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Evaluation of midwives services scheme in a southwest Nigeria state: Policy implication for maternal and child health care programs

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David Ayobami Adewole, Ayodeji Mathew Adebayo, Taiwo Akinyode Obembe and Musibau Ayoade Titiloye

Full Length Research Paper

Evaluation of midwives services scheme in a southwest Nigeria state: Policy implication for maternal and child health care programs

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Midwives services scheme was implemented as an intervention program to mitigate maternal and child health care related challenges especially in the rural areas of Nigeria. This study was carried out to explore stakeholders' perception of the scheme with a focus on perceived facilitators and barriers to its objective. Interviews conducted among health care workers were audio-recorded, transcribed verbatim, coded, and analyzed using Nvivo software version 11 through thematic approach. Most participants opined that the scheme had the potential to minimize the challenges facing maternal and child health care in Nigeria and similar other settings. However, the most cited constraint, among others, was poor funding of the scheme. It is suggested that the scheme is re-packaged and re-launched in the efforts to address poor maternal and child health indices in the country.

Key words: Health care facilities, health policy, maternal and child health, midwives services scheme, rural communities.

INTRODUCTION

Globally, substantial progress has been made in reducing child and maternal mortalities within the space of 15 years (2000 - 2015) of the MDGs. Efforts made in many sub-Saharan African (SSA) countries have contributed considerably to this global achievement (Economic Commission for Africa, 2015). However, a sizeable number of countries in the region are still lagging behind (Alkema et al., 2016; World Bank, 2018). Nigeria falls in this category, with an average maternal and child health

indices worse than the average value obtainable in the SSA and the rest of the low and middle-income countries (LMICs) (World Bank, 2018).

In Nigeria, disparities exist between urban and the rural areas as well as from one geopolitical zone to the other, with some zones having worse scenarios than the national average. However in all the zones, the rural areas are characterized by poor availability, and scantily resourced health care facilities (Economic Commission

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for Africa, 2015; Federal Ministry of Health, 2010). Access to health services is low, a major contributor to poor health outcomes in the country (Federal Ministry of Health, 2014).

Nigeria is categorized as a LMIC and with a population of 182 million people. Poverty rate is high, and generally, the health indices are poor (Kale, 2010; World bank, 2018). The primary health care (PHC) has been adopted as the framework to implement health care programs for the populace. It is the first point of contact with the health systems, and it's primarily manned by nurses, midwives, community health officers and other categories of health care workers. This level of care is the principal provider of health services for people at the grassroots, especially in the rural areas. However, the facilities are poorly resourced with poorly remunerated and poorly motivated health workers (Bello et al., 2013; Federal Ministry of Health, 2010; Federal Ministry of Health, 2014).

One of the strategies to improving the current poor maternal, newborn and child health outcomes in Nigeria was the midwifery service scheme (MSS) that was established in the year 2009 (Abimbola et al., 2012). Categories of health care workers of the scheme engaged were the unemployed, newly qualified and retired midwives and community health extension workers (CHEWs) for deployment to selected PHC facilities in rural communities. Midwives on the scheme were also made to undergo periodic continuing medical education (CME) to ensure quality health care services delivery (The Presidency Nigeria, 2013). Newly qualified midwives among them were expected to spend a mandatory one year on the scheme for preregistration (Abimbola et al., 2012). The scheme was a collaborative effort between the three tiers of federal, state and the local governments, and supported by partners such as the WHO, UNICEF, UNFPA among others. However, the national PHC development agency (NPHCDA), a parastatal of the Federal Ministry of Health was responsible for its implementation (The Presidency, 2013).

According to the terms of reference, the federal government through the NPHCDA provides the needed technical support in the implementation and supervision of the scheme; it also provides drugs and other essential commodities as well as monthly stipends to the MSS workers. On the other hand, the states were saddled with the responsibility of equipping the secondary health facilities. The states also provided financial support to the recruited workers on monthly basis among other roles. The local governments of domiciliation of the PHC facilities were expected to provide basic but decent accommodation, security as well as a monthly financial token to the workers (Abimbola et al., 2012).

In the year 2012, Subsidy Reinvestment and Empowerment Program of the maternal and child health care (SURE-P MCH) was implemented to reinforce the MSS. Essentially, SURE-P MCH had similar goal and

areas of focus with the MSS (Okpani and Abimbola, 2016). The schemes were designed to address the inequity of access to social infrastructure, improve socio-economic development and quality of life especially in the underserved rural areas of Nigeria (Olayiwola and Adeleye, 2005). However, both schemes were terminated about four years ago by the federal government. This coincided with the expiration of a 3 year commitment grant derived from a debt relief approved to the Nigerian government by the Paris Club to enable funding development – oriented interventions in all sectors including the health system.

