AVAILABILITY AND CATEGORIES OF MATERNAL HEALTH MESSAGES IN HEALTH CENTRES OF SELECTED RURAL COMMUNITIES IN BAUCHI STATE

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ABSTRACT
Maternal mortality rate has been found to be still very high in Nigeria especially in the North Eastern part where Bauchi state is located. Various interventions have been put in place by government and Non-Governmental Organisations in an effort to curtail higher mortality rates among women of child bearing age. One of such interventions has been identified as provision of adequate information aimed at creating awareness regarding ways of improving maternal health. This paper, using the Information Motivation and Behavioural (1MB) skills model posits that provision of information about improving maternal health is a necessary step to motivating the adoption of healthy behavioural skills among women of child bearing age. In view of this, health centres were assumed to be one of the places that such information should be provided. Therefore, health workers in selected health centres in the study area were the respondents for the study. Survey research method was used to find out if women with maternal health issues visit the health centres and if there is availability of maternal health messages in the health facilities that could lead to the necessary maternal health awareness among the women. Findings indicate that there is availability of such messages and they arein form of Posters and general counseling by health workers. As a result of these findings, it is recommended that other communication channels/strategies should be explored by health communication experts in the dissemination of maternal health messages/information at the health centres so as to enhance levels of awareness through the provision of information through multiple channels of communication. Further studies can equally be conducted to examine the effectiveness of the available messages/information as appropriate to the target group.

Introduction
Maternal health refers to the health of a woman during pregnancy, childbirth and the post partum period. Statistics indicate that in Nigeria, there exist huge urban/rural and zonal disparities in maternal health access and utilization. The Multiple Indicator Ouster Survey (MICS) indicates that maternal mortality is more than twice as high in the rural areas than in the urban areas; with the North East region, where Bauchi state is situated, having the highest maternal mortality rate (FOS, 2000).

Most cases of maternal mortality are preventable. According to Hunt and De-Mesquita (2009), an estimated 74 percent of maternal deaths could be averted if all women had access to the interventions for preventing or treating pregnancy and birth related complications. In many countries with high maternal mortality rates, there is the need to increase provision of appropriate quality services and the bridging of other inequalities such as weak health systems, lack of political commitment and lack of information that can often prevent maternal mortality and morbidity.

Maternal mortality in Nigeria and elsewhere in the developing world is mostly avoidable through some relatively uncomplicated health interventions (Nieburg, 2012). Availability of maternal health information/messages is considered very essential in considering maternal health interventions that are aimed at improving maternal health. However, the messages, services and resources that ensure safe delivery and recovery are too often not available or accessible to the target group. Provision of relevant information on health issues as well as their availability in health centres tends to address barriers related to lack of information on health matters such as maternal mortality, which threaten human survival.

Research Objectives

The objectives of this study are to:

1) Find out if women with Maternal Health Issues visit the selected health care centres;
2) Ascertain the availability of Maternal Health messages in the selected health centres;
3) Find out the forms of the available maternal health message

Health Communication

Health Communication links the spheres of communication and health and has been recognized as a necessary element of efforts to improve personal and public health. The practice of health communication therefore, has contributed to health promotion and disease prevention in several areas. Dissemination of health messages through public education campaigns can seek to change the social climate to encourage healthy behaviours, create awareness, change attitudes, and motivate individuals to adopt recommended behaviours. (Maibach and Parrott, 1995). Health promotion is any event, process or activity that facilitates the protection or improvement of the health status of individuals, groups, communities or populations health promotion is premised on the understanding of the fact that the behaviours in which we engage, and the circumstances in which we live, impact on our health, hence, health promotion is a product of health education and public health policy (Tones, 1998, cited in Berry, 2007).

Health promotion involves the construction of ways to provide scientific information, both to encourage the individuals to find the motivational basis for developing non-risky behaviours and to modify the existing ones. Therefore, preventive strategies must include health education through information and educational campaigns that can reach the entire population with general information. But they should include interventions of personalized information to promote the modification of risk behaviours and the adoption of adequate living styles implemented within a relationship of professional help to put an emphasis on individual cultural and social features (Frati and Cordone cited in Frati, Luzi & Colucci, 2010).

Communication about health encompasses the study and use of communication strategies to inform and influence individual and community decisions that enhance health. According to Anatsui (2014), health communication makes available information to assist in making complex choices, such as selecting health plans, care providers and treatments. Health promotion and communication attempt to reduce and eliminate the risk factors of lifestyle-related health behaviours. Receiving information is an important initial step in health behaviour change (Freimuth, Stein & Kean, 1989).

Information is fundamental to choice and the making informed decisions. Information also helps knowledge and understanding. It gives patients the power and confidence to engage as partners with their health services. Individuals are therefore, encouraged to be well informed in health topics. This is because they are expected to play an active role in seeking health information, managing their health and participating in health and medical decision-making (McNutt 2004).

