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UTILIZATION OF LIFE SAVING SKILLS AMONG NURSES AND MIDWIVES AT MURTALA MUHAMMAD SPECIALIST HOSPITAL, KANO

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ABSTRACT

Maternal morbidity and mortality associated with pregnancy and childbirth is of clinical peril on a global scale. A cross sectional survey design was employed and the study aimed at exploring the level of awareness on Life Saving Skills (LSS), LSS practices been employed, barriers to implementation and strategies to promote effectiveness of LSS practice. A total sample of 154 nurses/midwives were recruited for the study at Murtala Muhammad Specialist Hospital, Kano. The result showed that 87.0% of the nurses/midwives were aware of LSS, Majority of the nurses/midwives reported numerous challenges to implementation of LSS some of which include Shortage of skilled birth attendant (93.5%), Attitude of health care provider (79.2%), Inadequate equipment and supplies (81.8%) and Inadequate training for midwives (77.9%); they also identified some of the strategies to promote effectiveness of LSS such as Provision of lifesaving skills equipment (84.4%), Training and retraining of personnel in life saving skills (88.3%), Accessibility of patient to the life saving skills services (97.4%). The study concluded that there is a high level of awareness on utilization of LSS. Therefore, it is recommended that multilateral collaboration

is needed in the study setting to overcome the limiting factors to utilization of LSS.
Keywords: Utilization, Life Saving Skills, Midwives, Nurses

INTRODUCTION

Approximately 830 women die worldwide on a daily basis due to complications of pregnancy and child birth and 14 % of these deaths, occur in Nigeria (WHO, 2016; National Population Commission, 2014). Millennium Development Goal (MDG) number five proposed that, by 2015, maternal mortality should be reduced by 75 % from that of the level reported in 1990. It has been observed that worldwide maternal deaths are declining by 45 %, however, this is occurring much more slowly in Sub-Saharan countries, Nigeria included (August, Pembe, Mpembeni, Axemo & Darj, 2016; WHO, 2016).

In sub- Saharan Africa, the lifetime risk of maternal deaths is 1 in 16, and for developed nations only 1 in 2800 (August et al., 2016). Nigeria rank as one of 13 countries in the world with highest maternal mortality rate. It is estimated that about four maternal deaths occur in Nigeria per hour, 90 per day and 2,800 per month, a total of about 34,000 deaths annually (WHO, 2016).

Maternal mortality is still a leading cause of death among women of reproductive age (15-49years) worldwide, with the current estimated maternal mortality ratio (MMR) of Nigeria at 545 per 100,000 live birth (WHO, 2016).
In Nigeria, 58,000 women die annually due to complications of pregnancy

and child birth that can be prevented by Life Saving Skills (LSS), which are early, aggressive, and coordinated interventions for prevention of maternal mortality (Nkwonta & Oyetunde, 2017). Nigeria has one of the highest rates of maternal mortality in the world and contributes about 10% of the world Maternal Mortality, although its population size is only 2% of the world population (Muhammad, 2009). Maternal mortality rates in the Northern States of Nigeria are estimated to be far above the current national figure of 545 per 100,000 live births (WHO, 2007).
Live Saving Skills (LSS) are those interventions for reducing maternal and neonatal mortality and morbidity through acquiring skills which allow nurses/midwives to recognize and respond to emergencies (related to pregnancy, child bearing and rearing). LSS also refers to the ability to prevent, identify and treat problems such as shock, hemorrhage, infection, (sepsis) and eclampsia (convulsion from high blood pressure), and to manage abortion complications (August et al., 2016; Muhammad, 2009).

Most maternal deaths are the direct result of complications arising during pregnancy, birth and postpartum; postpartum hemorrhage, sepsis, complications of unsafe abortion, prolonged or obstructed labour and hypertensive disorders of pregnancy especially eclampsia (Nkwonta & Oyetunde, 2017). These complications occur at any time during pregnancy or childbirth without forewarning. Others are as a result of indirect factors such as lack of government funding and political will,

barriers to accessing health care such as distance, few skilled attendants and lack of quality care, poor functioning health systems (August et al., 2016; Muhammad, 2009).

