

Assessment of the Impact of Midwife Service Scheme (MSS) on Maternal and Child Health (MCH) in Rafi Local Government Area- Niger State

Janet A Ephraim*

Midwife Tutor/Director Policy and Intersectorial Coordination, Niger State Agency for the Control of HIV/AIDS (NGSACA) Minna, Nigeria

***Corresponding Author:** Janet A Ephraim, Midwife Tutor/Director Policy and Intersectorial Coordination, Niger State Agency for the Control of HIV/AIDS (NGSACA) Minna, Nigeria.

Received: January 10, 2019; **Published:** January 29, 2019

Abstract

This study on assessment of impact of MSS in Rafi Local Government Area in Niger State was born out of dearth of data to show how far the MSS program have gone in the improvement of MCH since its take off in 2009 to date through the evaluation of the program main goal. The MSS program has been identified as the most effective and efficient strategy for reducing MMR and IMR in our Primary level of health system in our nation. Four clusters in Rafi Local Govt. area designated MSS centre were selected. Questionnaire was the only instrument for data collection.

Keywords: Maternal; Impact; Midwife; MSS

Introduction

The MSS is a new intervention designed to address shortage of skilled birth attendants at Primary Health care level in Nigeria some few years ago. The development has been identified as a key factor responsible for high maternal mortality in Nigeria. The scheme is a collaborative effort between the Federal Ministry of Health and core partners in the Maternal and Child Health effort, and is funded under the MDGs - DRG, 2009 Appropriation Act. Implementation of the scheme is based on the cluster model in which 4 Primary Health Care facilities providing basic essential obstetric care have been clustered around a general hospital with capacity to offer comprehensive emergency obstetric care and serving as referral facility. Each of the primary health care facilities have a compliment of four Midwives that work for 24 hours services.

The Midwives are given refresher training courses on Life Saving Skills and integrated Management of Childhood illness (IMCI) so as to ensure a continuum of care in a cost effective and impact maximizing ways.

Maternal health is the promotive, preventive, curative and rehabilitative health care for mothers during pregnancy, childbirth and 42 days after birth [1].

According to Lucas and Gilles, 2003 the main objectives of maternal health services are to ensure that mothers remain healthy throughout pregnancy, have healthy babies and to recover fully from the physiological changes that take place during pregnancy and child birth.

In many countries complications of pregnancy and child birth are the leading causes of death among women of reproductive age [2].

Maternal mortality is a crucial and complex measure of a country's overall health and development status. WHO (1999). WHO/UNICEF [3] also estimated that about 585,000 women die each year from problems associated with pregnancy and childbirth.

These deaths were said to occur mainly in the developing countries where maternal mortality ratio per 100,000 range from 50 in East Asia to 640 in Africa where as they are 20 or less in the developed countries.

Nigeria has a population of 140 million people with women of child bearing age constituting about 31million and children less than five years of age constituting 28 million, a significant percentage of the nation's population. As at 2009 Maternal, newborn/neonatal and child mortality rates have been unacceptably high in Nigeria. A women's chance of dying from pregnancy and childbirth in Nigeria is 1 in 13, while it is 1 in 5000 in developed nations

Niger State has 669036 total population while Rafi Local Government area has total population of 215032, population of childbearing age women which 15 - 40 years of age is 10, 729 while the population of under-five is 8,601 these are the group of people we want to find out what impact the MSS has got in their health since its establishment or take off in their community.

Statement of the problem

The Nigeria Maternal Mortality (MM) ratio range from 300 - 12,000 live birth with two-third occurring at homes, 26% of births, assisted by untrained person and 17% of women having no assistance during child birth (fed Moh. 2004).

According to WHO (1999) millions of women in developing countries experience life threaten and other serious health problems related to pregnancy and childbirth.

Because of poverty, disease and ill health in the developing world, international community adapted the millennium Development Goals (MDGs) in 2000. Two of the goals are to reduce under-five and maternal mortality rates. Analysis of result trend shows that Nigeria is making only marginal progress as at 2009 before the take-off of the MSS programme (Mid-Point Assessment over view, MDGs Nigeria sept, 2000) in reducing under five and maternal mortality rates and attaining the MDGs.

