African Journal of Health, Nursing and Midwifery
ISSN: 2689-9418
Volume 6, Issue 3, 2023 (pp. 1-14)
www.abjournals.org

THE ROLE OF HEALTH INFORMATION MANAGERS IN MINIMIZING THE RATE OF MATERNAL MORTALITY AMONG THE WOMEN OF CHILDBEARING AGE IN OBAFEMI AWOLOWO UNIVERSITY COMPLEX, ILE IFE, NIGERIA

Oladimeji Olanrewaju Adedipupo[1], Lasisi Taiwo Abideen[2*] and Adeniregun Kehinde Adesoji[3]

[1]Department of Statistics, Federal Polytechnic, Ile-Oluji, Ondo State, Nigeria.

[2]Department of Statistics, Ladoke Akintola University of Technology, Ogbomoso, OyoState, Nigeria

[3]School of Health Information Management, Obafemi Awolowo University Teaching Hospital, Ile-Ife, Nigeria

*Corresponding Author

Cite this article:

Adedipupo O.O., Abideen L.T., Adesoji A.K. (2023), The Role of Health Information Managers in Minimizing the Rate of Maternal Mortality among the Women of Childbearing Age in Obafemi Awolowo University Complex, Ile Ife, Nigeria. African Journal of Health, Nursing and Midwifery 6(3), 1-14. DOI: 10.52589/AJHNM-J0SBBTAU

Manuscript History

Received: 6 May 2023

Accepted: 23 June 2023

Published: 21 July 2023

ABSTRACT: *This study focused on the roles of health information professionals in minimizing the rate of maternal mortality among the women of childbearing age. The study assessed the rate of maternal mortality, identified the causes of maternal mortality among the women of childbearing age and assessed the roles of health information management professionals in minimizing the rate of maternal mortality at the Obafemi Awolowo University Teaching Hospital Complex, lle-lfe. Descriptive cross-sectional research design was adopted for this study and a close-ended questionnaire was used to gather information which was administered to 165 respondents and 155 were retrieved for data analysis, giving 93% response rate, cutting across health information managers, nurses and doctors. A proforma was designed to generate data on maternal mortality rate. The data obtained from the respondents were analyzed with the use of descriptive statistics through the aid of IBM SPSS version 21. The findings of this study showed the overall rate of maternal death of 9 maternal deaths per 1000 live births for the period of 2017 to 2021; the study also revealed that sepsis (2.1161), lack of education (1.7806), teenage marriage (1.7548), preeclampsia and eclampsia (1.7355), inadequate facilities and equipment to provide adequate care for pregnant women (1.6645), lack of adequate antenatal care (1.6581) and obstetric hemorrhage are the major causes of maternal mortality among women of childbearing age. The study further revealed that the major roles of health information manager in minimizing maternal mortality rate are provision of data on the rate of maternal mortality in the hospital (1.5677) and providing data on management of maternal health and childbirth (1.4839). The study concluded that lack of adequate facilities and equipment to provide adequate care for pregnant women, poverty, lack of education, lack of family planning, teenage marriage, sepsis, hypertensive diseases are some of the major causes of maternal mortality among women of childbearing age.*

KEYWORDS: Maternal, Mortality, Childbearing, Teenage, pregnant women, Emclampia, Proforma, Diseases, Sepsis.

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

INTRODUCTION

Maternal mortality is a serious public health problem, especially in African countries including Nigeria. In many nations, maternal death rates continue to be primarily a public health issue. Each year, pregnancy- and childbirth-related problems claim the lives of more than 500,000 women around the world. In underdeveloped nations like Nigeria, over 98% of these deaths are place [15]. Every year, at least 150,000 African women die from complications related to pregnancy, and maternal fatalities are on the rise in many nations.