These challenges could be addressed by providing skilled attendance for antenatal and delivery care as well as counseling on danger signs, birth preparedness and complication readiness (BP/CR) plans and provision of emergency obstetric care (Nkwonta & Oyetunde, 2017; August et al., 2016).

This study was therefore conducted to determine the awareness of nurses/midwives on LSS, LSS practices been employed, Barriers to implementation and Strategies involved in promoting the effectiveness of life saving skills in reducing maternal mortality at Murtala Muhammad Specialist Hospital.

STATEMENT OF THE PROBLEM

Millennium Development Goal (MDG) number five proposed that, by 2015, maternal mortality should be reduced by 75 % from that of the level reported in 1990; In Sub-Saharan countries, Nigeria included this goal is yet to be achieved. Effective implementation life saving skills is one of the approaches to ensure that this goal is realized. In light of the above the study aims to explore the level of awareness on Life Saving Skills (LSS), LSS practices been employed, barriers to implementation and strategies to promote effectiveness of LSS practice.

Conceptual Framework

This conceptual framework on the causes of maternal deaths illustrates that health outcomes are determined by interrelated factors, encompassing nutrition, water, sanitation and hygiene, health-care services and healthy behaviors, and disease control, among others (WHO & UNICEF, 2012). These factors are defined as proximate (individual), underlying (household, community and district) and basic (societal). Factors at one level influence other levels. The framework is devised to be useful in assessing and analyzing the causes of maternal mortality and morbidity, and in planning effective actions to enhance maternal health (WHO & UNICEF, 2012).

MATERIALS AND METHODS

Setting / Study Population

The study was conducted among nurses and midwives at Murtala Muhammad Specialist Hospital, Kano, Nigeria. This hospital was the first hospital to be founded in Kano city and is one of the oldest and largest hospitals in Northern Nigeria. It was established in the year 1926 with 16 beds, which has now been expanded comprising of different department and units. The hospital was chosen because it is one of the largest health centers with sufficient nurses and midwives. The hospital is located in the center of Kano Municipal Local Government which is a densely populated area of the state.

Target Population

The target population for the study consists of 154 nurses and midwives working at Murtala Muhammad Specialist Hospital, Kano.

Study Design and Sample

The study design used was a Descriptive cross-sectional study. No sampling was done as the population was manageable. The sample size was 154 nurses and midwives working at Maternity unit of Murtala Muhammad Specialist Hospital, Kano.

Instrument Description / Data Collection

Informed consent was obtained from prospective respondents prior to commencement of the interviews. Approval for the study was obtained from the Ethical Approval Committee at Murtala Muhammad Specialist

Hospital, Kano. A pre-tested structured interviewer-administered questionnaire was used. The questionnaire was adapted from the survey tools used in a previous study (Nkwonta & Oyetunde, 2017). It was divided into five parts; the first section inquired about personal data including age, tribe, religion, professional status and working experience. The second part elicited information about awareness on life saving skills practice employed in reducing maternal mortality. The third section inquired about the Life Saving Skills practice employed in reducing maternal mortality. The fourth section elicited information about barriers to implementation of life saving skills and the final section inquired about Strategies involved in promoting the effectiveness of life saving skills in reducing maternal mortality.

Validity and Reliability of Research Instrument

An evaluation of the instrument by four (4) experts (two lecturers of Maternal and child health Nursing as well as two clinicians in the area of obstetrics and gynecology) in the area of study gave a face and content validity of 80 percent.

Data Analysis

The data collected from this study was analyzed using Statistical Package for Social Sciences (SPSS) version 20. Quantitative data were presented using Descriptive statistics, simple frequency tables and percentages.

