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

Photo by Carmen Urdaneta

Background

Malawi, home to an estimated 16.8 million people in 2014[1] with an average of 341 maternal deaths per 100,000 live births[2] occur annually due to direct causes such as haemorrhage, infection, unsafe abortion, pre-eclampsia /eclampsia, and obstructed labour, and indirect causes including malaria, anaemia, HIV/AIDS, and tuberculosis.[3] Recent studies vary in their observation of leading causes, with reports showing a range from 39.7 percent to 65 percent of maternal deaths that were attributable to direct obstetric causes.[4,5]

The majority of maternal deaths are considered preventable, yet they persist in Malawi due to the combination of high total fertility rate and limited access to contraception, weak health infrastructure, shortages of health professionals, and low institutional capacity.[6,7] While the percentage of births taking place in health facilities has risen to an estimated 73 percent,[8] the overcrowding of facilities and systemic health system failures have limited Malawi's ability to capitalize on this impressive trend.[9]

To reduce maternal mortality, the Malawi Ministry of Health (MOH) has led a concerted effort to improve the timely reporting of maternal deaths, systematize verbal autopsies and maternal death audits, and strengthen the link between reporting and quality improvements.[10] With funding and technical support from UNFPA, UNICEF, and WHO, the MOH introduced national Maternal Death Surveillance and Response (MDSR) system guidelines in July 2014. The MDSR system is integrated with the national Integrated Disease Surveillance and Response (IDSR) program, established in Malawi in 2002.

Notably, the MDSR guidelines include guidance for verbal autopsies for deaths that take place in the community, provide updated maternal death audit forms, and establish maternal deaths as a notifiable event, in accordance with the current draft of Malawi's National Health Policy.[11]

Status of MDSR implementation

The MOH, with the support of partners in the National Task Force on Maternal Deaths,[12] has developed a Plan of Action for the national scale-up of MDSR. The Task Force meets quarterly to report on progress and identify next steps. Activities completed since the introduction of the MDSR system last year include the adoption of the national guidelines, identification and training of MDSR leads at the central, zonal, and district levels, and the establishment of zonal and district level MDSR committees.

Capacity building trainings have been initiated for zonal and district level MDSR leads, and the MOH is piloting the Maternal Morbidity and Mortality Audit System (MaMMAS), an electronic maternal mortality auditing platform that captures details of maternal deaths, at the zonal level in all five zones. The intention is to eventually roll out MaMMAS at the district level and integrate it with the national District Health Information Software (DHIS2) platform.[13]

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.

The MDSR protocols enhance and build on existing maternal death reporting processes already in place in Malawi. In facilities, health workers are required to complete and submit a death notification form to the Safe Motherhood Coordinator (MDSR lead) and Health Management Information System Officer (IDSR lead), both district-level officers, within 24 hours of a maternal death. In communities, health surveillance assistants (HSAs), salaried community health workers responsible for a range of preventive and curative health services, do the same within 48 hours of a maternal death. The district IDSR leads submit data weekly to the National IDSR Coordinator, who collates data and disseminates a weekly report.

Meanwhile, Safe Motherhood Coordinators are responsible for scheduling maternal death reviews upon notification of a death. Within seven days, District MDSR Committees[14] audit maternal deaths in facilities, and Community MDSR Committees[15] conduct verbal autopsies of maternal deaths in communities. The maternal death review process includes outlining recommendations and actions plans with timelines to respond to the causes of death. District and Community MDSR Committees are responsible for implementing recommendations.

MDSR leads at the zonal and central levels play a role in reviewing, reporting, and responding to maternal deaths, as well. Zonal M&E officers enter information on audited deaths into MaMMAS, and Zonal MDSR Committees meet quarterly to review data and MDSR action plans. They follow up with Safe Motherhood Coordinators regarding implementation of MDSR action plans quarterly. At the national level, the National Confidential Committee on Enquiry into Maternal Death (NCCEMD), established in 2009, ensures that data is captured in the national M&E Plan and is responsible for developing a national MDSR report biennially.

The first report, which analyzed maternal deaths that occurred between 2008 and 2012 and called for the institutionalization of MDSR, was published in 2015. A representative of the NCCEMD also participates in quarterly National Task Force on Maternal Deaths meetings.

Challenges

The introduction of MDSR has contributed to a greater focus on the review of and response to maternal deaths. However this has been met with various challenges ranging from behavioral and cultural norms to health system issues. As seen in other countries introducing MDSR, some health workers in Malawi are reluctant to report maternal deaths for fear of being blamed and subsequently disciplined.[16]

Furthermore, obtaining verbal autopsies at the community-level within 48 hours of a maternal death is challenging, as families and friends typically engage in at least a seven-day mourning period. At the facility-level, staff shortages affect both the quality of care and the completeness and accuracy of maternal death audits. While identified as a need, it has proven challenging to integrate and streamline the various reporting and data analysis platforms within the health system, and while vital registration is in pilot stage, it is yet to be scaled-up. Improving the reporting of perinatal deaths while they are still not considered notifiable events is an additional challenge.