The term "maternal death" refers to the passing of a woman while she is pregnant, within 42 days after giving birth, during a miscarriage, or after ending her pregnancy, from any cause connected to or aggravated by pregnancy or its management, but not from accidental or incidental reasons [8]. Pregnancy problems can develop before, during, or after delivery, as well as up to 42 days after childbirth. In the context of the current investigation, maternal mortality is defined as the death of a woman during pregnancy, during labor, within the first six weeks following birth, or during pregnancy termination from reasons directly related to pregnancy or from conditions made worse by pregnancy. According to a population-based study, Northern Nigeria has the highest maternal mortality rate, with an average startling figure of 2,420 (range from 1,373 to 4,477) per 100,000 live births recorded in Kano State [2]. Borno State in the North Eastern region has an estimated maternal death ratio of 1,549 per 100,000 live births, whereas Bauchi State in the same North Eastern region recorded 1,732 per 100,000 live births [5]. The worst ratios conceivable are here. Direct and indirect obstetric deaths were combined with maternal deaths. Direct obstetric deaths include those brought on by obstetric difficulties during pregnancy, labor, or the period following childbirth, as well as those brought on by interventions, omissions, or improper treatments, or by a series of incidents brought on by eclampsia, postpartum hemorrhages, or sepsis. Indirect obstetric deaths are those brought on by a chronic illness that either already existed or developed while the mother was pregnant. Anemia, HIV/AIDS, malaria, or heart disease are a few examples. There are a few reasons for these deaths that result from pregnancy-related complications[6].

Women of childbearing age in this study refer to women aged between 15-49 years in Nigeria. The World Health Organization asserted that some groups of women of childbearing age are more at risk than others. WHO also stated that girls and adolescent women have a high risk of pregnancy related complications. This may be because they lack adequate knowledge for prevention of maternal mortality due to their age. Lack of knowledge of maternal mortality may be a reason for negative attitude towards maternal mortality.

The objectives of this paper are to assess the role of health information management professionals in minimizing the rate of maternal mortality in OAUTHC; to assess the rate of maternal mortality in OAUTHC; and to identify the causes of maternal mortality among women of childbearing age in OAUTHC.

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

LITERATURE REVIEW

Maternal death is defined as the passing of a woman while she is pregnant or within 42 days of delivery, regardless of the length or location of the pregnancy, from any cause connected to or aggravated by pregnancy or its management, but not from unintentional or incidental causes. Deaths from pregnancy-related issues that happen during pregnancy, during labor, and in the postpartum period (up to the 42nd day following delivery) are also referred to as maternal deaths[15]. Maternal mortality in this study refers to a woman's passing while she is pregnant, during childbirth, within the first six weeks following delivery, or as a result of ending her pregnancy due to one of 17 conditions that are specifically related to pregnancy. Maternal mortality decreases when WCA are knowledgeable about it and have a supportive attitude toward it.

The term "maternal mortality rate" refers to the number of maternal fatalities in a given time frame, often one calendar year, for every 100,000 women who were of reproductive age during that time frame. It depicts obstetric dangers as well as how frequently women are exposed to these risks. According to [14], an unsafe abortion is one that is performed by a person who lacks the essential skills, in a setting that does not meet the minimum standards, or by both. Complications from unsafe abortions are thought to be responsible for roughly 13% of pregnancy-related deaths each year, or about 67,000 deaths. The term "abortion" refers to the death or expulsion of a fetus before the 24-week mark of pregnancy, whether it occurs naturally or through induction[13].

Induced abortion is the termination of the fetus before 24 weeks of pregnancy. Abortion, whether induced or spontaneous, performed by an unskilled (quacks) person in an environment lacking the minimal standards is said to be unsafe. Most of the induced abortions in Nigeria are illegal and are done by unsafe hands. In Nigeria, abortions are legally permitted only to save the lives of the woman. However, when abortion occurs and there are complications, assistance must be offered to save the life of the mother. Complications of abortion include bleeding, infection, injury to female reproductive organs, infertility and or increased pregnancywastage and injury to abdominal organs [10].

Maternal mortality is significantly influenced by hypertensive illness. Pregnancy-related hypertension is listed as the second most frequent cause of maternal death. The most frequent medical condition that causes pregnancy complications is hypertension, which affects 10% of all pregnancies[8].

Low uptake of these crucial therapies is observed in nations with high rates of maternal mortality[12]. The uptake of the interventions is significantly higher in nations that have consistently lowered maternal mortality. Okonofua added Nigeria and Sweden as examples. With one of the lowest rates of maternal death in the world, Sweden has a prevalence of contraception of 75%, antenatal attendance of 98%, skilled birth attendance of over 100%, and practically universal access to emergency obstetric care.

The main factor contributing to maternal fatalities in Nigerian women is low care usage. Onah added that the underutilization of ANC services in Enugu State's healthcare facilities is mostly due to lack of competent birth attendants, underfunded healthcare facilities, and unfriendly medical staff[13].