Several initiative and instrument have been introduced morbidity and mortality among mothers and children over the years. These includes safe mother hood making pregnancy safer integrated management childhood illness (IMCI) strategy, integrated maternal newborn and child health strategy (IMNCHs) etc. and accelerated child survival and development strategic frame work and plan of action (2005 - 2009 to guide implementation of child and maternal survival intervention by government all levels.

Despite these intervention gaps still exist. These gaps range from instrument accuses to services and human resources need. In many health facilities across the loafing there is shortage of skilled attendant and this has reported to have impact negatively on utilization of services by women, the midwives scheme therefore is a significant step in the national effort at imposing skilled attendance at delivering and indeed accelerate progress in the attained of MDGs 4 and 5.

Rafi local government area in zone B' geopolitical zone in Niger state is one of beneficiary of this MSS programme for the past 5 years. Therefore this study is to assess the impact of the programme on the MCH of the community that are beneficiary considering the main goal the programme set out to achieve which is to contribute to the reduction of maternal, newborn and child morbidity and mortality in Nigeria.

From the above statement of problem the following research questions were raised.

How many pregnant women receives antenatal care from your Centre before the MSS program.

What is the rate of maternal/child mortality in the community since the present of the MSS program here.

Is there any increase in the birth of babies in the hospital within the community compare to previous years?

How many neonatal mortality do you record monthly since the inception of the program.

The main aim of the study was to find out whether there is any positive significant difference between the maternal and child mortality rate in the area since the inception of the MSS program in their community.

The specific objectives of the study were:

1. To find out the level of effectiveness of the MSS program in the community of the designated clinic in regard to maternal and child mortality rate.

Hypothesis

There is a significant positive impact of Midwife Service Scheme(MSS) program on the Maternal and Child Health (MCH) in Rafi local government area of Niger state.

Significant of study content

The outcome of the study when communicated to those concerned, it is hope will enlighten the stakeholder at the local, state and federal level more on the impact of the program if maintain on MCH and its role in the reduction of MCMR in our community.

To the midwives, it will create awareness of the important of the program and lead to improved attitude to work in their various clusters, rekindle her interest in community midwifery which may be nurtured to job satisfaction and realistic attainment of midwifery goals and professional growth.

It may be useful to the National Primary Health Care Development Agency (NPHCDA) in the continuation of the program through selection of candidate for more enrolment into the program in order to reduce Maternal and Child Mortality Rate (MCMR) in our community.

It is also hoped that this study will contribute to the existing body of knowledge in this area, if properly and extensively publicized. The researcher also stand to reap much benefit from the study.

Literature Review

The midwives service scheme according to NPHCDA briefing manual (2009) is a scheme that seeks to mobilize unemployment and retired midwives for deployment to selected primary health care (PHC) facilities in rural communities in order to facilitate increase in skilled attendance at birth and the reduction of maternal newborn and child mortality in Nigeria. A skilled attendant is a health professional such as midwife or doctor who has been educated and trained to manage normal (uncomplicated pregnancy childbirth and the post-natal period, and the identification, management and referred of complication in a woman and children.

Azuitre [4] described the Nigerian maternal mortality rate as one of the highest in the world, making the country unsafe place for a woman to be pregnant and to go into labour especially the rural areas where literacy level is low poverty and cultural practice are high.

The Nigerian maternal and mortality ratio ranges from 300 - 12,000 per 100,000 live birth with two - third occurring at home 26% of birth assisted by untrained person and 17% of women having no assistance during child birth (federal ministry of health (2004) this form one of the reason for the introduction of the MSS to provide care to save our mothers and children especially at the grass root.

According to Sawyer [5] since the last decade of the 20th century intensive mobilization of the international health and development agencies have been carried out by the united nations member countries towards reducing maternal deaths especially in the developing countries WHO/UNICEF [3] estimated that about 585,000 women died each year from problems associated with pregnancy and childbirth. In many countries complications of pregnancy and childbirth are the leading causing of deaths among women of reproductive age.

Location of the study and brief historical background of Rafi Local Government.

LGA is one of the 25 LGAs that make up Niger State. Niger State is one of the state that make up the 6 states plus Federal capital territory that make up the North-Central zone of Nigeria.

Rafi Local Government shares boulder with Birni-Gwari (Kaduna State) to the west Mashegu and Mariga LGAs, to the South, to the East. The LGA is located at the northern part of the State with its headquarters in Kagara. With total population of 215,032 (2006 census) and 11 political wards. Population of child bearing age women is 10,729 (15 - 40 years) while that of UF is 8,601.

