Institutionalisation of maternal death reviews: A study on progress in Kano State

January-March 2013

Evidence for Action Research Report

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List of Acronyms and Abbreviations

CHW	Community Health Worker
CONMESS	Consolidated Medical Salary Scheme
E4A	Evidence for Action
FCT	Federal Capital Territory
FGD	Focus Group Discussions
FMCH	Free Maternal and Child Health services
LGA	Local Government Authorities
MCH	Maternal and Child Health
MDR	Maternal Death Review
MDG	Millennium Development Goals
MNCH	Maternal, Newborn, and Child Health
MNH	Maternal and Newborn Health
MoU	Memorandum of Understanding
MSS	Midwifery Service Scheme
MSSFP	Midwives Service Scheme Focal Person
NPHCDA	National Primary Health Care Development Agency
PHC	Primary Health Centre
SMOH	Kano State's Ministry of Health
SWOT	Strength, weakness, opportunity and threat analysis
WDC	Ward Development Committees

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Summary of Key Findings

- Maternal death reviews (MDR) capture information on maternal deaths, examine underlying factors and aim to create change needed to improve quality of health services, averting future deaths.
- In Kano State as of March 2013, MDRs had only been conducted once at select midwifery service scheme facilities. However, this practice was not maintained due to lack of state government commitment.
- Key features of the national MDR strategy include a phased implementation from federal, state and local health facilities; initially prioritizing facility-based MDRs; and conducting MDRs and developing national/state recommendations to ensure action.
- MDR committees have been established at both facility and State levels to review maternal deaths and aim to report, review and develop action plans for all maternal deaths. The State/LGA MDR committees review maternal deaths that occur under the midwifery service scheme (MSS). Terms of references are outlined for both committees.
- As of December 2014, no significant progress in implementation of MDRs has been achieved in Kano State.
- Key stakeholders in implementation of MDRs including the State Ministry of Health (SMOH). The SMOH is needed to play a critical role managing other stakeholders such as the NPHCDA and organizations.
- Challenges in implementing MDRs in Kano State identified included a lack of a strong team, inadequate planning, incomplete data, lack of community sensitization

and a lack of cooperation from the ward development committees and health facility staff.

- Stakeholder management, including ensuring all key stakeholders are involved in the MDR process, was identified as a potential barrier to successful implementation.

Introduction & Background

Maternal death reviews (MDR) capture information on the number of maternal deaths and examine the underlying factors that led to these deaths. Information gathered from MDRs, if acted upon, can create the change needed to improve the quality of health services and help avert further deaths. In order to be effective, MDR approaches need to go beyond counting maternal deaths, to understanding why they happened and how they can be prevented[1]. There are multiple approaches to MDRs, including facility-based reviews, near-miss reviews, community-based review (verbal autopsies) and confidential enquiry into maternal deaths. At the time of data collection (January to March 2013), MDRs were only being conducted at the Federal level through the National Primary Health Care Development Agency (NPHCDA), with no organisations or programmes participating at the state level. The NPHCDA initiated MDRs in Kano State as a support to the State government in 2012. Facility-level MDRs were conducted only one time in select Midwifery Service Scheme (MSS) facilities, by the State committee established by NPHCDA. However this exercise was not sustained due to lack of continued State government commitment. Considering the important role that MDRs can play in preventing maternal deaths, Evidence for Action (E4A) is working closely with partners in Nigeria to roll out the implementation of MDRs in Jigawa and Kano States and to ensure that findings are acted upon at local, State and National levels. This study aimed to gather information on the extent to that MDRs (or equivalent) are implemented and the use of findings, in Kano and Jigawa. In addition it aimed to gather lessons learned about common challenges and constraints and understand various stakeholders and their level of engagement.

Recent global estimates indicate that 289,000 women died due to complications in pregnancy and childbirth in 2013, with approximately 40,000 maternal deaths in Nigeria[2]. Research on maternal mortality out in Nigeria has revealed the leading causes including haemorrhage, hypertension, sepsis and unsafe abortion[3]. Maternal death reviews help to initiate necessary action and prevent deaths, however this process, which requires the health system to reflect on what might have gone wrong at each maternal death, is non-existent or weak in many developing countries, including Nigeria.