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

The process by which a pregnant woman and her unborn child are given proper care during pregnancy, labor, delivery, and the immediately following post-partum periods is referred to as skilled care (attendant) during childbirth[9].

The Nigerian government implemented various social programs in an effort to address the issues with maternal mortality. The reduction of poverty is one of these services. In order to reduce maternal mortality in underdeveloped nations, poverty alleviation is crucial. Poverty is one factor responsible for poor utilization of quality antenatal and delivery care services[11].

Women's economic position portrays their better educational status. Moreover, their working class also served as a source of information especially in case of maternal health care and the respective institutions. The working class women were educated and they were more aware about the importance of health care services, skilled birth attendants' requirements and the importance of frequent clinical checkups and thus they received extra health and delivery care as compared to the non-working class women[3].

However, what is required of maternal mothers at this time are improved nutrition, rest, and focused ante-natal care as well as moral and financial support. Unfortunately, these experiences are very rare for many Nigerian women. Hence maternal mortality has become a public health issue as statistical evidence shows that at every moment, a woman dies from difficulties of pregnancy, bringing the maternal mortality rate for Nigeria to 3,200 per 100,000 live births. It is further stated that these figures are worse in the Northern part of Nigeria, raising the tension that a process, such as pregnancy, can be a life-threatening process.

METHODOLOGY

This research investigated the role of health information management in minimizing the rate of maternal mortality in Obafemi Awolowo University Teaching Hospital Complex, lle-Ife, Osun State. This section described and discussed the design and procedure for the study. It described the study population, sample size and sampling technique used. A description was also made on the instrumentation for data collection as well as discussion of the validity and reliability of the instrument and also discussed in this chapter were the procedures for the administration of the instrument and method of statistical analysis.

Research Design

The current study's goals were met by using a descriptive survey research design. The descriptive survey design is a research method that is frequently used in surveys because it makes it easier to learn about a wider population by gathering data from a subset of that group from which generalizations may be drawn. A cross sectional survey involving a sample of healthcare practitioners in Obafemi Awolowo University Teaching Hospital Complex, Ile-Ife, Osun State, Nigeria was carried out.

Study Population

The target populations for this study were staff of OAUTHC, Ile-Ife, composed of health information managers (120), medical doctors (642), and nursing officers (892). These comprised the total of 1,654 staff who participated in the study. A retrospective study of women

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

of childbearing age who attended antenatal clinics within a period of 5 years was also studied to determine the maternal mortality rates in the hospital. The total population of women for the five years period was 10393.

Sampling Techniques and Sample Size

Stratified random sampling technique was used to select the respondents. The sample size comprises 165 respondents, consisting of (3) departments of the hospital, namely; 12 health information managers, 64 medical doctors and 89 nurses.

ANALYSIS AND RESULT

In this paper, a total of one hundred and sixty-five (165) copies of questionnaire were administered. One hundred and fifty-five (155) questionnaires were retrieved giving a total response rate of 93.9%. The data aeey analyzed using frequency tables, mean scores and standard deviation. It is presented in a tabular form.

Table 4.1 Socio-demographic Characteristics of the Respondents

Variables	Classification	Frequency N (115)	Percentage (%)
Gender	Male	55	35.5
	Female	100	64.5
	Total	155	100.0
Age	21-30	57	36.8
	31-40	64	41.3
	41-50	32	20.6
	50 above	2	1.3
	Total	115	100.0
Department	Doctors	60	38.7
	Nurses	83	53.5
	Health Information manager	12	7.7
	Total	155	100.0
Level of Education	OND/Tech/RN	53	34.2
	HND/BSc	62	40.0
	MSc	10	6.5
	MBBS	25	16.1
	PhD	5	3.2
	TOTAL	155	100.0
Years of working experience	Below-10	57	36.8
	11-20	67	43.2
	21-30 31- 40	21 10	13.5 6.5
	Total	155	100.0
Religion	Christianity	101	65.2
	Islamic	54	34.8
	Others	0	0
	Total	155	100.0

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

Marital Status	Married	98	63.2
	Single	57	36.8
	Divorce	0	0
	Widow	0	0
	Total	155	100.0
ETHNICITY	Yoruba	139	89.7
	Igbo	13	8.4
	Hausa	3	1.9
	Total	155	100.0