Maternal Mortality in Nigeria.

The World Health Organization defines maternal mortality as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes (WHO, 2010).

Generally, adult and maternal mortality indicators are used in assessing the health status of a population, especially in developing countries such as Nigeria. The estimated maternal mortality ratio in 2013 is 576 deaths per 100,000 live births (NDHS, 2013). This is almost the same with the 2008 ratio of 545 deaths per 100,000 live births. This suggests that there is no change in maternal mortality ratios between the two surveys, because "the difference between the 2008 and 2013 maternal mortality, ratio estimates is not statistically significant" (NDHS, 2013, p 278). For the purpose of this study, three components of maternal health, which help in reducing maternal mortality, are elaborated. These components are: Antenatal care, Place of Delivery and Post Natal care.

Antenatal Care: Antenatal care (ANC) attendance is an important element of a comprehensive maternal health strategy. According to Doctor etal., (2011, p.ll), "Utilization of ANC provides opportunities for a full range of health promoting services that may include weight and blood pressure measurement, screening and treatment for syphilis, prevention and presumptive treatment of malaria in pregnancy and health education, prevention of mother - to - child transmission of HIV, etc." Most importantly however, ANC represents an opportunity to counsel women about possible serious complications to pregnancy and delivery and to promote institutional delivery (Doctor et al., 2011).

According to NDHS (2013 p. 128), antenatal care provided by a skilled health worker enables:
(1) Early detection of complications and prompt treatment (e.g. detection and treatment of sexually transmitted infections, (2) Prevention of diseases through immunization and micronutrient supplementation, (3)birth preparedness and complication readiness, and (4) health promotion and disease prevention and counseling for pregnant women.

The major objective of antenatal care is to ensure optimal health outcomes for the mother and her baby. Antenatal care from a trained provider is important so as to monitor the pregnancy in order to reduce morbidity for the mother and child during pregnancy and delivery. The importance of skilled attendance at delivery is important, and ANC visits serve to encourage women to have skilled attendants at birth at a facility, who can provide life - saving obstetric care interventions towomen who develop complications (Doctor et al., 2011).It is during this gestation period that the health condition of the mother and the unborn baby is monitored to ensure safe delivery.

Place of Delivery: Increasing the percentage of births delivered in health facilities is equally an important factor in reducing deaths arising from complications of pregnancy. The expectation is that, if a complication arises during delivery, a skilled health worker can manage it or refer the mother to the next level of care. Antenatal care attendance and other socio-demographic factors are significant predictors of having a birth at a facility (Doctor et al., 2011).

Post Natal Care: The post partum period is important for women. There is evidence that "a large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery" (NDHS, 2013p.l41). Postnatal care visits provide an ideal opportunity to educate a new mother on how to care for herself and her newborn baby.

The recently launched Sustainable Development Goals (SDGs) offer an important opportunity to improve the maternal health situation in Nigeria. Rural and northern Nigerian women have been identified as key vulnerable and at - risk maternal health groups in Nigeria (Izugbara, Wekesah & Adedini, 2016).

Baseline Information from the Nigeria Evidence-Based Health System Initiative (NEHSI) Study in Bauchi State

The Nigeria Evidence-based Health System Initiative (NEHSI) was launched in 2008 as a joint effort of the government of Nigeria, IDRC and the Canadian International Development Agency (CIDA). It strengthens health information systems in two Nigerian States Bauchi and Cross River - and trains decision-makers to use local evidence in planning and managing health services. Improving maternal and child health outcomes is a top priority.

In Bauchi State, the project carried out a Social Audit on Primary Health Care with women of childbearing age (14 - 49). It came out with a score card that showcased some components of maternal health in Bauchi state for the years 2009 and 2013. Key among the components relevant to this study is about the main source of maternal health information for women as presented below:

Table A: Main Sources of Information on health

	Component	**Year 2009**	**Year 2013**
a.	Don't get any	14%	13%
b.	Family friends	17%	6%
c.	Media (Radio/TV)	30%	36%
d.	Health Worker	39%	42%
e.	Community institutions	-	5%

Source:(NEHSI, 2010).

The above table indicates the main sources of acquiring maternal health information by women in Bauchi State. It shows that a significant percentage of women (39% in 2009 and 42% in 2013) have health workers as their main source of maternal health information.

The Information Motivation and Behavioural (1MB) Model as a Framework

The 1MB Model postulates that health-related information; motivation and behavioural skills are important determinants of whether or not to perform health behaviour (Fisher *et al,* 2008).

Hence, if a person is well-informed, motivated to act and they have the skills and confidence to take action, they are more likely to initiate and maintain health-promoting behaviours that may produce positive outcomes.

