USAID
FROM THE AMERICAN PEOPLE

OCTOBER 2015

AFRICAN STRATEGIES FOR HEALTH

ELIMINATING MATERNAL DEATHS IN BURKINA FASO: INTEGRATION OF MDSR INTO EXISTING SURVEILLANCE SYSTEM

Photo by WHO/TDR/A Craggs

Background

Burkina Faso's population of more than 17 million persons experiences a high rate of maternal mortality with an average of 341 maternal deaths per 100,000 live births. It is estimated that the majority (80 percent) of these deaths are preventable and 50 percent occur within the first 24 hours after delivery often due to obstetrical complications such as hemorrhage and eclampsia. Certain factors such as shortages of blood also contribute to the overall burden of maternal deaths occuring in health facilities.

ABOUT ASH

African Strategies for Health (ASH) is a five-year project funded by the U.S. Agency for International Development's (USAID) Bureau for Africa and implemented by Management Sciences for Health. ASH works to improve the health status of populations across Africa through identifying and advocating for best practices, enhancing technical capacity, and engaging African regional institutions to address health issues in a sustainable manner. ASH provides information on trends and developments on the continent to USAID and other development partners to enhance decision-making regarding investments in health.

To reduce maternal mortality and improve the timely notification of maternal deaths, the Burkina Faso Ministry of Health (MOH), in January 2012, introduced the national Maternal Death Surveillance and Response (MDSR) system and guidelines. MDSR was integrated into the existing National Health Information System and the Integrated Disease Surveillance and Response (IDSR) program which was implemented in 1998 and serves to improve the availability and use of data for the timely detection, confirmation, and response to illness, death, and disability.

Through funding and technical support from UNFPA, UNICEF, and WHO, the MOH revised its surveillance and reporting tools, forms, and guidelines to include reporting for cases of maternal death. Subsequently, the MOH trained health agents at all levels of the health system on the revised IDSR guidelines and to identify, notify, and investigate cases of maternal death.

Since its introduction, MDSR has been scaled-up nationally and reporting is conducted in real-time. Health agents are required to immediately report cases of maternal death via mobile phone. On a weekly basis, this information is sent via the Official Weekly Telegram (TLOH - Télégramme Lettre Officiel Hebdomadaire) from health centers and hospitals to the District Health Offices (District Sanitaire) which send it to the Regional Health Offices (Direction Régional de la Santé). This information is then transmitted to the Directorate of Disease Mangement (Direction de Lutte Contre la Maladie), which is responsible for compiling the data and sending it to the Directorate of Family Health (DSF - Direction de la Santé de la Famille). After analyzing the data, the DSF regularly disseminates the information to all actors in the health system including in-country technical and financial partners (e.g. UNFPA, WHO). In addition, the DSF organizes semestrial debriefing meetings with all stakeholders and issues annual

Maternal and Neonatal Death Surveillance reports (Rapports Annuels de la Surveillance des Deces Maternels et Neonatals) detailing the situation of maternal and neonatal mortality, the effects of surveillance, and recommended actions for improving the reporting process and preventing future cases of mortality.

In Burkina Faso, maternal and neonatal death audits are institutionalized to ensure that health facilities regularly analyze the causes and circumstances of each occurrence, address the shortcomings of the health system, and prevent future deaths. In 2014, 63.2 percent of maternal deaths were audited. The DSF, with the support from maternal and child health experts, is responsible for organizing these audits and subsequently issuing corrective actions in districts or regions which have higher than normal rates of maternal deaths.

Challenges

The integration of MDSR into the existing IDSR system has contributed to its sustainability and success; however, challenges remain in improving the quality of MDSR reporting. Often, reporting is delayed in remote, hard-to-reach communities which are located outside of a telephone network or far from a CSPS (centre de santé et de promotion sociale, equals to a primary helath care centre).

To address these issues, the MOH and in-country stakeholders continue to strengthen the notification, analysis, and utilization of the surveillance data at all levels of the health system for improved decision making. This requires ongoing capacity reinforcement and training of all health agents, particularly those at the CSPS, and community members to ensure the prompt reporting of suspected cases of maternal death.