Table 4.1 showed the demographic characteristics of the respondents. It can be inferred from the table that the majority 64.5% of the respondents were female while 35.5% were male with ages ranging between 21-40, and with the percentage response rate of 36.8% and 41.3% respectively. It was revealed that the respondents are predominately doctors, nurses and health information managers with the response rate of 38.7%, 53.5% and 7.7% respectively. With regards to level of education, the majority 40.0% were those with HND/BSc, 34.2% were OND/Tech/RN, 16.1% were those with MBBS, 6.5 % were MSc and 3.2% were those with PhD. The majority (36.8%, 43.2%, 13.5% and 6.5%) have below 10 years, between 11-20, between 21-30 and 31-40 years of working experience respectively. The table further revealed that 65.2% were Christians and 34.8% were Islam. For marital status, the majority 63.2% were married and 36.8% were single. Finally, it was revealed that the majority of the respondents with 89.7% were Yoruba, 8.4% were Igbo and 1.9% were Hausa.

Table 4.2. Rate of maternal mortality among the women of childbearing age for the year 2017

2017						
Age/Group	**No of women in the age group**	**No of live birth**		**Maternity death**	**No of still birth**	
		M	**F**		**M**	**F**
15-19	27	10	12	1	4	2
20-24	200	85	112	1	4	6
25-29	594	286	299	6	18	11
30-34	653	353	284	5	20	16
35-39	311	154	144	4	17	7
40+	102	47	53	1	0	0
Total	1887	935	904	18	63	42
Grand Total	1887	1,839		18	105	

$$Maternal\ mortality\ ratios = \frac{Total\ Number\ of\ maternal\ deaths}{TotalNumber\ of\ live\ birth} \times 1000$$

$$= \frac{18}{1,839} \times 1000$$

$$= 9.7879$$

$$= 10\ per\ 1000\ \ maternal\ death\ for\ the\ period\ of\ 2017$$

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

African Journal of Health, Nursing and Midwifery
ISSN: 2689-9418
Volume 6, Issue 3, 2023 (pp. 1-14)

www.abjournals.org

Table 4.2.1: Rate of maternal mortality among the women of childbearing age for the year 2018

2018						
Age/Group	**No of women in the age group**	**No of live birth**		**Maternal death**	**No of still birth**	
		M	**F**		**M**	**F**
15-19	30	12	17	0	0	3
20-24	209	96	105	1	8	5
25-29	605	203	299	6	23	14
30-34	691	350	338	4	14	18
35-39	400	201	192	6	9	9
40+	97	51	47	3	1	3
Total	2032	913	998	20	55	52
Grand	2032	1,911		20	107	

$$Maternal\ mortality\ ratios = \frac{Total\ Number\ of\ maternal\ deaths}{Total\ Number\ of\ live\ birth} \times 1000$$

$$= \frac{20}{1,911} \times 1000$$

$$= 10.4657$$

$$= 11\ per\ 1000\ \ maternal\ death\ in\ the\ year\ 2018$$

Table 4.2.2: Rate of maternal mortality among the women of childbearing age for the year 2019

2019						
Age/Group	**No of women in the age group**	**No of live birth**		**Maternal death**	**No of still birth**	
		M	**F**		**M**	**F**
15-19	57	33	23	0	1	4
20-24	304	153	157	0	9	5
25-29	849	446	397	8	21	19
30-34	834	437	393	6	21	15
35-39	536	281	259	6	13	12
40+	130	67	59	0	3	9
Total	2,710	1,417	1,288	20	68	64
Grand total	2,710	2,705		20	132	

$$Maternal\ mortality\ ratios = \frac{Total\ Number\ of\ maternal\ deaths}{Total\ Number\ of\ live\ birth} \times 1000$$

$$= \frac{20}{2,705} \times 1000$$

$$= 7.3937$$

$$= 7\ per\ 1000\ \ maternal\ death\ in\ the\ year\ 2019$$

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

African Journal of Health, Nursing and Midwifery
ISSN: 2689-9418
Volume 6, Issue 3, 2023 (pp. 1-14)

www.abjournals.org

Table 4.2.3: Rate of maternal mortality among the women of childbearing age for the year 2020