According to this model, information is the first construct. Information is directly related to preventative behaviour. The more information a person has, the greater the likelihood that he/she will indulge in preventative behaviour. Information is the basic knowledge about a medical (Health condition that might include how the disease develops, its expected courses and effective strategies for its management (WHO, 2015).

The second construct is motivation. Motivation is comprised of two types: (a) personal motivation to practice preventative behaviours, such as attitudes toward practicing specific preventative actions and (b) social motivation to engage in preventative behaviour, such as having perceptions of social support. Motivation encompasses personal attitudes towards the adherence behaviour, perceived social support for such behaviour, and the patient's objective norm or perception of how others with this medical condition might behave (WHO, 2015).

The third construction of the 1MB model is behavioural skills. This comprises of an individual's objective ability and self-efficacy in performing the behaviour. Self-efficacy is the confidence that a personhas in his/her ability to perform a given behaviour at the present moment (Sharma, 2012). Behavioural skills include ensuring that the patient has the specific behavioural tools or strategies necessary to perform the adherence behaviour such as enlisting social support and other self-regulation strategies.

According to Fisher and Fisher cited in Richard (2001p.84), Information and Motivation are regarded as independent entities. Well informed individuals may have either high or low motivation to practice preventive behaviour, and also well-motivated individuals may or may not be well-informed. However, Richard further posits that information is the first critical step in the 1MB approach because people cannot enact a preventive behaviour if they do not know much about the associated ailment, behaviour or practice; therefore, information is a necessary precursor to risk-reduction behavior. The model posits that performing a health promotion behaviour is a function of the extent to which an individual is well informed about the behaviour (e.g. has positive personal beliefs and attitudes towards the behaviour or outcome, and social support for the behaviour), and has the requisite skills to execute the behaviour and confidence in their ability to do so across various situations (Fisher and Fisher, 2000).

Essentially, the model demonstrates that information is a pre-requisite to enacting a preventive behaviour (WH©, 2015). As such, this study assumes that availability of adequate information on maternal health in the health centre could bring about an awareness that could lead to improved maternal health. As such, the model provides a valid framework for public health education via health workers in health centres.

Methodology

Survey was the methodology adopted in this study. The population for the study consisted of health workers in the selected communities. The Multi-Stage sampling technique was adopted to select the communities. At the first instance, Stratified Sampling was used to group the Local

Government Areas in Bauchi state into the three Senatorial Districts. Thereafter, ballot was used to pick two local governments in each of the senatorial districts, making a total of six Local Government Areas. In each Local Government area picked, two communities were further picked through ballot, making a total of 12 communities. Questionnaire was used as the instrument for data collection. Ten copies of the questionnaire were distributed to the health workers working in the health centres of the selected communities and who were readily available to give responses due to the demanding nature of their schedule, making a total of 120 respondents.

Results and Discussion

A total of 120 copies of the questionnaire were distributed to health workers working within the study area and the same number was retrieved. The data is presented below:

Age of respondents

Table 1: Distribution of respondents based on age brackets

Age (years)	Frequency	Percentage
20-30	35	29.16
31-40	66	55.00
41-50	14	11.67
>=51	5	4.17
Total	**120**	**100**

Table 1 show that the health workers were relatively young and in their working age as only 4% of them were close to the retirement age of 60.

Qualification of respondents

Table 2: Distribution of respondents based on their qualification

Qualification	Frequency	Percentage
MBBS	8	6.67
Midwife	45	37.50
Nurse	32	26.67
Community Health Extension Worker	35	29.16
Total	**120**	**100**

Table 2 shows that only 6.67% of the health workers were medical doctors while majority (37.50%} of the respondents were midwives. This indicates a probable low enrolment of indigenes into the medical profession.

Working experience of respondents

Table 3: Distribution of respondents based on number of years of working experience

Working Experience	Frequency	Percentage
<1	9	7.50
1	14	11.67
2-3	26	21.67
4-5	31	25.83
>5	40	33.33
Total	**120**	**100**

Table 3shows that 33.33% of the health workers have more than 5 years of working experience and only 7.50% have less than 1 year of working experience. Thus, it can be said that the health workers have a moderate duration of working experience.

Gender of respondents

Table 4: Distribution of respondents based on gender

Gender	Frequency	Percentage
Male	52	43.33
Female	68	56.67
Total	**120**	**100**

Table 4 shows that the females are slightly more than the males in terms of number.
Whether women with Maternal Health Issues visit the health facilities

Table 5: Distribution of respondents based on whether women with issues relating to maternal health come to the health facilities

Women with ailments	Frequency	Percentage
Yes	120	100
No	0	0
Total	**120**	**100**

Table 5 indicates all the respondents attesting that women with issues relating to maternal health do come to the health facilities.

