectious diseases.

Alubo (2010) asserted that, maternal mortality is the death of a woman while pregnant or within 42days of termination of pregnancy, regardless of the site or duration of the pregnancy, from any cause related to aggravate by the pregnancy or its management. While WHO, (2012) added to this that is not from accidental or incidental causes. WHO, (2010) asserted that, maternal mortality is sub-divided into direct and indirect obstetric deaths. Direct obstetric death result from obstetric complication of pregnancy, labour or the postpartum period .They usually due to one of the five major causes: hemorrhage (usually occurring post-partum) sepsis, eclampsia, obstructed labour and complication of unsafe abortion as well as interventions, omissions, incorrect treatment or event resulting from any of these. Dutta, (2014) agreed that physiological transition from pregnancy to motherhood heralds an enormous change in each woman physically and physiologically. It is a time when every system in the body is affected and the experience represents a major "rite de passage" in the woman's life.

Conclusion and Recommendations

Based on the findings on this study, the following conclusions were made: Poor maternal health care during pregnancy leads to maternal mortality. Given birth to many children can increase maternal mortality rate. Low level of education can cause high maternity rate. Inadequate working environment and lack of suitable occupation can cause maternal mortality rates.

Based on the findings of study, the followings recommendations were made:

1. Pregnancy women should treat any diseases and go for prenatal care while nursing mothers should attend postnatal care.

2. Women attending pre and postnatal at General Hospital Badagry should be advised to space and give birth to number of children they can cater for.
3. Pregnant women and nursing mothers should be given awareness on the need to visit hospital as soon as they notice any disease signs and symptoms.
4. Women in the local Government should be empowered by Badagry local Government to start small scale business in a conductive environment.

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