2020						
Age/Group	**No of women in the age group**	**No of live birth**		**Maternal death**	**No of still birth**	
		M	**F**		**M**	**F**
15-19	37	15	2	1	1	2
20-24	254	121	125	1	9	12
25-29	645	331	310	5	16	19
30-34	705	355	345	4	13	18
35-39	403	203	192	4	11	19
40	109	60	47	4	4	5
Total	2153	1085	1038	19	54	58
Grand total	2153	2,123		19	112	

$$Maternal\ mortality\ ratios = \frac{Total\ Number\ of\ maternal\ deaths}{Total\ Number\ of\ live\ birth} \times 1000$$

$$= \frac{19}{2123} \times 1000$$

$$= 8.9496$$

$$= 9\ per\ 1000\ \ maternal\ death\ in\ the\ year\ 2020$$

Table 4.2.4: Rate of maternal mortality among the women of childbearing age for the year 2021

2021						
Age/Group	**No of women in the age group**	**No of live birth**		**Maternal death**	**No of still birth**	
		M	**F**		**M**	**F**
15-19	32	15	15	0	1	2
20-24	192	102	83	0	6	8
25-29	483	245	227	4	8	19
30-34	521	277	242	2	13	7
35-39	293	158	135	4	10	9
40	90	49	46	2	5	2
Total	1611	846	748	12	43	47
Grand total	1,611	1,594		12	90	

$$Maternal\ mortality\ ratios = \frac{Total\ Number\ of\ maternal\ deaths}{Total\ Number\ of\ live\ birth} \times 1000$$

$$= \frac{12}{1594} \times 1000$$

$$= 7.5282$$

$$= 8\ per\ 1000\ \ maternal\ death\ in\ year\ of\ 2021$$

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

For the period of five years 2017 to 2021

$$= \frac{89}{10,172} \times 1000$$

$$= 8.74950845481203$$

$$= 9 \, per \, 1000 \;\; maternal \, death \, from \, the \, period \, of \, 2017 \, to \, 2021$$

Table 4.2 showed the rate of maternal mortality among women of childbearing age. The result showed that there is 10 maternal deaths per 1,000 live births in the year 2017, 11 maternal deaths per 1000 live births in the year 2018, 7 maternal deaths per 1,000 live births in the year 2019, 9 maternal deaths per 1,000 live births in the year 2020 and 8 maternal deaths per 1,000 live births in the year 2021 then averagely, there is 9 maternal deaths per 1,000 live births between 2017 to 2021**.**

Table 4.3: Causes of Maternal Mortality among the Women of Childbearing Age

Parameter	**Strongly agreed**	**Agreed**	**Disagreed**	**Strongly disagreed**	**Mean**	**SD**
Abortion performed by unqualified health personnel cannot lead to maternal death	89(57.4)	42(27.1)	9(5.8)	15(9.7)	1.6774	0.95981
Obstructed labour	53(34.2)	76(49.0)	9(5.8)	17(11.0)	1.9355	0.91650
Lack of adequate antenatal care	69(44.5)	71(45.8)	14(9.0)	1(0.6)	1.6581	0.66877
Unreliable transportation services	55(35.5)	73(47.1)	19(12.3)	8(5.2)	1.8710	0.81948
Poverty	29(18.7.5)	85(54.8)	31(20.0)	10(6.5)	2.1419	0.79314
Ignorance of the need for antenatal care the parts of the patients	77(49.7)	43(27.7)	21(13.5)	14(9.0)	1.8194	0.98344
Inadequate facilities and equipment to provide adequate care for pregnant women	67(43.2)	73(47.1)	15(9.7)	0(0)	1.6645	0.64745
Lack of family planning can cause maternal mortality	76(49.0)	44(28.4)	34(21.9)	1(0.6)	1.7419	0.82051
Hypertensive disease	26(16.8)	91(58.7)	31(20.0)	7(4.5)	2.9355	4.20370
Obstetric Hemorrhage	96(61.9)	46(29.7)	12(7.7)	1(0.6)	1.4710	0.66752
Pre-eclampsia and eclampia	63(40.6)	71(45.8)	20(12.9)	1(0.6)	1.7355	0.70322
Anaemia	76(49.0)	61(39.4)	8(5.2)	10(6.5)	1.6903	0.84183
Abruption Placenta	66(42.6)	75(48.4)	14(9.0)	0(0)	1.6645	0.63734
Sepsis	39(25.2)	66(42.6)	43(27.7)	7(4.5)	2.1161	0.83709
Cultural believe	37(23.9)	55(35.5)	56(36.1)	7(4.5)	2.2129	0.86029
Poor attitude of the health workers	79(51.0)	46(29.7)	29(18.7)	1(0.6)	1.6903	0.79420
Lack of education	61(39.4)	67(43.2)	27(17.4)	0(0)	1.7806	0.72319
Teenage marriage	66(42.6)	63(40.6)	24(15.5)	2(1.3)	1.7548	0.75886