Frequency of visits to health facilities by women with maternal health issues

Table 6: Distribution of respondents based on the frequency of visits to health facilities by women with issues of maternal Health

Frequency of visits to health facilities	Frequency	Percentage
Daily	11	9.17
At least once a week	20	16.66
At least once in 2 weeks	62	51.67
At least once a month	23	19.17
At least once a year	4	3.33
Total	**120**	**100**

In table 6, the health workers indicated that most women with issues relating to maternal health (51.67%) come to the health facilities at least once in two weeks. This indicates that there is probability of sensitization about the importance of maternal health in the area.

Availability of Messages on modern maternal health at the health facility

Table 7: Distribution of respondents based on whether there are messages on modern maternal health at their Facilities

Availability of Messages	Frequency	Percentage
Yes	120	100
No	0	0
Total	**120**	**100**

Table 7 shows that all the respondents testify that there are messages on modern maternal health at then facilities. Examples of such messages are the posters seen by the researcher displayed at the health centres.

Forms of messages relating to modern maternal health practices

Table 8: Distribution of health workers based on the forms taken by messages relating to modern maternal health practices at the health facilities

Forms of Messages	Frequency	Percentage
Posters and Counseling	120	100
Total	**120**	**100**

Table 8 indicates that both counseling and posters are used to provide the women with maternal health messages. There is an evidence of Posters that encourage the patronage of skilled birth attendants seen by the researcher at the health centres.

Frequency of exposure of women to health messages relating to maternal health

Table 9: Distribution of respondents based on frequency of exposure of women to health messages on maternal health

Frequency of exposure to messages	Frequency	Percentage
Everyday	0	0
During routine visitations, such as ANC	53	44.17
When they present at the facility with ailments/complications	67	55.83
Total	**120**	**100**

In Table 9, the health workers attest that most patients come across the messages when they present at the facility with ailment/complications and during routine visitations, such as ANC visits. Research objective one sought to find out if women with maternal health issues in the study area visit the selected health care centres. Results show that they do. Table 5 indicates all

the respondents testifying that women do visit the health facilities with issues relating to maternal health. Table 6 gives a further breakdown of the frequency of visits by the women.

Research objective two tried to ascertain the availability of maternal health messages in the selected health centres. Table 7 clearly shows that messages relating to maternal health are available in the health centers as all respondents (100%) testify to this. This finding is further buttressed by the researcher as she came across posters in all the health facilities visited. According to Freimuth, Stein and Kean(1989), receiving information is an important initial step in health behaviour change. This is because information is fundamental to choice and the making of informed decisions. Information also helps knowledge and understanding as it gives patients the power and confidence to engage as partners with their health services. Individuals are therefore, encouraged to be well informed in health topics as they are expected to play an active role in seeking health information, managing their health and participating in health and medical decision-making (McNutt2004). The availability of health information in these health centres is therefore a positive step in the right direction.

Research objective three further sought to find out the forms that the available maternal health messages take! Data from the respondents indicate that all the messages on maternal health at the health centres are in form of posters and counselling. This can be seen in table 8. Posters are placed in the health centres, this has been seen by the researcher as evidence. Counseling is done when the women present at the facilities with ailments/complications or during routine visits such as Ante Natal Care (ANC) visits as indicated in table 9.This finding is further in line with the NEHSI data as presented in table A which says that a significant percentage of women in Bauchi state (39% in 2009 and 42% in 2013) have health workers as their main source of maternal health information. Also, according to Doctor *et al.,* (2011), ante natal care visit provides an opportunity to counsel women about possible serious complications to pregnancy and delivery and to promote institutional delivery (Doctor et al., 2011).

Conclusion

The study has been able to establish that there is availability of messages on maternal health in the study area and that the messages are mostly in form of posters displayed at the facilities as well as in form of counseling. This indicates that women do come across messages on maternal health because messages do not take only one form, so at least there is a possibility of coming across at least one of the available forms of messages. This is a further indication that there is hope for improved maternal health as long as women visit health facilities due to the awareness being created through the messages available at the health centres. The availability of health information in these health centres is therefore, a positive step in the right direction because information is fundamental in making choices and informed decisions as well as helps in the creation of knowledge and understanding among people.

What remains therefore, is to ensure that women are encouraged to regularly visit the health centres especially for routine maternal health issues such as ante natal and post natal care visits so that they can be exposed to the messages. Other communication strategies (apart from the use of Posters and Counseling) should be explored by health communication experts in the dissemination of maternal health messages/information at the health centres so as to enhance levels of awareness through the use of multiple communication channels. Also,further studies

can equally be conducted to examine the effectiveness of the available messages/information as appropriate to the target group. This is because it has been suggested that interventions and specifically, health related interventions can only be effective when messages are adequately available and appropriate to the target group.

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