Progress to implementing MDRs in Nigeria

In 2004, the WHO, in a landmark publication titled *Beyond the Numbers*, recommended that all countries that had not established medical auditing systems should do so without further delay, in order to address maternal mortality. Whereas many countries have since responded, Nigeria's response has been limited[1]. The impediments to Nigeria's effort were soon identified and targeted by a synergy of efforts of the International Federation of Gynaecology and obstetrics (FIGO) and the Society of Gynaecology & Obstetrics of Nigeria (SOGON) through their *Leadership in Obstetrics & Gynaecology for Impact and Change* (LOGIC) initiative. This initiative aimed "to improve maternal and newborn health (MNH) policy and practice by strengthening FIGO member associations and using their position and knowledge to facilitate and contribute to these improvements, leading to better maternal and new born health for underserved populations in low- and middle-resource countries[5]". This project assembled Nigerian stakeholders on maternal health between March and July 2012 to develop a pilot medical audit process that will include collection and analysis of

maternal death data, for the improvement of maternal health across the country. The group acknowledged the existence of some forms of ongoing medical audits in the country, including: facility-based clinical reviews, community and facility-based surveys, and the efforts of the National Primary Health Care Development Agency (NPHCDA) to establish medical audits in Primary Health Care Centers (PHCs). It also acknowledged the wider inherent benefits of establishing the full range of medical audits across the country but considered it more expedient to start the process with a pilot scheme that will involve all Federal secondary and tertiary health facilities. A review of the scheme after one year will inform its scale up to the states, the private sector and will also be synchronised with efforts of the NPHCDA at the PHC level. Further reviews will target the inclusion of maternal deaths that occur outside health facilities, and such will synergize with the efforts of the National Population Commission (NPC) and the community schemes of the National Health Insurance Scheme (NHIS).

Key features of the Nigerian national MDR strategy include[6]:

- Phased implementation of MDRs starting at federal facilities to state and local health facilities;
- The process will focus on implementing MDRs in facilities initially, and investigate opportunities for community MDRs;
- The process will involve recording maternal deaths, conducting MDR meetings to discuss deaths and develop recommendations and state/national MDR recommendations to ensure action.

Methodology

This study employed qualitative research methods, using key informant interviews to gain insight on midwives' and health planners' perspectives of MDRs in Kano State. A two-day meeting focusing on issues of maternal death reviews (MDR) and the midwife service scheme (MSS) was convened by E4A in collaboration with the National Primary Health Care Development Agency (NPHCDA). A topic guide was developed by E4A for use in focus group and key informant interviews. Seven individual key informant interviews were conducted lasted 45-60 minutes each to explore both MDR and MSS topics, with decision makers and health planners. Individuals were selected purposively due to their roles and responsibilities relating to implementing the MDR and MSS systems. Key informants included:

- The Director of Planning and Statistics
- Director of Primary Health Care
- Honourable Commissioner
- Permanent Secretary of the Ministry
- Director of Medical Services
- Secretary of Free Maternity Services
- Chairman of Free MNCH

Qualitative data was analysed using a thematic content analysis approach. Data and notes from the interviews were transcribed and patterns and themes of information were identified and coded. Finally, interpretation of themes and patterns was done and consensus or

dissonance amongst participant perspectives informed the results. This study was conducted as operational research to provide a snapshot of the progress to implementing maternal death reviews in Kano State and to inform the strategic direction of the E4A programme. In particular, Nigeria national MDR guidelines were established after this research was conducted, a development likely to influence key informants' knowledge of the MDR process and requirements prior to nationally approved guidelines. Similar research on the MDR process was conducted in Jigawa State, however both are not necessarily representative of experiences and plans to implement MDRs across the States or in Nigeria.