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

Table 4.3 showed the factors causing maternal mortality among women of child bearing age in OAUTHC. The table revealed that the majority of the respondents (with respondents rate of mean 1.6581, 1.8710, 1.8194 and 1.6645 respectively) opined that lack of adequate antenatal care, unreliable transportation services, ignorance of the need for antenatal care on the part of the patients, and inadequate facilities and equipment to provide adequate care for pregnant women which are the major causes of maternal mortality. 1.7548 respondents agreed that illiterates may enter into teenage marriages due to ignorance, and 1.7806 respondents strongly agreed that lack of education may lead to women entering into early marriages, bearing many children, and having a high infant mortality rate. 2.1419 respondents agreed that poverty is a major economic factor that contributes to maternal death because it prevents women from receiving proper and adequate medical attention due to their inability to afford good antenatal care services. 1.7419 of the respondents strongly agreed that lack of knowledge about family planning increases the rate of maternal mortality. 1.6903 of respondents agreed that anemia may cause death on its own or predispose a woman to severe postpartum hemorrhage leading to death. 1.6774 optioned out to the fact that abortion performed by unqualified health personnel cannot lead to maternal death, and majority of the (1.9355, 2.9355, 1.4710, 1.7355, 1.6645 and 2.1161) respectively of the respondents believe that obstructed labor, hypertensive disease, obstetric hemorrhage, preeclampsia and eclampsia, abruptio placenta. Sepsis are the major diseases that lead to maternal mortality among women of childbearing age. And finally, the majority of the respondents believed that cultural beliefs and poor attitude of the health workers play a significant role in the causes of maternal mortality.

Table 4.4: The roles of health information management professionals in minimizing the rate of maternal mortality in OAUTHC

Parameter	Strongly agreed	Agreed	Disagreed	Strongly disagreed	Mean	SD
Provide data on the rate of maternal mortality in the hospital	76(49.0)	74(47.7)	1(0.6)	4(2.6)	1.5677	0.64485
They serve as custodian of all patient records	65(41.9)	54(34.8)	22(14.2)	14(9.0)	1.9032	0.95872
They ensure proper availability of patient health records	71(45.8)	67(43.2)	17(11.0)	0(0)	1.6516	0.67027
They ensure proper filing and retrieving of patient records	77(49.7)	77(49.7)	1(0.6)	0(0)	1.5097	0.51431
They provide record for evaluation of all maternal cases	57(36.8)	90(58.1)	7(4.5)	1(0.6)	1.6903	0.58740
They ensure privacy and confidentiality of patient records	97(62.6)	50(32.3)	8(5.2)	0(0)	1.4258	0.59159
Promote effective communication, respect, and collaboration among professionals	87(56.1)	65(41.9)	3(1.9)	0(0)	1.4581	0.53741

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

Ensure prompt availability of record for both antenatal care and post- antenatal care	107(69.0)	40(25.8)	8(5.2)	0(0)	1.3613	0.57979
They support research by providing data on management of maternal health and childbirth	87(56.1)	61(39.4)	7(4.5)	0(0)	1.4839	0.58504
They make record available for the continuation of care for all women of childbearing age, pre and post pregnancy period	113(72.9)	33(21.3)	9(5.8)	0(0)	1.3290	0.58231
They initiate records for all maternal health and childbirth diseases	84(54.2)	63(40.6)	8(5.2)	0(0)	1.5097	0.59618
They carry out clinical coding on the cases of maternal health and childbirth	88(56.8)	66(42.6)	1(0.6)	0(0)	1.4387	0.51071
They provide early detection, prevention and management of cases relating to maternal and childbirth	73(47.1)	74(47.7)	8(5.2)	0(0)	1.5806	0.59074
Allow doctors to have access to data on major causes of maternal death and ensure statistical report	86(55.5)	62(40.0)	7(4.5)	0(0)	1.4903	0.58518
Generate information useful for management of maternal health and child birth.	67(43.2)	80(51.6)	8(5.2)	0(0)	1.6194	0.58411