The LGA just like every other LGA of Nigeria has multi-ethnic and multi-religious with Kamuku, Inqwai, Bauchi, Hausa, Fulani, Yoruba Ibo, etc. with Kamuku as the major language.

The specific areas of the LGA for this study are Madaka, tegina, kusheriki and Yekila cluster areas of the MSS designated PHC centre in the LGA.

The people are predominantly farmers and they are followers of (Christianity and Islam).

Methodology

Population of study. The study is made up of women of childbearing age and the MSS Midwives in the Community of study. All women and Midwives that falls within the above categories forms the population of study.

Sample size and sampling technique. A total of 220 women and MSS midwives from the local government MSS cluster area were drawn from the population using systematic sampling technique. This was to get opinion of all as regard the topic under study.

Simple random sampling was used to selected 216 child- bearing age women and 4 MSS Midwives where used for the study.

Instrumentation

The main instrument of data collection for this study was structured questionnaire which was used for everybody on the level of maternal and child health improvement since the inception of the MSS programme in their community as it relate to antenatal, intra natal, postnatal and child welfare health care services.

Method of data collection

The data for the study was collected using structure questionnaire which were distributed to the literate respondents to complete while the non-literate respondents were interviewed with the questionnaire.

Results and Discussion

Table 1 presents the socio-demographic characteristics of respondents.

Characteristics	Frequency	%
Age (year)		
15 - 19	18	8.1%
20 - 24	30	13.6%
25 - 29	60	27.2%
30 - 34	52	23.6%
35 - 39	22	10%
40 - 44	24	10.9%
45 - 49	14	6.3%
Total	220	100%
Marital status		
Married	161	73.1%
Devoiced	31	14.0%
Widow	28	12.75%
Total	220	100%
Religion		
Christianity	95	43.1%
Islam	100	45.4%
Traditional	25	11.3%
Total	220	100
Level of education		
No formal education	35	15.9%
Primary education	131	59.5%
Secondary education	30	13.6%
Tertiary	24	10.9%
Total	220	100%
Occupation		
Civil servant	30	13.6%
Farming	35	15.9%
Petly trading	53	24.0%
House wife	102	46.3%
Total	220	100%
Number of pregnancies		
1	90	40.9%
2	60	27.2%
3	70	31.8%
Total	220	100%

Table 1: Socio-demographic characteristics of respondent.

The data reveal that 60 (27.2%) of the respondents were between the ages of 25 - 29, 52 (23.6) were 30 - 34, 30 (13.6), 24 (10.9) were 40 - 44, 22 (10%) were 35 - 39, 18 (8.1%) were 15 - 19 while 14 (6.3%) were in the 44 - 49 years age bracket.

The above analysis shows that majority of the respondents fall within 25 - 29 years of age which indicate that majority of the respondents are matured and within the active phase of child- bearing age women who can feed the research with proper information. The finding also reveal that majority (40.9%) of the respondents were Muslims, 38.6% were Christians while 11.3% were traditional worshipers. 73.1% were married, 14% were divorced while 12.7 were widows. The table also shows that majority of the respondents (59.5%) had only primary education. 13.6% secondary education while tertiary is 10.9% which N C E and few diploma certificate.

The finding also show that majority of them 46.3% were house wives, 24% petty trader, 15.9% farmers and 13.6% were civil servant. The table also show number of pregnancies 2 - 4 56.8%, 4 - 7 4.1% while 7 - 10 is 0%

Table 2 knowledge about midwives service scheme (MSS).

What is midwife service scheme all about? it is a program that ensures that pregnant women are attended to by a skilled birth attendant (midwife) during pregnancy, labour, purperium, care of the new born and provision of family planning service for women		
Yes	190	86.3%
No	30	13.6%
Is the program easy to Access?		
Yes	200	90.9%
No	20	9.0%
MSS benefit is for the mother and child		
Yes	202	91.8%
No	18	8.1%
What do you think about the MSS program in your area? Has it reduced MCMR		
Yes	207	94.0%
No	13	5.9%
Have you had pregnancy. Labour and delivery since the inception of the program in the community. If yes how many?		
No	32	14.5%
Yes	188	85.4%
Has the program have any positive impact on you and your children?		
Yes	210	95.4%
No	10	4.5%
How long have you notice the present of the program in your community?		
5 yrs ago	178	80.9%
6 yrs ago	42	19%

Table 2: Knowledge about midwives service scheme (MSS).