RESULTS

A total of 154 questionnaires were administered, completed and analyzed. Findings from the study as indicated in Table 1 revealed that About

3 out of every ten of the respondents 44 (28.6%) of the respondents are above 50 years. The Table further revealed that majority 124 (80.5%) of the respondents are Hausa/Fulani. The vast majority of respondents 144 (93.5%) are Muslims. Only a few of the respondents 6 (3.9%) have reached the professional status of Chief Nursing Officer (CNO). More than half of the respondents 90 (58.4%) have attained 6-10 years.

Figure I showed that majority of respondents 134 (87.0%) were aware of life saving skills employed in reducing maternal mortality. Only a few of the respondents 20 (13.0%) were unaware of life saving skills employed in reducing maternal mortality.

Table 2 revealed that nurses and midwives at Murtala Muhammad Specialist Hospital employed all the Life saving skills practices mentioned in table 2 in reducing maternal mortality.

Table 3 indicated that a vast majority of the respondents agreed that Shortage of skilled birth attendant (93.5%), Attitude of health care provider (79.2%), Inadequate equipment and supplies (81.8%), Inadequate training for midwives (77.9%), Lack of technical support (83.1%), Poor cooperation between health professionals (84.4%), Poor access to health facilities, especially in rural areas (80.5%), Delay in accessing care (77.9%), Limited available finance (84.4%) and Socio-cultural and religious barriers (81.8%) are barriers to implementation of LSS practices in reducing maternal mortality.

Table 4 revealed that majority of the respondents agreed that Provision of lifesaving skills equipment (84.4%), Training and retraining of personal in life saving skills (88.3%), Accessibility of patient to the life saving skills services (97.4%), Expanding programmes to every local government in the state (81.8%), Reduction of delay in accessing care (88.3%), Emphasize on the use of information education communication materials (77.9%), Good cooperation between the health professional (84.4%), Regular maintenance of adequate equipment and services (77.9%), Establishment of emergency triage and treatment for emergency obstetric care (81.8%) and Provision of additional incentives for health workers (81.8%) are the strategies needed to promote the effectiveness of life saving skills in reducing maternal mortality.

DISCUSSION

The findings from this study indicated that a majority (87%) of nurses/midwives were aware of LSS practices employed in reduction of maternal mortality. This is much higher than 53% reported in a research conducted in Anambra, Nigeria (Nkwonta & Oyetunde, 2017). Other research carried out in Nigeria and Ethiopia also revealed high knowledge of LSS by the midwives (Oyetunde & Nkwonta, 2015; Yaekob, Shimelis, Henok, & Lamaro, 2015). However, Oladapo, Fawole, Loto, Adegbola, Akinola Alao & Adeyemi (2009) reported only 28.3% awareness on LSS by midwives.

Findings from the study indicated that a vast majority of the respondents agreed that Shortage of

skilled birth attendant (93.5%), Attitude of health care provider (79.2%), Inadequate equipment and supplies (81.8%), Inadequate training for midwives (77.9%), Lack of technical support (83.1%), Poor cooperation between health professionals (84.4%), Poor access to health facilities, especially in rural areas (80.5%), Delay in accessing care (77.9%), Limited available finance (84.4%) and Socio-cultural and religious barriers (81.8%) are barriers to implementation of LSS practices in reducing maternal mortality. This was consistent with findings of prior studies, which revealed that Nigerian midwives mentioned lack of an assistant, shortage of oxytocin, non-compliance of patient and perception of the procedure to be time consuming are some of the factors that hinder the practice of LSS in reducing maternal mortality (Nkwonta & Oyetunde, 2017; Braddick, Tuckey, Abbas, Lissauer, Ismail, Manaseki-Holland, & Stokes, 2016; Oyetunde & Nkwonta, 2015; Shack, Elyas, Brew & Peterson, 2014; Yaekob et al., 2015).