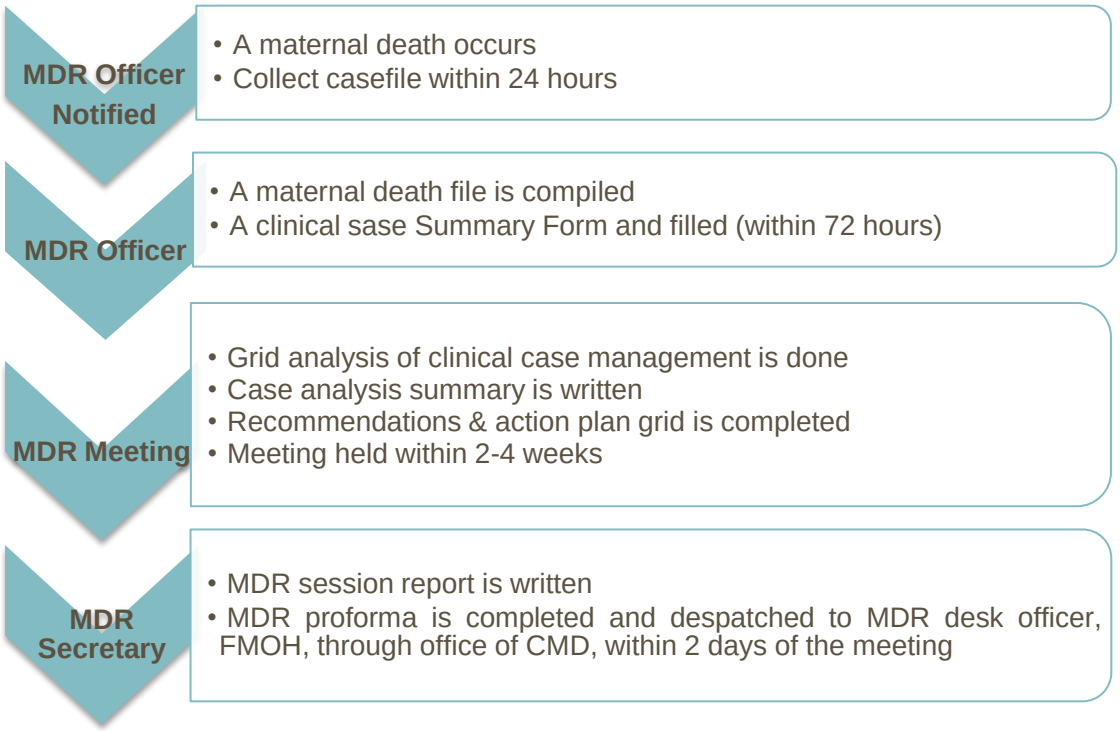
Key Findings

Facility MDR Process

The facility MDR process is initiated when a maternal death occurs and has two ideal outcomes, which include i) the remittance of a completed MDR form to the National MDR Officer, Department of Family Health, Federal Ministry of Health in Abuja; and ii) the implementation of the recommendations made by the facility MDR Committee after deliberating on her case. In the first step, the MDR officer (an obstetrics and gynaecology resident, appointed by the head of the department) collects the casefile within 24 hours and completes the MDR form and notifies the head of the obstetrics and gynaecology department. The MDR officer presents the maternal death to the facility MDR committee, within two to four weeks. After analysis and deliberation, the MDR committee develops recommendations and an action plan. The Committee Secretary writes the meeting session report, completes the MDR form and dispatches both the report and MDR form to the MDR

desk officer in the Federal Ministry of Health (Department of Family Health). The entire review process is expected to take between two to four weeks (See Figure 1).

Figure 1: MDR process in health facilities and responsibilities



Data collection

Facility health workers, facility-in-charge, facility ward development committee members and/or MSS midwives are responsible for recording or collecting information. Information collected during the reviews includes:

1. Details of the deceased
2. Date of admission to facility & condition on admission
3. Antenatal care
4. Delivery and pueperium
5. Neonatal information
6. Cause of death
7. Associated factors that contributed to death
8. Case summary
9. Facility MDR action plan to improve future care
10. Name of the individual completing the form and signature
11. Name of second person providing a countersignature

Maternal deaths occurring in facilities will be identified by the MDR officer by searching various data sources including: death certificates, discharge records and records from labour and delivery room, obstetrics and gynaecology wards, intensive care units, operating theatre register, mortuary, accident and emergency unit and general medical ward. Maternal deaths that occur in the community are frequently underreported and may not be reviewed. After

a death is reported, the officer will collect all case files and materials within 24 hours and compile a maternal death file. A clinical case summary form is to be filled within 72 hours.

Facility MDR Committees

MDR committees will be established at both facility and State levels to review maternal deaths. Committee members will be appointed by the hospital's Chief Medical Director and as well as other individuals that the committee identifies as critical. Key informants identified eleven individuals who will take part in the MDR review process, sitting on the facility MDR committee. Membership on the facility MDR committees include:

- Chairman, Medical Advisory Committee (or Director of Clinical Services)
- Head, Obstetrics Department
- Head of Department of: nursing/midwifery, paediatrics, pathology, anaesthesia, haematology
- Member of a local women's group
- Representative from medical records
- Representative from the pharmacy
- MDR Officer (this person will be a nominee of the head of department of obstetrics and gynaecology and as outlined above will assemble and present cases to the committee).

The facility MDR terms of references and responsibilities include:

1. To report and identify all maternal deaths occurring in hospitals

2. To ensure facility-based review forms are competed accurately and in a timely manner
3. To retrieve case notes and keep safe as soon as possible after all maternal deaths
4. To hold MDR meetings regularly where case(s) will be discussed in a non-threatening manner and to compile a report and recommendations for the local staff and hospital
5. To prepare a standardized report that is sent to the national MDR committee in a short time
6. To follow up local recommendations to ensure they have been implemented.