Prior to the present study, a one year nation-wide post-implementation evaluation of the impact of the scheme indicated an overall improvement in maternal, neonatal and child health indices, and particularly a reduction in maternal mortality ratio and neonatal mortality rate (Abimbola et al., 2012). Similar report about the scheme was cited in an earlier study (Okeke et al., 2016). A major component of the design of the MSS/SURE-P program was the inclusion of conditional cash transfer (CCT) as a form of monetary incentive to encourage health care service uptake among potential service beneficiaries. Evidence from previous studies suggests CCT could increase service uptake (Bassani et al., 2013), and more so in maternal and newborn services (Glassman et al., 2013).

Generally, health care programs can be appraised from three perspectives; consumers, providers, and the policy makers. However, for the purpose of this present study, the MSS was appraised from the healthcare workers' perspective (Okpani and Abimbola, 2016), who were the street level bureaucrats (Buse et al., 2012) saddled with the important role of health policy implementation. This approach in addition, served as a proxy in assessing to some extent, both the consumers and the policy makers' perspectives, as health personnel served as a link between them. Currently, studies on the MSS/SURE-P are few; that includes the study by Abimbola and colleagues which was a review of the structure of the scheme and its achievement one year after implementation (Abimbola et al., 2012). Other studies on the MSS involved policy makers and beneficiaries of the scheme (Okeke et al., 2016; Okpani and Abimbola, 2016).

Few studies have attempted to assess condition of service delivery and the availability of infrastructural resources in the implementation facilities. This present research was conducted to complement previous studies (Adegoke et al., 2015; Exley et al., 2016) that attempted to assess the perspective of health care workers that were directly involved, both human and material resources availability and other conditions of service delivery in the MSS scheme while it was operational. Findings from this study will contribute to learning experiences in the efforts to improve maternal and child health care services in Nigeria and in similar other

LMICs.

METHODOLOGY

Study area

This study was carried out in Oyo State, one of the 36 states of Nigeria. The state is located in the southwest of the country, with its capital city in Ibadan. Ibadan is situated 530 km southwest of Abuja, the federal capital city of Nigeria. The state has a total population of about 5.6 million people and it is divided into 33 local government areas (LGAs) (National Population Commission, 2006).

The state has three different levels of care; the primary, secondary and tertiary levels of care coupled with a good number of educational training institutions (Oyo State, 2018). The study was conducted in designated midwives service scheme (MSS) and SURE-P implementing PHC facilities across selected rural local government areas in the state. Out of the 33 LGAs in the state, the scheme existed in only 11 LGAs; 5 MSS LGAs and 6 SURE-P LGAs participated in the MSS/SURE-P MCH scheme. In each participating LGA, only 4 health care facilities were selected to implement the scheme. All implementing LGAs in the state were considered for selection into the study. One (1) MSS/SURE-P implementing facility per LGA (out of 4 MSS facilities in each participating LGA) was randomly selected into the study. Though the MSS/SURE-P scheme is a national program, however, for reasons of financial constraint, the study was limited to one state in the southwest of Nigeria. In order to obtain the best possible information about the subject of study, in each selected facility, one (1) health care worker who was directly involved in the scheme, have a good knowledge of it and willing to provide necessary information was interviewed between June and October, 2016.

However, 8 (across 8 MSS/SURE-P MCH participating LGAs) out of the estimated 11 health care workers participated in the study. For purpose of clarity, study participants were regular health care workers who were employed by the government before the implementation of the MSS/SURE-P program. However, the MSS/SURE-P program was implemented in the facilities where they worked. Again, health care workers who were employed mainly for the MSS/SURE-P program had all been discharged by the government and were no more available in these facilities as at the time of the study.

Data collection instrument

Information was sourced using an in-depth interview (IDI) guide to collect data from study participants (either a chief matron or a medical officer of health). The IDI guide was aimed at eliciting useful information along the line of design of the MSS/SURE-P Scheme. Face to face interviews were conducted among key health personnel in selected health facilities. Knowledge about MSS/SURE-P MCH, maternal and child health care services, availability and quality of physical and supportive infrastructure, organization and method of operation of the scheme and roles of stakeholders were key areas of the interview. Interviewers were postgraduate students with masters of public health (MPH) degree and a minimum of five years' experience in qualitative research data collection. Interviews were conducted in the English language. Backup of the audio interviews were done through note taking by assigned research assistants. One interview session lasted an average of 75 min. Transcription and recording of the interviews were carried out concomitantly. Transcribed data were stored in a computer and accessed through a password known only to the researchers.