The study further revealed that majority of the respondents agreed that Provision of lifesaving skills equipment (84.4%), Training and retraining of personal in life saving skills (88.3%), Accessibility of patient to the life saving skills services (97.4%), Expanding programmes to every local government in the state (81.8%), Reduction of delay in accessing care (88.3%), Emphasize on the use of information education communication materials (77.9%), Good cooperation between the health professional (84.4%),

Regular maintenance of adequate equipment and services (77.9%), Establishment of emergency triage and treatment for emergency obstetric care (81.8%) and Provision of additional incentives for health workers (81.8%) are the strategies needed to promote the effectiveness of life saving skills in reducing maternal mortality. This was consistent with findings of similar studies conducted in Nigeria, Uganda, Ghana and Ethiopia (Nkwonta & Oyetunde, 2017; Braddick et al., 2016; Oyetunde & Nkwonta, 2015; Shack et al., 2014; Yaekob et al., 2015).

CONCLUSION

The findings of the study indicated a high level of awareness on LSS by nurses and midwives. Therefore, it is recommended that multilateral collaboration is needed in the study setting to overcome the limiting factors to utilization of LSS

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TABLES AND FIGURES

TABLE 1: Distribution of respondents by Bio-demographic data N=154

Variable	Frequency	Percentage (%)
Age		
21-30	30	19.4
31-40	38	24.7
41-50	42	27.3
50 and above	44	28.6
Tribe		
Hausa/Fulani	124	80.5
Yoruba	20	13
Igbo	10	6.5
Others	0	0
Religion		
Islam	144	93.5
Christianity	10	6.5
Others	0	0
Professional Status		
NO	50	32.5
SNO	60	39
PNO	20	13
ACNO	18	11.7
CNO	6	3.9
Working Experience		
1-5 years	42	27.3
6-10 years	90	58.4
11-15 years	10	6.5
16 years and above	12	7.8

Figure 1: Pie Chart showing the Awareness of nurses and midwives on Utilization of Life Saving Skills in Reducing Maternal Mortality

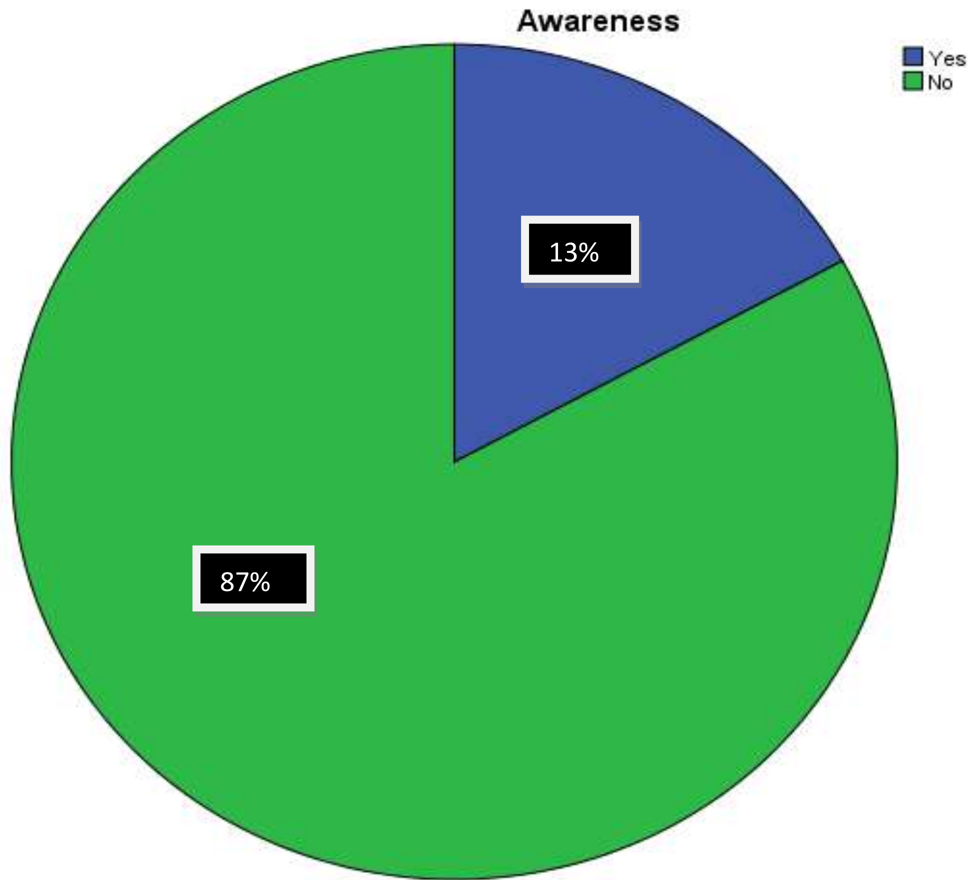

Table 2: Distribution of Respondents by Life Saving Skills practice employed in reducing maternal mortality N= 154