Successes

Since implementation of the national MDSR system began, 1,746 maternal deaths have been reported to the national level in Burkina Faso between 2012 and 2014, demonstrating improvements in overall maternal death reporting. Moreover, real-time reporting has improved both the availability of information, subsequent analysis, and decision-making, allowing the MOH to appropriately allocate the necessary resources for improving maternal and newborn health. For example, the MOH has leveraged MDSR data to address stockouts of essential commodities for facilities, conducted in-service emergency obstetric and newborn care training in facilities with high case fatality rates, and procured surgical equipment for facilities that were in need. As a result, the country has experienced marked reductions in reported cases of maternal deaths since 2012.

Several factors have contributed to the success of the MDSR system including the ongoing engagement and commitment of health authorities and stakeholders at all levels of the health system – from the central level to the community – in addressing maternal and neonatal mortality. Also, the effective integration of MDSR into the existing IDSR has has helped improve coordination between multiple vertical programs (MDSR, meningitis, HIV/AIDS, malaria, etc.) and partners.

Recognizing the success of Burkina Faso's MDSR system, several sub-Saharan countries, including the Democratic Republic of Congo and Guinea, have drawn upon lessons learned and best practices and requested technical assistance from in-country stakeholders in the planning and scaling up phases of MDSR in their countries.

Next Steps

The current focus is to strengthen the analysis and use of surveillance data at all levels of the health system and improve both the quality and simplicity of MDSR reporting. Efforts are underway to revise the IDSR reporting forms to ensure that health agents include a more detailed description of the factors that contributed to maternal mortality.

Following a successful pilot of a Rapid SMS system in the district of Baskuy, the MOH began scaling up this system in two additional districts (Gourcy and Kongoussi) in August 2015 with the financial support from the WHO for the installation and configuration of two database servers. The Rapid SMS system is expected to improve data reporting quality and analysis, allowing health centers and hospitals to instantly transmit more detailed data on the causes of maternal and neonatal deaths directly to the central level MOH offices for immediate analysis and decision-making. ■

This summary brief was prepared by Colin Gilmartin (MSH) and Rebecca Levine (ASH), with inputs from Nathalie Roos (WHO). It was developed for the WHO Global MDSR Implementation Report and can be accessed on the WHO website at http://www.who.int/maternal_child_adolescent/epidemiology/maternal-death-surveillance/case-studies/en/

Endnotes

1. Maternal death is defined 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" (World Health Organization).
2. Ministère de l'Economie et des Finances, Institut National de la Statistique et de la Démographie, MEASURE DHS, and ICF Macro. "Enquête Démographique et de Santé (EDS-IV) et à Indicateurs Multiples (MICS)EDSBF-MICS IV – Rapport Préliminaire." 2010. http://dhsprogram.com/pubs/pdf/pr9/pr9.pdf
3. Ibid.
4. Centers for Disease Control and Prevention. Integrated Disease Surveillance and Response (IDSR). 2013. http://www.cdc.gov/globalhealth/healthprotection/ghsb/idsr/default.htm
5. Each health center has a registered "flotte" mobile telephone, allowing health agents to call other MOH staff free-of-charge.
6. If a maternal death occurs outside of health facility, health agents are required to travel to the community and confirm the case.
7. Burkina Faso Ministère de la Santé. Annuaire Statistique 2014.
8. Burkina Faso Ministère de la Santé. Rapport Annuel 2014 de la Surveillance des Deces Maternels et Neonatals au Burkina Faso. 2014.
9. SIDA. "The 'black box' of maternal mortality." 2014. http://www.sida.se/English/press/current-topics-archive/2014/the-black-box-of-maternal-mortality/
10. Ibid.
11. Burkina Faso Ministère de la Santé. Rapport Annuel 2014 de la Surveillance des Deces Maternels et Neonatals au Burkina Faso. 2014. The following number of cases were reported by year: 702 (2012); 527 (2013); 517 (2014).
12. Academy for Educational Development. "Integrated Disease Surveillance and Response." http://pdf.usaid.gov/pdf_docs/Pnacu389.pdf

Additional information can be obtained from:
African Strategies for Health 4301 N Fairfax Drive, Suite 400, Arlington, VA 22203 • +1.703.524.6575 • AS4H-Info@as4h.org
www.africanstrategies4health.org

This publication was made possible by the generous support of the United States Agency for International Development (USAID) under contract number AID-OAA-C-11-00161. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.