Qualitative data analysis and technique

Data analysis was done using thematic approach (Braun and Clarke, 2006). Coding of the transcripts was done by two data analysts independently to develop a thematic framework. A consensus was reached about coding decisions and key themes were identified. Qualitative data were analysed on the platform of Nvivo software version 11. Output and reports were generated for specific codes, and sub-themes, and narratives were identified. Themes and narratives were interpreted within the context of the study, after which the report was written.

Ethical approval

Approval to conduct the study was sought and obtained from the Oyo State Ethics and Research Board. Permission to conduct study was also obtained from relevant authorities of the health facilities where the study was conducted. Informed consent form was made available to participants to sign after the content was duly explained, the benefits of the study described and assurance of confidentiality given. Verbal informed consents were also sought and obtained; these were audio-taped. Names or any form of identifiers were not used during the interview to ensure confidentiality. Audio tapes will be kept for a period of 5 years after which they will be destroyed.

RESULTS

Of the estimated sample of 11 potential study participants, only 8 (73%) health care personnel across 8 of the 11 LGAs (one health care personnel per LGA) were available and were interviewed. This was made up 4 males and 4 females (3 from MSS facilities and 5 from the SURE-P facilities).

Knowledge of and benefits of MSS/SURE-P

Participants were familiar with the aims of the MSS and SURE-P MCH, as they all mentioned quite often and in different contexts, reduction of child mortality, increase in manpower and professional development, supplies of equipment, mama kit (delivery kits), cash and consumables as part of the benefits derived from the scheme. Above all, participants identified the need for reduction of maternal and child mortality as the major aim of the scheme. As stated by some of the participants:

“Well, I think, the idea is that skilled manpower was not enough, in the rural LGAs, the idea was just to make skilled manpower available in order to reduce maternal and infant mortality in the LGAs. Some equipment and consumables were supplied” (R7_MoH).

Many of the participants expressed satisfaction with the scheme as they compared manpower availability, service delivery, maternal and infant mortality reduction and infrastructural development as was available under the schemes with the situations before and after (the schemes) in the facilities:

"I said it, I said by the time they were around, there was an increase of maternal and child health service patronage from the communities, and at the local government level, we felt their impact because the level of services then increased and patronage of facilities was higher than what it used to be before they came; of a truth also, we have found it difficult to fill the gap created by their exit, especially 24 h service coverage, unlike what it is now" (R6_MoH).

With regards to the achievement of the goals for which these schemes were established, majority were confident expressing their opinions on the programs as having achieved its main goal. One of them has this to say:

"...cases of death of mothers and children were greatly reduced and I think that was the aim of the government behind the MSS scheme" (R8_CNO).

Nevertheless, one of the participants was skeptical about the achievement of the scheme:

"I cannot say yes, and I cannot say no if it actually achieved its goals or not. I do not know their target, so I cannot measure it" (R1_CNO).

Quality of facility infrastructure in the MSS/SURE-P MCH program

An aspect of the scheme quality was described in terms of infrastructural assessment, the supply of drugs and other consumables. All the interviewees reported taking advantage of many of the benefits. One of the most frequently mentioned was the supply of potable water through boreholes, and sanitary agents as expressed below:

"The source of water supply to the health facility was poor, but when these SURE-P and MSS schemes started, they provided boreholes for them which are still functioning till this present moment. The schemes also provided power generating plants, but the facility is still small than what we need" (R3_CNO).

Among other effects of these schemes previously reported was the presence of stationed ambulances provided by the state government while the schemes existed. The physical environments of some of the facilities were conducive as they were upgraded by these schemes; however, not all the facilities enjoyed facility upgrade. Part of the strategies to improve maternal and child health care services was the cash rewards used as incentives to encourage pregnant women to complete at least 3-4 antenatal visits.

"Yes...yes, but only one of the four facilities was

upgraded. But I have seen some MSS facilities that were not renovated though. As for the ambulance for referral and other necessary services, well, all I need is to give instruction and it is done accordingly" (R5_MoH).

"Supplies (sanitary agents and drugs) and delivery kits were regular when the schemes were still available but it is very occasional these days". (R6_MoH).

"....they give money, cash transfer fund to the clients that registered in the clinic, and who successfully completed four antenatal visits, as well as to those who delivered at the health facilities" (R1_CNO).

