Empowering communities through community monitoring of health systems

MORE MAMaZ
Mobilising Access to Maternal Health Services in Zambia

EVIDENCE BRIEF

A good reporting system is the backbone of every successful health system. Surveillance at community level allows government to plan adequately and prioritise how to respond. Often, however, resources do not permit health workers to regularly collect enough data to provide a clear picture of the health situation in each community. Community level monitoring and tracking of the health status of pregnant women, mothers and their babies is not only feasible in resource constrained settings such as rural Zambia, but can be designed to be cost-effective, self-sustaining, and empowering for communities.

Female SMAG in Serenje with CMS notebook

Summary

- MORE MAMaZ's community monitoring system (CMS) collected maternal and newborn health data that informed health decision-making at community level and management decision-making at health facility, district and national levels. Safe Motherhood Action Group volunteers (SMAGs) were trained to accurately record, track and assist women to achieve a safe pregnancy and deliver a healthy baby.
- Data collected through the CMS, although gathered by community volunteers, was of high quality. The data complemented Health Management Information System (HMIS) data by providing greater insights into maternal health within each community.
- MORE MAMAZ demonstrated that CMS can be cost-effective, self-sustaining and used as a framework for documenting a range of investments in communities.

By taking responsibility for our own community in a programme like this, the government may get to know our needs and provide us with better services"
Male SMAG, Mkushi District

Background and context

Maternal and newborn health indicators in Zambia remain a concern and are a conspicuous reminder of the multiple barriers that constrain women's and girls' access to and uptake of essential health services. In response, the Safe Motherhood Action Group policy developed by the Ministry of Health (MOH) seeks to advance the continuum of maternal health care by establishing community-based health volunteers (SMAGs) who are linked to the health delivery system. Guided by this policy, the Comic Relief-funded More Mobilising Access to Maternal Health Services in Zambia Programme (MORE MAMaZ) (2014-2016) worked with District Health Management Teams (DHMTs) to scale up a demand-side intervention that addressed the range of maternal barriers and delays simultaneously. This work built on a predecessor programme, MAMaZ (2010-2013), funded by UK aid through the UK government.

Various community level monitoring systems, including community scorecards, have been tested in other countries as a way of promoting community involvement in the development of responsive health systems. However, prior to start of MORE MAMaZ virtually no systematic recording of community level data was taking place with direct input from community members. Insights into the health status of communities were based on reports compiled by health providers, such as Environmental Health Technicians. This situation still prevails in most of rural Zambia. Without the systematic insight of community volunteers such as the SMAGs, critical events such as maternal deaths tend to be under-reported.

Strategy

MORE MAMaZ's design included an ambitious community monitoring component that sought to use community members trained as SMAGs to routinely monitor and record programme indicators in Neighbourhood Health Committee areas (NHCs). Data collection was undertaken by 3,801 SMAGs, 478 ETS riders, and additional Community Health Volunteers from 357 NHCs in five intervention districts. Approximately 50% of the SMAGs and a smaller percentage of ETS drivers were women. Each NHC had between four and 16 SMAGs, depending on the intensity of support provided.

The community monitoring system was designed to track indicators such as maternal and newborn deaths, facility and home deliveries, ANC uptake, participation in community maternal health discussions, and beneficiaries of community support systems (e.g. food banks, emergency savings schemes, emergency transport schemes (ETS)).