State Level MDR Process and Committee

The State level/LGA MDR team will be composed of five members from the State Ministry of Health, School of Midwifery, School of Health Technology, State Primary Health Care Development Agency (SPHCDA) and Midwives Service Scheme Focal Person (MSSFP). Deaths occurring in the health facilities and communities under MSS will be reported as part of routine cluster monitoring data collated quarterly by the MSSFP and forwarded to the State MDR team. The State MDR Team will review maternal deaths that occur under the scheme. The State team will be joined at the local government area (LGA) level by the LGA Reproductive Health Focal Person (RHFP) (or representative) during each review. The facility in-charge, health workers and the Ward Development Committee (WDC) members carry out the MDRs at the facility level. The facility health team carries out appropriate follow-up based on the outcome of MDR and all completed MDR forms are kept confidential by the facility in-charge and made available to the LGA RHFP and State MDR team. The state MDR committee's key roles and responsibilities include:

- Use the facility interview record and community maternal death interview record tools to conduct the MDR in facilities/communities where a maternal death has occurred.
- Write a report within two weeks of the review, forward report to the WDCs, LGAs, SMOH, NPHCDA and zonal/headquarters
- Provide feedback to all the stakeholders including the facilities/communities on the recommendations developed by the committee
- Conduct state level debriefing and sensitization meeting the SMOH within two weeks
- Conduct zonal and national level debriefings (twice per year).

Use of Findings

Findings from MDRs will be used to raise awareness among health providers and communities about risk factors as well as to empower policy makers, health providers and the public to design and implement interventions to address maternal death. Key informants highlighted the following purposes

1. To improve maternal health
2. To identify social, cultural, epidemiological and other factors that lead to maternal deaths at the health facility and community levels
3. To understand women's awareness of warning signs of problems in pregnancy
4. To determine whether services are available, adequate and accessible

After each MDR, the following outputs are expected:

- Completed National MDR Forms on each maternal death (for remittance within two days by the Committee Secretary through the Chief Medical Director's office to the MDR desk officer in the FMoH);
- Compilation of the meeting session report by the Secretary (for remittance within two days by the Committee Secretary through the Chief Medical Director's office to the MDR desk officer in the FMoH);
- Recommendations for local remedies (compiled and sent by the committee secretary to the Chief Medical Director of the hospital).

Key Stakeholders in Kano State

A critical stakeholder in implementing MDRs at the State level is the SMOH, which is responsible for leading the process and development of guidelines. The Government needs to bring together the NPHCDA and other organizations conducting MDRs to ensure they are following the national MDR guideline and government should give adequate funding. MDR meetings should be conducted at all levels including teaching hospital, PHCs, SMOH and LGA. There is a need to identify and report every death at the community or facility level to the relevant authorities, forwarding records to LGAs, monitoring and evaluation officer, State and Federal.

The NPHCDA recruits members of the MDR committee among staff of SMOH, teaching hospitals, NPHCDA and other partners. The process of creating the MDR team involves forming a strong team, developing adequate tools, ensuring accurate and complete record-

keeping at the facility, planning, logistic arrangement, sensitizing the community and health facilities and seeking cooperation of WDCs and the health facility staff.

Challenges to Implementing MDRs

Respondents indicated that challenges experienced to implementing the MDRs included a lack of a strong team, inadequate planning, incomplete data, lack of community sensitisation and a lack of cooperation from the WDCs and health facility staff. The current MDR system is only between NPHCDA and the facility. Other stakeholders including communities, SMOH, Health Service Management Board (HSMB), State Primary Health Care Development Agency (SPHCDA), are not included.

Respondents identified a need for guidelines, tools and adequate funding by government as well as improved coordination from the government to engage all partners working in implementing MDRs in the State. In order to make findings from MDRs more action-oriented, an MDR committee at the State level should be established to work in collaboration with the in-house committee and ensure actions are taken in order to improve the quality of care provided to women seeking health services. Finally, tools should be used to monitor that actions and interventions are implemented.

Table 1: Links between MDRs and Government: Analysis of strengths, weaknesses, opportunities and threats (SWOT)

Strengths	**Weaknesses**
• There are workforces willing to partake in conducting MDR	• Incomplete data • No MDR guidelines available • Poor funding • Weak collaboration between key stakeholders
Opportunities	**Threats**
• Many stakeholders interested and willing to support implementation of MDRs including: SOGON, E4A, PATHS2, TSHIP, WHO, etc. • MDRs conducted by the facility MDR Committee • Community sensitization	• Insecurity • Lack of political commitment

Conclusion & Recommendations

This study was intended as operational research to provide a snapshot of maternal death reviews in Kano State. Some key conclusions and recommendations included:

- As of December 2014, no significant gains have been achieved in implementing MDRs in Kano State. Advocacy efforts and holding decision makers to account is needed in order to ensure action is taken and MDRs are implemented.
- The approval of national guidelines on maternal death reviews represents a significant opportunity, highlighting national level commitment and political will to improving maternal health.
- Ensure adequate coordination between facility and State level MDR teams, particularly so that MDRs are action-oriented and improve the quality of care.
- Take advantage of workforce and organizations capable of supporting implementation of MDRs in Kano state, particularly in support of advocacy and accountability.
- Develop follow-up tools to help monitor and ensure that actions and interventions have been carried out

References

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