Availability and supply of water and other consumables as determinants of service provision

Almost all the study participants expressed their dissatisfaction on the issue of water supply after the schemes ceased to exist. As such, majority of the facilities have resulted to source water using many strategies.

"Since the borehole breaks down without repair sometimes, we ask patients to bring with them jerry can of water for cleaning purposes, otherwise we will not attend to them. Sometimes we buy the water ourselves". (R2_MoH).

Supportive roles of stakeholders during the intervention

Analysis of the key informant interview on supportive roles of stakeholders revealed a number of key findings related to roles played by the stakeholders as documented below.

Supervisory, monitoring and evaluation from the Government

Supervision of the schemes was reportedly minimal. Participants described a general *lack of concern* on the part of the state government whose role was to provide supportive supervision to the health care facilities. One of the participants offered a statement that was representative of the comments of the majority of the interviewees:

"We call them MSS/SURE-P officials at the National PHC Agency, they come only occasionally but I have never seen officials of the state ministry of health paying a visit" (R2_MoH).

Supports from the local community host

Community participation was an integral part of the

scheme; however, the performance of the community members, operating under the community development committee (CDC) was not satisfactory, as they were less visible in their expected roles. The incorporation of village health workers (VHW) although was reported in some of the facilities, but not in all as many of the villagers including the CDC were expecting compensation for rendered community service. This is as briefly summarized below:

“During the MSS/SURE-P program, occasionally, they do come to help us cut grasses around the facility building or clean the facility itself, and, some also give us what we need, such as soaps, and other commodities needed to take care of mothers and the children. But the problem is that it is usually not enough and it comes once in a while, the people in the committee are not usually available most of the times” (R1_CNO).

“Many of the villagers were aware that pregnant women were paid some amount of money, we tried to explain to them the rationale behind the payment but they seemed not to understand or refused to understand. It is the same experience with the Community Committee members, they met for a few times and stopped coming when we could not give them any money. I cannot use my salary to pay them. But the money really improved attendance among pregnant women and nursing mothers”. (R8_CNO).

Suggestions to improve service delivery under the schemes

Nevertheless, some were of the opinion that the scheme needed to be strengthened in certain areas to ensure better performance and sustainability.

“I think it will be better for them to recruit middle age and young adults; those that are of advance age cannot perform up to expectations and they don't yield to corrections; When you employ, train them from time to time too. Attention also needs to be paid to consumables such as drug supply, water, electricity, and money needs to be earmarked for the health care sector to enable meeting the necessary areas of need and pay workers' salaries”. (R4_CNO)

Maternal and child health services post MSS/SURE-P

Almost all the participants expressed displeasure in the current situation of maternal and child health services in the health facilities after the termination of the program. Some were of the opinion that health services were not as well patronised unlike when the scheme was operational. Excerpts below are some of the statements

made by a select few of the participants:

“...we have experienced increase in the quality of service as at the time the scheme was available, the volunteers seemed to know better and good in managing health conditions especially issues related to women and child birth, we never knew the schemes will come to an end so soon...” (R6_MoH).

“The health services situation reverted to the time before the MSS was introduced, most items were supplied free. We are now, back to square one, no drug, and no ambulance. We make use of the ambulance at Tede health facility, but it is not reliable as it breaks down these days more frequently” (R2_MoH).

“...you know when these people were no more with us, many of the patients stopped coming to the facility, because when they were with us they encouraged mothers to come to the health centres. But I think the money given to the pregnant women also helped, but that has stopped too” (R8_CNO).

DISCUSSION

Knowledge of the purpose and benefits of the scheme as exhibited by the participants was quite encouraging. Satisfactory display of knowledge and perception in several studies have been linked to favourable outcomes that range from acceptance to utilization (Green et al., 2014) and prognosis of public health interventions (Liverani et al., 2017). Even though many of these participants identified a concerted need to focus on reduction of maternal and infant mortality as the major aim of the study, it is worthy to note the presence of other complexities that obstructed the achievement of this scheme. Okeke and colleagues (2016) emphasized that a scale-up of midwives supply may be insufficient on its own especially in the absence of necessary infrastructure and supportive environment. However, positive report about the program amidst lack of some basic needs in the health facilities as reported by study participants' lends credence to findings documented in literatures of improvement in maternal services partly as a result of availability of fairly adequate number of health care workers (Okeke et al., 2016).