The community knowledge about the midwives service scheme services in the area.

This table indicate that 86.3% knows what MSS is all about to them in the community by responding yes while 13.6% said 'NO' 90% of the respondent said the program is easy to assess while 9.0% said 'NO' 91.8% agreed that the program is beneficial to both the mother and the child, while 8.1% said 'NO' 94.0% said the program has reduced, maternal and child mortality drastically in their community, 14.5% said they have had 2. 95.4% of the respondents said the program has positive impact on the mother and child in the community. 80.9% said they notice the program 5years ago while 19 said 6 years ago.

The midwives under the service scheme response:

- ANC- As indicated in table the majority of midwives 83.6% attend to ANC cases 4x and above for pass one year, 10% said they attended to 15, while 6.3% said they attend to 10.
- MMR- 90.1% said maternal mortality has drop in the community by at least 60% since 2015, 93.6% said there is an increase of 75% of babies delivered in the clinic with a skilled midwife attendant in attendance. 92.7% respondent shows that Neonatal mortality has decrease by 30% since the beginning of the program in the community.
- Immunization- 79.5% shows that more than 80% children are fully immunized for past five years of the program in the community.
- Asses to family planning- 88.6% respondent shows that about 50 and above have asses to family planning for past five years of the program.

The finding of the study showed that majority of the respondents (92.6%) falls within 25 - 29 years of age which indicate that majority of them are matured and within the active phase of child-bearing age women who can feed the research with proper information. It also show that majority of the respondent (59.5%) had only primary education which shows that there was enough enlightenment about the benefit of the program in the community to the people since even with their low level education they asses the services in high percentage level.

The community knowledge about the program is high with 86.3% awareness rate knowing what MSS program is all about. Accessibility rate is high as 90% of respondents say it is easy to assess. 91.8% said it is beneficial to both mother and child, while 94% said it has reduced maternal and child mortality drastically in their community. 85.4% said they have had 1 - 2 pregnancy and delivery within the period of the program in their community without recording any mortality rate while 95.4% said it has positive impact on both the mother and the children.

The response from the midwives serving under the scheme shows that there is a high level (83.6%) that attended ANC 4X and above for the pass one year. This shows that if the program is maintain, it is possible for pregnant women to sort for the service in our community which will go a long way in preventing maternal and child mortality.

86.3% said hospital delivery has also increase in the area, while 90.1% said maternal mortality has drop by at least 60% since 2015, with 75% of babies delivered in the hospital with skilled midwife as birth attendant in attendance.

92.7% respondent shows that Neonatal mortality has decreased by 40% since the beginning of the program in the community while 79.5% shows that more than 80% children under five years are fully immunized for the past two years in the community. 88.6% respondent shows that about 50 and above women have asses to family planning for past five years.

Conclusion

From the finding of the study, there was a high utilization of the MSS designated clinic centers; the positive impact of the program on the MCH is highly commendable. Most of their birth, now take place in the designated hospitals with a registered midwife in attendant. These are clear indications that the community and the people welcome the program and it has reduced the MMR within the community.

Recommendations

The following recommendations are made in view of the above findings:

- There is need for government at state and local level to sustain the program.
- I also advise that the new community midwifery that is proposed by the Nursing Council of Nigeria should be embraced by all the state and local government and be sponsored by the federal government.
- The program should be extend to more local government areas in the state for wider coverage.

Bibliography

1. Park K. "Parks Textbook of preventive and social medicine". Jabalpur, Barnasidas Bhanot (2002).
2. Sambo MN. "Health Sector Reforms: the Key to Achieving Millenium Development Goals". A paper presented at the Annual Conference of principals of school of Nursing in Nigeria held at minna, Niger State (2006).
3. W.H.O/UNICEF. Revised 1990 Estimates of Maternal Mortality; a New Approach, World Health organization and United Nations International Children Emergency Fund (1996).
4. Azuike EC. "Health sector reform in Nigeria". A paper presented at the conference of head of nursing in Nigeria held at Gombe (2006).
5. Sawyer A. "Strategies for Reducing Maternal and Infant Mortality and Morbidity: Where there is will there is way". *West African Journal of Nursing* 18.1 (2007): 4-9.

Volume 3 Issue 2 February 2019

©All rights reserved by Janet A Ephraim.