Table 4 showed the roles of health information management professionals in minimizing the rate of maternal mortality. The table revealed that vast majority of the respondents (with average response rate with mean 1.5677, 1.8250, 1.9032, 1.5097 and 1.6903 respectively) opined that health information managers provide data on the rate of maternal mortality in the hospital. They serve as custodian of all patient records. They ensure proper availability of patient health records, proper filing and retrieving of patient records, and records for evaluation of all maternal cases. Health information managers also play a significant role in minimizing the rate of maternal mortality by providing valid statistical data that help facilitate decision-making on issues pertaining to maternal mortality. And also the table revealed that superiority of the respondents (with average respondents rate of mean 1.4258, 1.4581, 1.3613, 1.4839 andb1.3290 respectively) observed that health information managers play a key role on the rate of maternal mortality. They ensure privacy and confidentiality of patient records, promote effective communication, respect, and collaboration among professionals, ensure prompt availability of record for both antenatal care and post-natal care, support research by providing data on management of maternal health and childbirths, make record available for the continuation of care for all women of childbearing age, pre- and post-pregnancy period. They also promote early detection, prevention, and management of maternal mortality which are one

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

of the major roles played by health information managers towards reducing maternal mortality. Finally the preponderance of respondents (with average response rate of 1.5097, 1.4387, 1.5806, 1.4903 and 1.6194 respectively) believed that health information managers initiate records for all maternal health and childbirth diseases, carry out clinical coding on the cases of maternal health and childbirth, provide early detection, prevention and management of cases relating to maternal and childbirth, allow doctors to have access to data on major causes of maternal death, ensure statistical report and generate information useful for management of maternal health and childbirth.

DISCUSSION

The demographic characteristics of this study showed that the majority 64.5% of the respondents were female while 35.5% were male with the age range of 21-30, 31-40 and 41-50, and the percentage response rate of 36.8%, 41.3% and 20.6% respectively. It was revealed that the respondents are predominantly doctors, nurses and health information managers with a response rate of 38.7%, 53.5% and 7.7% respectively. With regards to the level of education, the majority were whose percentage score was 34.2% were OND/Tech/RN, 40.0% were HND/BSc, 16.1.0% were those with MBBS, 6.5% were MSc holders and 3.2% were those with PhD. The majority (36.8%, 43.2%, 13.5% and 6.5%) have below 10 years, between 11-20, between 21-30 and 31-40 years of working experience respectively. The table further revealed that 65.2% were Christians and 34.8% were Islam. For marital status, the majority 63.2% were married and 36.8% were single. Finally, it was further revealed that the majority of the respondents with 89.7% were Yoruba, 8.4% were Igbo and 1.9% were Hausa.

Findings showed that lack of adequate antenatal care, unreliable transportation services, ignorance of the need for antennal care on the part of the patients, and inadequate facilities and equipment to provide adequate care for pregnant women are part of the reasons why we have maternal mortality among women of childbearing age. It further revealed some certain diseases that lead to maternal death, such as hypertensive disease, obstetric hemorrhage, preeclampsia and eclampsia. The findings also presented the roles of health information management towards minimizing maternal mortality. The table revealed that vast majority of the respondents (with average response rate with mean 1.5677, 1.9032, 1.6516, 1.5097 and 1.6903 respectively) opined that health information managers provide data on the rate of maternal mortality in the hospital, serve as custodian of all patient records, ensure proper availability of patient health records, ensure proper filing and retrieving of patient records. They equally provide record for evaluation of all maternal cases; health information managers also play significant roles in minimizing the rate of maternal mortality by providing valid statistical data that help facilitate decision making on issues pertaining to maternal mortality. And also the table revealed that the superiority of the respondents (with average respondents rate of mean 1.4258, 1.4581, 1.3613, 1.4839 and 1.3290 respectively) observed that health information managers play a key role in the rate of maternal mortality. They ensure privacy and confidentiality of patient records, promote effective communication, respect, and collaboration among professionals, ensure prompt availability of record for both antenatal care and postnatal care, support research by providing data on management of maternal health and childbirth, and make record available for the continuation of care for all women of childbearing age. They also promote early detection, prevention, and management of maternal mortality which are one of

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

the major roles played by health information management towards reducing maternal mortality.