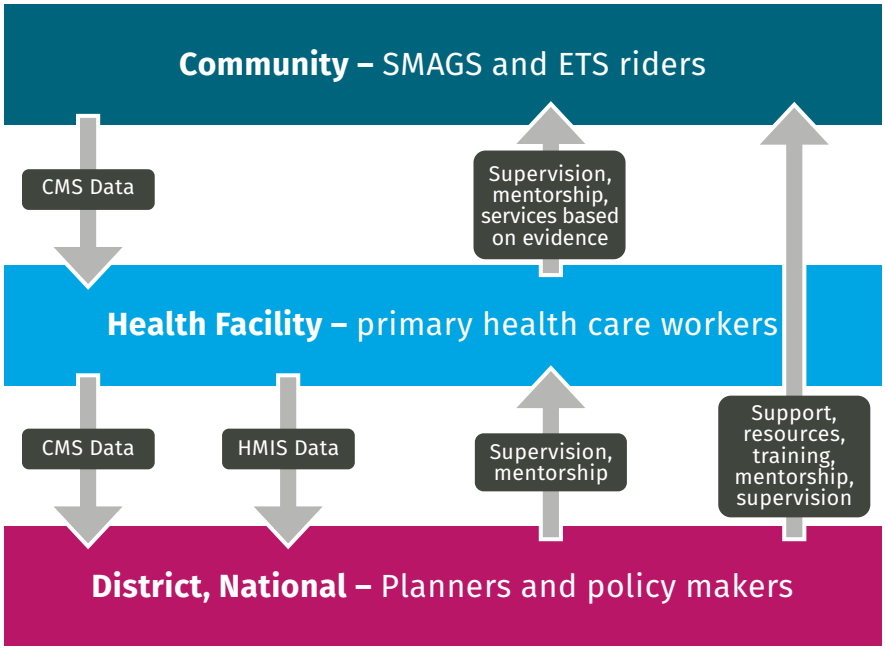
SMAGs were assigned to routinely monitor and record maternal health indicators for a particular section of the community. Lead SMAGs and other Community Health Volunteers, who co-ordinated the work of ordinary SMAGs in an NHC, aggregated the data at community level having reviewed and collated the reports generated by colleagues. Collecting and reporting data took approximately 10% of the time spent by SMAGs and other community volunteers on programme activities. Evidence generated led to decision-making on key programme issues such as gender-based violence or social inclusion, or enabled the SMAGs to focus their efforts on the parts of the community that had yet to be reached. The process of reviewing activities and achievements, and the joint planning that took place following data review, contributed to the motivation and retention of the SMAGs.

At health facility level, health centre staff quality assured the data by comparing it with the HMIS data collected at the facility. CMS data from the NHCs in the facility's catchment area were aggregated to give a picture of the state of maternal health in the locality. This enabled health personnel to improve their planning for upcoming deliveries and identify areas that needed additional follow-up. Data from all intervention sites in a district were aggregated at district level to give a picture of district-wide progress, and to prioritise programme actions. The data were accessible to DHMTs, and in a number of districts, the data informed decision-making.

Capacity development was an important programme strategy. SMAGs were trained and equipped with reporting templates, notebooks and pens at the start of the programme. Mentorship was regularly provided by MORE MAMaZ and health facility staff. A CMS training input targeted to health providers focused on the rationale for the data collection system, the key indicators and how they would complement the HMIS, the role of facility staff in reviewing the quality of data collection, and how the data could be used for management decision-making. In response to this input, some of the CMS indicators were adjusted so that they were better aligned with facility data needs. The overarching aim was to transfer responsibility for the CMS to the district health team, helping to ensure that data collection continued beyond the end of the programme.

Programme approach

- A **community empowerment process** facilitated by trained SMAGs mobilised communities around a maternal and newborn health agenda.
- **Community systems** provided safety nets for pregnant and newly delivered women, addressing barriers of access, affordability and lack of social support. This included ETS, savings schemes, food banks, child-care schemes, and mothers' helpers.
- A **community monitoring system** generated data on the maternal and newborn health activities and changes in the community.
- A system of **mentoring and coaching support** helped communities make the transition from increased awareness to sustained change.



CMS data flows in MORE MAMaZ

Results

The CMS collected accurate data – comparable to major surveys. Comparable indicators from the CMS were similar to the data generated by the programme's statistical endline survey. However, the CMS was better placed to record important health outcome indicators such as maternal deaths, home deliveries and maternal danger signs.

The SMAGs contributed immensely to programme learning by regularly collecting monitoring data on their activities and the wellbeing of the communities they served. Trained and highly motivated SMAGs and other Community Health Volunteers, who often worked with limited resources and gave their time selflessly to better their communities, were a key factor in the success of the CMS.