Poor supervision of health care services under the schemes by those responsible for such is an enormous deficit. Although, there are controversies about the effectiveness and efficiency of supervision of health care services deliveries (Bosch-Capblanch and Garner, 2008), however, more evidences back the claim that supportive supervision could improve performance of health systems (Tegegne et al., 2018). As it has been employed in several other contexts, supportive supervision could be a viable managerial tool to improving health systems

performance and in programs such as the MSS/SURE-P MCH (Adejumo et al., 2016). Supportive supervision has been reported to improving routine immunization activities in recent past in Nigeria (O'Connell and Wonodi, 2016).

Involvement of the members of the communities as represented by the CDC, in the scheme is suggestive of a good program design that could ensure sustainability, however, the reported sub-optimal performance and expectation of pecuniary reward by the CDC members is indicative of poor implementation of a well-designed program. It is also reminiscent that the CCT meant for pregnant mothers as an incentive to utilize necessary services was misunderstood by community members, who were expecting pecuniary rewards. This development gives credence to the importance of robust advocacy to ensure community members understand special intervention programs (Arin and Hongoro, 2013), their designs and the rationale behind it. This is more important in environments where the level of poverty is high (Kale, 2010).

The impact of CCT as an instrument to improve uptake of health care services is inconclusive. While some studies advocate caution in attributing improved service uptake to the use of CCT alone (Bassani et al., 2013), others were of the opinion that CCT as an instrument, could serve as a catalyst to improve health services uptake especially among the poor (Glassman, 2013). Some studies on CCT in Nigeria (The Presidency Nigeria, 2013), are in support of the latter.

Increased uptake of available health care services in healthcare facilities was reported similar to what was documented in previous studies (Anselmi et al., 2015).

Increased service uptake at the MSS/SURE-P MCH implementing health facilities may be attributed to physical upgrade and provision of equipment, drugs and other consumables as well as the presence of trained health care personnel coupled with 24 h service coverage in the designated facilities. As evidenced in previous studies, better-equipped health facilities are more likely to be patronized than are poorly equipped and poorly staffed ones (Anselmi et al., 2015; Gage et al., 2016).

Individuals bypass poorly equipped (facilities) and travel further to receive care in the better resourced facilities (Gage et al., 2016; Kumar and Dansereau, 2014). Studies have shown that the longer the distance traveled, the worse the health outcomes (Sialubanje et al., 2015). Longer distance travelled to reach healthcare facilities is a major cause of delay in accessing needed care and have been shown to have a direct correlation with maternal morbidity and mortality in Nigeria, this is worse in the rural areas (Sialubanje et al., 2015; Sialubanje et al., 2017).

Poor funding is one of the reasons largely responsible for the weak health systems in the majority of the LMICs, particularly in the SSA. Lack of or an inadequate number of health facilities that are also poorly equipped and

staffed are invariably the consequences of poorly funded health systems (Sialubanje et al., 2017). A poorly paid health workforce lowers the morale of affected individuals, with a consequent poor job satisfaction and sub-optimal job performance (Bello et al., 2013). Non-payment, and/or irregular payment of monthly wages as was reported in this study are examples.

MSS/SURE-P in the implementing LGAs of Oyo State was studied as a result of insufficient funds to do a national study; which is accepted as a limitation. However, at the state level where it was conducted, and considering that there were a total of eleven participating LGAs out of which eight were represented in the study, we posit that the findings will be more credible to represent the scheme at the state level than it would at the national. However, as majority of the rural areas in different regions of Nigeria are largely the same, and thus experience similar challenges in mostly the same contextual environments, therefore, with a degree of caution, findings from this study can be taken as national representative with regards to the MSS/SURE-P program.

CONCLUSION

The MSS and the SURE-P MCH of Nigeria were promising policy initiatives to address the poor maternal and child health outcomes in the country. Findings from this study is in support of an earlier assessment of the scheme by Abimbola and colleagues (Abimbola et al., 2012) that given a longer period of time to operate, with necessary infrastructure, and political will, the scheme was capable to contribute immensely to improving maternal and child health outcomes in Nigeria. It is advocated that the scheme be resuscitated or a similar health policy initiative be designed and appropriately implemented for sustainability.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

ABBREVIATION

CCT, Conditional cash transfer; **CDC**, community development committees; **CNO**, chief nursing officer; **LMIC**, low and middle-income countries; **MoH**, medical officer of health; **MSS**, midwifery service scheme; **PHC**, primary health care; **SSA**, sub-Saharan Africa; **SURE-P MCH**, Subsidy Reinvestment and Empowerment Program of the maternal and child health care; **VHW**, village health worker; **WHO**, World Health Organization.

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