CONCLUSION

This paper focused on the role of health information managers in minimizing the rate of maternal mortality in Obafemi Awolowo University Complex, Ile-Ife, Osun State. Descriptive survey research design was adopted for this paper and a close-ended questionnaire was used to gather information which was administered to 165 respondents and 155 were retrieved for data analysis, giving 93.9% response rate, cutting across doctors, nurses and health information managers. The data obtained from the respondents were analyzed with the use of descriptive statistics through the aid of IBM SPSS version 20. Based on the findings, the paper concluded that health information managers play significant roles toward minimizing the rate of maternal death, and also provide data on the rate of maternal mortality in the hospital. They further support research by providing data on management of maternal health and childbirth, initiate records for all maternal health and childbirth diseases, ensure prompt availability of records for both antenatal care and postnatal care and promote effective communication, respect, and collaboration among professionals. Lack of adequate facilities and equipment to provide adequate care for pregnant women, poverty, lack of education, ignorance of the need for antenatal care on the parts of the patients, lack of family planning, teenage marriage, sepsis, and hypertensive diseases are some of the major causes of maternal mortality among women of childbearing age. It is therefore important to focus on an overall health reform program that will involve maternal education, access to health care services and women empowerment which will reduce the rate of maternal deaths among women.

REFERENCES

[1]. Bennet, V.R.., Brown, K.L (2003).Myles Textbook for Midwives. China: Churchill Livingstone.
[2]. Chama C. (2004). Status of Emergency obstetric services in six states of Nigeria. A need Assessment report*: society of Gynecology and obstetric of Nigeria*
[3]. Fawole O. I., Adeoye I. A. (2015). Maternal Healthcare Use in Nigeria. *African Health Medicine* 15(1), 217 – 225, 2015.87, 2015.
[4]. George.I. (2003). *The obstetric flying squa*d: a method of reducing maternal mortality and morbidity in developing countries 5(1): 410-415
[5]. Glew, R.H., Uguru, V.E (2005). Factors contributing to Maternal Mortality in North Central Nigeria: *Afr J Reprod Health*. 9 (3): 27-40
[6]. Graham, W.J. (2001). *Maternal mortality*: levels, trends and data deficiencies' In disease and health in Sub Sahara Africa, ed. R.G. Feachem and D. R. Jamison, 102-116.New York. Oxford University Press
[7]. Lanre, A (2008). Poverty and maternal mortality in Nigeria: towards a more viable ethics of modern medical practices. Retrieved from *http://www.creative.com /license*.on 20/10/2010

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU

[8]. Lewis. G., Drife I. (2001).Eds.*Why mothers Die*.1997-1999. The fifth report of the Continental Enquires into maternal Deaths in the United Kingdom, London, RCOG Press.
[9]. Macdonald,M., Starrs, A. (2002). *Skilled Care during childbirth Information Booklets: Saving Women's Lives. Improving Newborn Health*. New York: Family Care International.
[10]. Oguanua, T.C. (2005). Post abortion care in vision project; ministry of health Enugu.
[11]. Okeke, J. (2010). Poverty and maternal mortality in Nigeria: towards a more viable ethics of modern medical practice. Retrieved from http://www.*equityhealth*.com/content.retrieed on 7/1/011.
[12]. Okonofua, F.E. (2008). Maternal mortality prevention in Africa-need Quality of care.*African Journal of Reproductive Health* 12 (3):20-25.
[13]. Onah, H.N. (2009). *Socio-cultural factors affecting material mortality in Nsukka senatorial Zone of Enugu State: implications for Safe motherhood initiative in Nigeria.* PhD. Thesis submitted to the Department of Sociology/Anthropology, University of Nigeria, Nsukka, 2009.
[14]. Warriner, I.K., Shah, H. (2006).Preventing unsafe Abortion and its consequence: Priorities Research and Action. New York Guthmacher Institute
[15]. World health Organization (2007).*Maternal mortality in 2005: Estimates Developed by WHO, UNICEF, UNFPA and the World Bank Geneva*: WHO.

Article DOI: 10.52589/AJHNM-J0SBBTAU
DOI URL: https://doi.org/10.52589/AJHNM-J0SBBTAU