Facility staff's understanding of, and involvement in, the CMS led to community monitoring data being reported alongside HMIS data as part of routine reporting to the DHMT. Their involvement also motivated the SMAGs and the Community Health Volunteers.

Capacity building of DHMTs focused on building a secure, long-term institutional home for the entire demand-side, community-based maternal and newborn health response, including the CMS. In Mongu, the DHMT formalised a position of 'District SMAG Coordinator.' This contributed to the continuation of data gathering through the CMS when MAMaZ ended in 2013.

MORE MAMaZ results

In the MORE MAMaZ intervention sites:

Skilled birth attendant rates increased by 32% (from 46% to 78%). The increase in control sites was 22% (from 46% to 68%)

Early antenatal care (ANC) rates (attendance in first trimester) increased by 25% (from 37% to 62%). The increase in control sites was 4% (from 40% to 44%)

Percentage of men who knew at least three maternal danger signs increased by 51% (from 19% to 70%). The increase in control sites was 7% (from 34% to 41%)

39% of women in intervention sites were assisted by a SMAG when pregnant compared to 5% in control sites

Comparison of Endline Survey and CMS Data

Indicator	Chama	Chitambo	Mkushi	Mongu	Serenje	Total
Total number of pregnant women beneficiaries targeted						**8,437**
Actual number of pregnant women reached by May 2016	3,169	1,743	2,763	1,582	2,836	**12,093**
% reached against target						**143%**
% delivered in facility (CMS)	82%	66%	80%	90%	66%	**77%**
% delivered in facility (Endline survey)	96%	90%	81%	91%	87%	**89%**
Diff	*14%*	*24%*	*1%*	*1%*	*21%*	***12%***
Total number of women using ETS (CMS)	1,071	498	758	334	986	**3,647**
% of women using ETS (CMS)	31%	26%	25%	20%	29%	**27%**
% of women using ETS (Endline survey)	31%	24%	17%	37%	24%	**28%**
Diff	*0%*	*2%*	*-8%*	*17%*	*-5%*	***1%***

Source: *MORE MAMaZ endline survey, 2016; CMS data covering the period September 2014 to June 2016.*

Male SMAGs in Serenje with CMS notebooks

"Before MORE MAMaZ came to this district, we would report that there were no maternal deaths recorded in the district – to mean that there were none known by our staff at the health facilities. Now we know with certainty what is happening in each NHC because of what the SMAGs record and submit. We can now report on maternal health with confidence."

Senior member of DHMT, Mongu

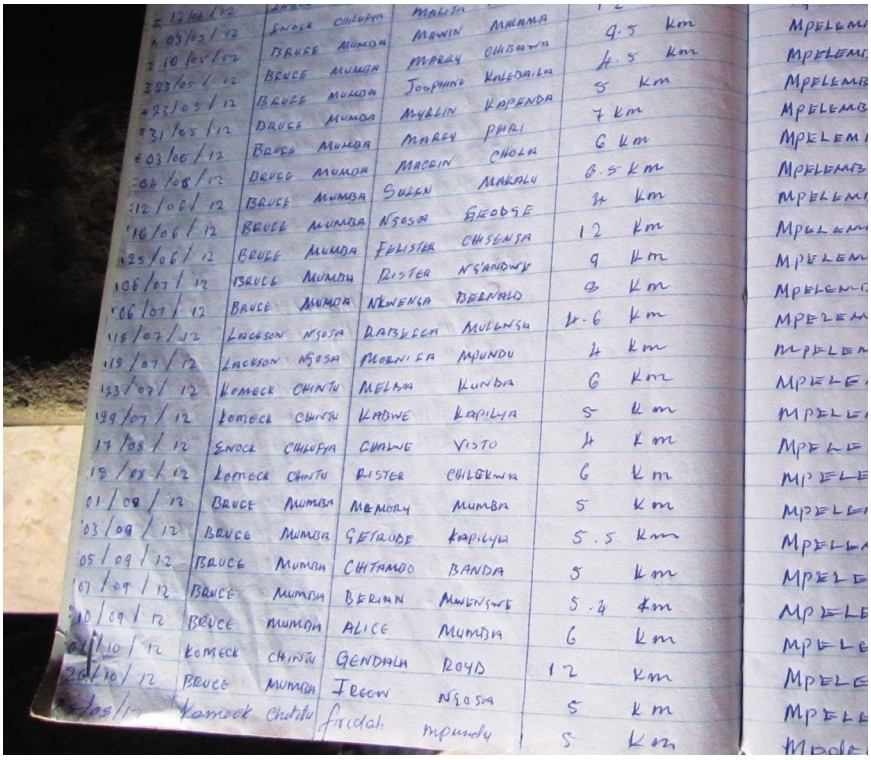
MORE MAMaZ's partnership with the MOH, guided by a memorandum of understanding, focused on supporting the operationalisation of the MOH's health strategy and national scale-up plan for SMAGs. Lessons from CMS will influence what data is collected and how it can be used.

