Reducing Maternal and Neonatal Mortality

Empowering communities to take action

More rural Zambian women have their babies delivered with a skilled birth attendant

The UK-Aid funded Mobilising Access to Maternal Health Services in Zambia (MAMaZ) programme tests a community engagement approach which aims to stimulate demand for maternal and newborn health (MNH) care services among poor communities living in rural areas.

Because most action research efforts to date have focused on assessing supply side considerations, MAMaZ provides the missing link to reducing maternal and newborn mortality by specifying the demand side factors that determine whether a woman gets the services she needs. The aim is to develop an approach that can be taken to scale by government in future.

MAMaZ, established in early 2010 and due to end mid-2013, operates in six districts in Central, Western, Southern and Muchinga provinces in rural Zambia and reaches a population of over 250,000.

The Challenge: History and research have shown that although all women and babies need pregnancy care, care in childbirth is most important for the survival since timely treatment of complications is critical[1].

In Zambia, where key health indicators remain poor with an estimated 2,600 maternal deaths annually, the average neonatal mortality rate is 30 deaths per 1000 live births and the average skilled birth attendance (SBA) rate has remained at around 47% for over 20 years.

A strong urban to rural differential in SBA rates of 83%:31%[2] implies the need to focus efforts to reduce maternal and neonatal death on rural populations.

The Context: Rural populations in Zambia face a range of severe challenges including: deep seated poverty, seasonal food shortages, poor infrastructure and social problems such as alcohol and drug dependency and gender-based violence. In addition, a number of significant barriers prevent women from accessing MNH services especially around delivery time. These include:

- **difficult physical access**: distance from health facilities, lack of affordable transport, and difficult terrain;
- **financial constraints**; and
- **knowledge gaps** on critical danger signs.

MAMaZ
Mobilising Access to Maternal Health Services in Zambia

Using actions to teach the safe pregnancy and delivery plan

Community-based interventions

By mobilising communities, creating widespread social approval for behaviour change, and helping to establish sustainable community response systems, MAMaZ helps break down barriers to access that exist at household and community level. The approach thereby contributes to women's increased access to and timely use of MNH services.

Core to the success of the MAMaZ community engagement strategy is the integrated implementation of five main components (*as shown in the diagram*).

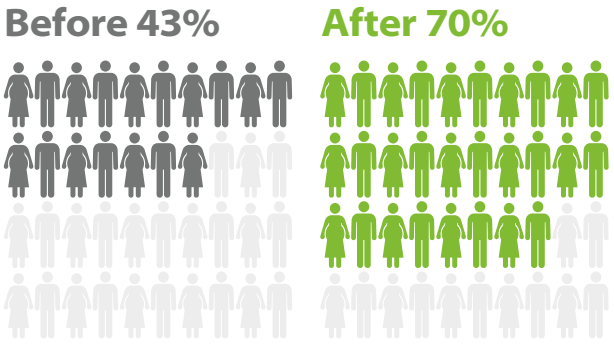
Key elements of the community engagement approach:

- **It builds on the Safe Motherhood Action Group strategy** of Ministry of Community Development, Maternal and Child Health.
- The process of change is **community-led and managed by community health volunteers**.
- **30 community health volunteers are trained** in each location using innovative participatory methods to saturate the community with new ideas and create wide social approval for behaviour change.
- Community health **volunteers facilitate discussion** groups which provide a safe space for reflection on the MNH situation and what can be done about it.
- **Communities are empowered** with knowledge, confidence and skills so that they can take action and make a difference in their own community.
- **District health management teams embed the approach** in district health plans and scale up interventions as they are fully involved throughout.

In Choma district, 40% more women have their babies delivered with a skilled birth attendant (SBA) compared to when the programme started. This result is consistent with changes across the six MAMaZ intervention districts[3].

Importantly, results from MAMaZ show that differences were more significant in intervention districts compared to controls, indicating that the programme and its community engagement approach has had substantial impact.

SBA rates increased over the course of the programme from an average of 43% (Baseline 2011) to 70% (Endline 2012) across the implementation districts.



This change in SBA rates was seen over the course of 2011-2012. For example Serenje almost tripled its rates while Choma and Mkushi doubled their percentage of deliveries conducted by an SBA. If the MAMaZ community engagement approach was rolled out across the country there would be potentially a very dramatic decline in maternal mortality in rural Zambia.

In all intervention sites, communities are successfully managing and utlilising community systems to ensure that the majority of women deliver at the facility. These systems include:

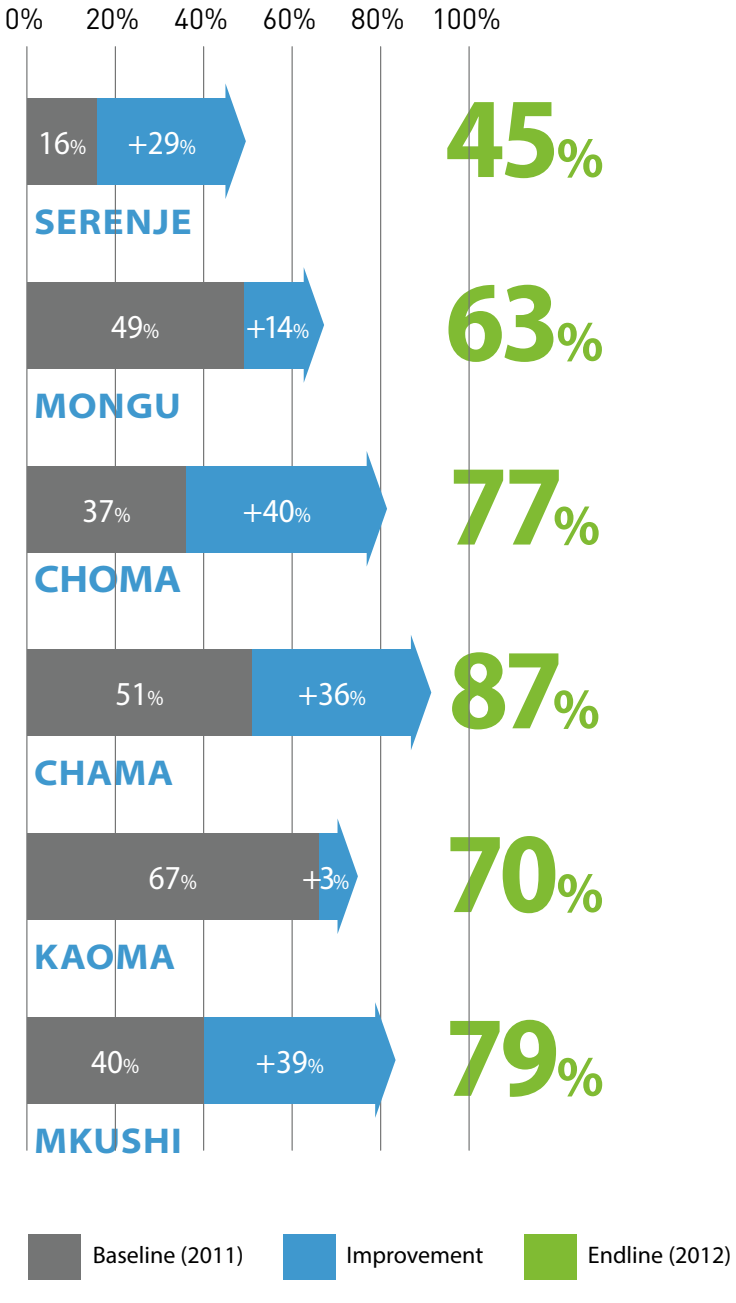
- emergency transport systems
- emergency savings schemes
- food banks
- mother's helpers

Community members report behaviour change and improved knowledge of maternal and new born danger signs and many of the myths about maternal issues have been dispelled.

Routine monitoring shows extensive improvement in and use of community systems established by the programme as well as evidence of increased social capital and cohesion within participating communities.

Up to December 2012 1,190 pregnant women, 18% of whom were women with complications, had used the community emergency transport scheme. The approach used to train the volunteers has been demonstrated to be highly effective[4] and the retention of volunteers is high, at just under 95%[5].

Percentage of deliveries conducted by skilled birth attendant by district



Source: Mobilising Access to Maternal Health Services in Zambia (MAMaZ) Summary of Baseline and Endline Results 2013

Signs that attitudes are changing

"Before the training I thought the issue of pregnancy was only between the husband and the wife. Now I know that the community should be more involved, and that I should be more involved."

Mkushi community member

"We've seen a change in deliveries in our community. Women are going to the facility to deliver."

Serenje community member[6]

A bicycle ambulance in action

Implications for scale- up: Key factors contributing to the sustainability of the community-based interventions include:

- **The training approach is effective**. The fact that the training is inclusive – that the methods used are accessible to a wide range of audiences whatever their level of literacy – is key.
- **The community engagement approach has contributed to increased social capital and cohesion,** which bodes well for sustaining the change process at community level.
- **Communities have been prompted to address social problems** such as gender-based violence and social exclusion.
- **The volunteer model is working** – retention of volunteers is high and demands on volunteers' time are not too onerous.

References:

1 World Health Organisation www.who.int/maternal_child_adolescent/en/

2 Demographic Health Survey 2007.

3 Mobilising Access to Maternal Health Services in Zambia (MAMaZ) Summary of Baseline and Endline Results 2013

4 Analysis of Community Monitoring System data from six MAMaZ districts. December 2012.

5 MAMaZ consultant report " Research Study on Volunteerism" Jan 2013. C . Green and Maureen Syanzila

6 An Innovative and Scalable Community Engagement Approach for Increasing Demand for Quality Maternal and Newborn Health Services: MAMaZ's Experience in Six Districts. Authors: Cathy Green, Abdul Razak Badru, Dynes Kaluba, paper presented at the Global Maternal Health Conference, Arusha, 2013.

These factors all combine to promote long-term improved health and support the sustainability of the interventions.

If replicated and rolled out across the country, the community engagement approach developed by MAMaZ and its district partners would have a **significant impact on maternal mortality** in rural Zambia.

The investment required to do this is modest. It costs approximately Kwacha 2,040 (£255) to train volunteers in a single Neighbourhood Health Committee area and to provide them with coaching and mentoring support in the first few months following training. A bicycle ambulance costs Kwacha 3,400 (£470). These investments provide value for money considering their very significant life-saving potential.

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The MAMaZ programme is funded and supported by UK aid from the UK Government. The programme is managed by Health Partners International, in association with Oxford Policy Management and Mailman School of Public Health, Columbia University, working with the Ministry of Community Development and Mother and Child Health and District Health Management Teams in Chama, Choma, Kaoma, Mkushi, Mongu and Serenje.

FUNDED BY: UKaid from the British people

MANAGED BY: Health Partners INTERNATIONAL

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