

An Assessment of Participatory Integrated Vector Management for Malaria Control in Kenya.

Mutero CM¹, Mbogo C², Mwangangi J³, **Imbahale S**⁴, **Kibe L**⁴, Orindi B⁵, Girma M¹, Njui A¹, Lwande W, ¹ Affognon H¹, Gichuki C⁶, Mukabana WR⁷.

¹International Centre of Insect Physiology and Ecology, ²University of Pretoria, Pretoria, South Africa; ³Kenya Medical Research Institute WellcomeTrust Research Programme, Kilifi, Kenya; ⁴Technical University of Kenya, Nairobi, Kenya; ⁵KU Leuven, Leuven, Belgium; ⁶The Presbyterian University of East Africa, ⁷University of Nairobi, Nairobi, Kenya

Abstract

Background: The World Health Organization (WHO) recommends integrated vector management (IVM) as a strategy to improve and sustain malaria vector control. However, this approach has not been widely adopted.

Objectives: We comprehensively assessed experiences and findings on IVM in Kenya with a view to sharing lessons that might promote its wider application.

Methods: The assessment used information from a qualitative external evaluation of two malaria IVM projects implemented between 2006 and 2011 and an analysis of their accumulated entomological and malaria case data. The project sites were Malindi and Nyabondo, located in coastal and western Kenya, respectively. The assessment focused on implementation of five key elements of IVM: integration of vector control methods, evidence-based decision making, intersectoral collaboration, advocacy and social mobilization, and capacity building.

Results: IVM was more successfully implemented in Malindi than in Nyabondo owing to greater community participation and multistakeholder engagement. There was a significant decline in the proportion of malaria cases among children admitted to Malindi Hospital, from 23.7% in 2006 to 10.47% in 2011 ($p < 0.001$). However, the projects' operational research methodology did not allow statistical attribution of the decline in malaria and malaria vectors to specific IVM interventions or other factors.

Conclusions: Sustaining IVM is likely to require strong participation and support from multiple actors, including community-based groups, non-governmental organizations, international and national research institutes, and various government ministries. A cluster-randomized controlled trial would be essential to quantify the effectiveness and impact of specific IVM interventions, alone or in combination.

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