During the life of MORE MAMaZ, the total amount spent on supporting the work of the SMAGs (of which CMS was one component) was GBP 213,567. This is equivalent to GBP 20 (K280) per SMAG for each year of the programme. A 2016 study into volunteerism undertaken by MORE MAMaZ found that 82% of SMAGs trained by MAMaZ four to five years ago were still active, while 95% of SMAGs trained by MORE MAMaZ two years previously were still active. Hence the programme investments provided excellent value for money.

Lessons learned

Lessons learned from MORE MAMaZ's CMS experience include:

- Initial investments in developing the capacity of SMAGs are essential. A highly motivated SMAG will be able to carry programme activities forward, and record progress accurately.
- The selection of SMAGs requires substantial input from communities. Literacy levels should be considered to ensure that accurate data is collected.
- In MORE MAMaZ, the CMS was implemented as part of a broader package of demand-side interventions. This greatly increased the participation of SMAGs in data collection: being able to keep a record of their activities and performance was highly motivating.
- With better coordination of community level development activities, costs for community monitoring can be shared, resulting in greater sustainability.
- Distance and poor telecommunication infrastructure limits bi-directional flow of CMS data. These factors can also limit the volume and quality of mentorship that can be provided to SMAGs. Innovation in the use of new communication technologies (e.g. social media applications such as WhatsApp) can greatly reduce the amount of time that SMAGs need to devote to data collection and transmission, while improving the quality of mentorship they receive from programme implementers.
- The sustainability of CMS depends to a large extent on the district health team maintaining their support for community-based data collection. Building community indicators into the HMIS will help to institutionalise CMS.



Extract from a SMAG volunteer's notebook

Policy implications

MORE MAMaZ demonstrated that it is possible to collect maternal health data at community level, and to use this to inform health and management decision-making at community, facility, district and national levels. Data collected by SMAGs can complement routine HMIS data collection by providing greater insights into maternal health within each community. Key policy implications include:

- Collection of community level data by SMAGs should not be an isolated initiative, as this takes away from their ownership and empowerment and can quickly undermine their motivation. Going forward, it is recommended that the national SMAG policy is rolled out with a solid plan that integrates community development and its monitoring as an extension of HMIS. HMIS data collection currently ends at facility level.
- CMS data collection forms need to be simple and usable by community members with limited education (primary school graduates), and focus on the minimum dataset necessary to achieve desired objectives.
- SMAGs need to be invested in and supported to record their activities. Such investment is not beyond reach if carefully planned for, and the benefits far outweigh the costs.
- In order to sustain the work of SMAGs, including their data collection activities, DHMTs would benefit from a post that focuses wholly on overseeing activities that help to strengthen the community health system – as happened in Mongu. Evidence from MORE MAMaZ points to the considerable improvements in health status and outcomes that have been brought about as a result of the activities of SMAGs in Zambia. Hence this investment has proved to be highly cost-effective.

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