Variables	Agreed (%)	Undecided (%)	Disagreed (%)
Quality antenatal care	120 (77.9)	10 (6.5)	24 (15.6)
Monitoring progress of labour with partograph	130 (84.4)	4 (2.6)	20 (13)
Prevention and treatment of hemorrhage	126 (81.8)	3 (1.9)	25 (16.2)
Access to post abortion care	128 (83.1)	0 (0)	26 (16.8)
Episiotomies and repair of lacerations	130 (84.4)	3 (1.9)	21 (13.6)
Prevention and management of sepsis	124 (80.5)	0 (0)	30 (19.5)
Family planning services	144 (93.5)	0 (0)	10 (6.5)
Rapid blood services	122 (79.2)	6 (3.9)	26 (16.8)
Vacuum extraction	126 (81.8)	2 (1.3)	26 (16.8)
Resuscitation for adult and infant	120 (77.9)	0 (0)	34 (22.1)
Improved education for women and girls	130 (84.4)	0 (0)	24 (15.6)
Recognize and manage malaria in pregnancy	120 (77.9)	3 (1.9)	31 (20.1)
Involve the community to plan on how to prevent obstetric death effectively	128 (83.1)	2 (1.3)	24 (15.6)

Table 3: Distribution of Respondents by Barriers to Implementation of Life Saving Skills in Reducing Maternal Mortality N= 154

Variables	Agreed (%)	Undecided (%)	Disagreed (%)
Shortage of skilled birth attendant	144 (93.5)	0 (0)	10 (6.5)
Attitude of health care provider	122 (79.2)	6 (3.9)	26 (16.8)
Inadequate equipment and supplies	126 (81.8)	2 (1.3)	26 (16.8)
Inadequate training for midwives	120 (77.9)	0 (0)	34 (22.1)
Lack of technical support	128 (83.1)	0 (0)	26 (16.8)
Poor cooperation between health professionals	130 (84.4)	3 (1.9)	21 (13.6)
Poor access to health facilities, especially in rural areas	124 (80.5)	0 (0)	30 (19.5)
Delay in accessing care	120 (77.9)	10 (6.5)	24 (15.6)
Limited available finance	130 (84.4)	4 (2.6)	20 (13)
Socio-cultural and religious barriers	126 (81.8)	3 (1.9)	25 (16.2)

Table 4: Distribution of Respondents by Strategies Involved In Promoting the Effectiveness of Life Saving Skills in Reducing Maternal Mortality N= 154

Variables	Agreed (%)	Undecided (%)	Disagreed (%)
Provision of lifesaving skills equipment	130 (84.4)	4 (2.6)	20 (13)
Training and retraining of personal in life saving skills	136 (88.3)	0 (0)	18 (11.7)
Accessibility of patient to the life saving skills services	150 (97.4)	0 (0)	4 (2.6)
Expanding programmes to every local government in the state	126 (81.8)	0 (0)	28 (18.2)
Reduction of delay in accessing care	136 (88.3)	0 (0)	18 (11.7)
Emphasize on the use of information education communication materials	120 (77.9)	13 (8.4)	21 (13.6)
Good cooperation between the health professional	130 (84.4)	4 (2.6)	20 (13)
Regular maintenance of adequate equipment and services	120 (77.9)	10 (6.5)	24 (15.6)
Establishment of emergency triage and treatment for emergency obstetric care	126 (81.8)	4 (2.6)	24 (15.6)
Provision of additional incentives for health workers	144 (81.8)	0 (0)	5 (3.3)

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