Social and behaviour change matters for data quality: Lessons from strengthening Mozambique's malaria surveillance system for informed decision-making

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Introduction

In 2018, Malaria Consortium and the National Malaria Control Programme carried out an evaluation of the integrated malaria information storage system (iMISS) in Mozambique to identify the bottlenecks and challenges to high-quality data collection and evidence-based decision-making for malaria control and elimination. The results of this assessment informed the design of a project that aimed to strengthen malaria surveillance for data-driven decision-making, which was implemented from June 2019 to December 2022. A comprehensive assessment of the project's effectiveness was carried out in 2022, focusing on district-level interventions.

Methods

- We collected primary and secondary data using the World Health Organization's Malaria Surveillance System Rapid Assessment Toolkit to carry out the assessment.
- We used a mixed-methods approach to evaluate project performance, data collection and data usage. The assessment aimed to identify strengths and weaknesses, and to provide recommendations for strengthening the quality of data for decision-making for malaria control and elimination.
- We administered a standardised semi-structured survey to district malaria focal points (DMFPs) and analysed data from monthly malaria reports and the health information system. Both quantitative and qualitative analyses were conducted using descriptive methods.
- We assessed the impact of the following social and behaviour change (SBC) interventions:
  - raising health technicians' awareness of good practices on filling out registration tools (handwriting, correct and comprehensive completion of registers)
  - engaging role models to encourage a culture of data discussion
  - technical support to advocate for self-assessment of data quality
  - peer-to-peer coaching and mentorship on data use
  - learning exchanges between health facilities from the same district (poor data quality partnered with good data quality)
  - yearly national data quality competitions, in which the district with the best performance in data quality is recognised
  - tailored messages disseminated to health technicians through information, education and communication materials.

Results

- The joint activity planning exercise encouraged government ownership of and leadership in implementing SBC and other project activities.
- The SBC approach encouraged self-data quality assessment (DQA) by health technicians. Self-DQA helped to improve the quality of data from several health facilities.
- Self-DQA developed technical capacities on triangulation and the discussion of data within the health facility.
- SBC communication promoted the exchange of experiences, which was a fundamental tool for sharing knowledge and keeping staff motivated.
- Regular meetings encouraged a culture of data discussion.
- Ongoing awareness raising for technicians encouraged best practice when completing registration tools and timely submission of reports.
- Out of the 28 selected districts, 27 (96 percent) participated in the evaluation. The assessment revealed that completeness of reporting (93 percent) and timeliness (89 percent) were good. However, an assessment of data accuracy revealed discrepancies across variables in 53 percent of districts.
- Data usage for decision-making was high, with regular data review meetings held in all districts. The epidemiology of malaria and data quality were discussed in these meetings. However, further analysis of data was limited, and desegregation by health facility was lacking.

Conclusion

Our evaluation highlighted the importance of SBC for improving data quality, specifically with regard to reporting and timeliness. The quality of data was related to behavioural practices, and our results suggest that reporting accuracy needs to be improved. We recommend that the use of the iMISS and self-DQA in health facilities is intensified. This will help to identify and monitor discrepancies in reported data, provide timely corrections and improve accuracy.

Acknowledgements

Our social and behaviour change approach fosters sustained behaviour change by enabling individuals to critically assess their actions and adopt positive behaviours that enhance decision-making

malaria consortium
disease control, better health

Supplementary visuals

Photo 1: Accurate and complete records are essential for improving data quality, 25 de Janeiro Health Facility, Cuamba district, Niassa province

Photo 2: Data quality assessment at Facassiza Health Facility, Magude district, Maputo province

Photo 3: Health staff engage in a data quality discussion at 25 de Janeiro Health Facility, Cuamba district, Niassa province

Photo 4: SBC communication promotes the exchange of experiences and sharing of knowledge, Facassiza Health Facility, Magude District, Maputo Province