Successes

While still relatively new in Malawi, MDSR is already yielding successes. Improvements have been seen in both community reporting, due to the introduction of new forms and engagement with village leaders through their inclusion in Community MDSR Committees, and in the proportion of maternal deaths that are reviewed. A 2011/2012 pilot program in the Mchinji district showed that a community-linked approach doubled the number of maternal deaths being reviewed.[17]

Due to this success, the verbal autopsy tools and approach developed for the pilot were adopted and included in the national MDSR Guidelines. Initial results through MaMMAS are promising: data for three zones showed that 68% of maternal deaths that took place between October 2014 and June 2015 were reviewed. The appointment of district level MDSR leads has improved the actionable response to maternal death reviews. For example, in 2014 in the Mchinji district, 67% of response recommendations were taken-up, compared to 26% in 2013.

Next Steps

Immediate next steps include the continued roll-out of MDSR trainings at the zonal and district levels and targeted capacity building in reporting, notification, and action planning. The implementation of MaMMAS will be strengthened through additional training for zonal M&E officers and improvements in the platform itself, based on current challenges related to exporting data and licensing issues. Additionally, in the coming months and years, efforts will continue to focus on accountability at each level of the health system to ensure that maternal death audit recommendations are actioned and preventable maternal deaths continue to decrease in Malawi. ■

This summary brief was prepared by Sarah Konopka 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. The World Bank: World Data Bank: World Development Indicators, Malawi. 2015. http://databank.worldbank.org/data//reports.aspx?source=2&country=MWI&series=&period=. Accessed 26 August 2015.
2. United Nations Population Fund (UNFPA): State of the World's Midwifery. 2015. http://www.unfpa.org/sites/default/files/pub-pdf/EN_SoWMy2014_complete.pdf. Accessed 26 August 2015.
3. World Health Organizations (WHO) African Health Observatory (AHO): Comprehensive Analytical Profile: Malawi. 2015. http://www.aho.afro.who.int/profiles_information/index.php/Malawi:Analytical_summary_-_Health_Status_and_Trends, Accessed 26 August 2015.
4. Kongnyuy EJ, Mlava G, van den Broek N. Facility-based maternal death review in three districts in the central region of Malawi: an analysis of causes and characteristics of maternal deaths. Womens Health Issues 2009;19(1):14-20.
5. Vink NM, de Jonge HC, Ter Haar R, et al. Maternal death reviews at a rural hospital in Malawi. Int J Gynaecol Obstet. 2013 Jan;120(1):74-7. doi: 10.1016/j.ijgo.2012.07.028.
6. World Health Organization (WHO): WHO Country Cooperative Strategy 2008-2013: Malawi. 2015. http://www.who.int/countryfocus/cooperation_strategy/ccs_mwi_en.pdf?ua=1. Accessed 26 August 2015.
7. Bazile J, Rigodon J, Berman L, et al. Intergenerational impacts of maternal mortality: Qualitative findings from rural Malawi. Reproductive Health 2015, 12(Suppl 1):S1.
8. National Statistical Office (NSO), ICF Macro. Malawi Demographic and Health Survey 2010. Zomba, Malawi, and Calverton, MD: NSO and ICF Macro, 2011.
9. Colbourn T, Lewycka S, Nambiar B, et al. Maternal mortality in Malawi, 1977–2012. BMJ Open 2013;3:e004150. doi:10.1136/bmjopen-2013- 004150.
10. Kachale, Fannie – Director, Reproductive Health Unit, Ministry of Health Malawi (2015, May 20). In-person interview with Sarah Konopka.
11. Ibid.
12. Members include representatives from the Ministry of Health, WHO, UNICEF, UNFPA, development partners, and civil society.
13. James Chilembwe – M&E Coordinator, Reproductive Health Unit, Ministry of Health Malawi (2015, May 20). In-person interview with Sarah Konopka.
14. District MDSR Committees are comprised of six to ten members including the following: District Health Officer; District Medical Officer; District Nursing Officer; Maternity Ward-in Charge; representative of the Health Advisory Committee; representatives of laboratory, pharmacy, and/or anesthesiology; the Safe Motherhood Coordinator; and a representative of the facility where the death occurred.
15. Community MDSR Committees are comprised of six to ten members including the following: three members from the District MDSR Committee, including the Safe Motherhood Coordinator; HSA's; service provider from the nearest facility; member of Area Development Committee; member of Village Development Committee; village headman; and two members of the Village Health Community from the area where the death occurred.
16. Bradley S, Kamwendo F, Chipeta E, et al. Too few staff, too many patients: a qualitative study of the impact on obstetric care providers and on quality of care in Malawi. BMC Pregnancy and Childbirth (2015) 15:65.
17. Bayley O, Chapota H,Kainja E, et al. Community linked maternal death review (CLMDR) to measure and prevent maternal mortality: a pilot study in rural Malawi. BMJ Open 2015;5:e007753.

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