

An exploratory study of community factors relevant for participatory malaria control on Rusinga Island, western Kenya

Abstract:

Capacity strengthening of rural communities, and the various actors that support them, is needed to enable them to lead their own malaria control programmes. Here the existing capacity of a rural community in western Kenya was evaluated in preparation for a larger intervention. Methods Focus group discussions and semi-structured individual interviews were carried out in 1,451 households to determine (1) demographics of respondent and household; (2) socio-economic status of the household; (3) knowledge and beliefs about malaria (symptoms, prevention methods, mosquito life cycle); (4) typical practices used for malaria prevention; (5) the treatment-seeking behaviour and household expenditure for malaria treatment; and (6) the willingness to prepare and implement community-based vector control. Results Malaria was considered a major threat to life but relevant knowledge was a chimera of scientific knowledge and traditional beliefs, which combined with socio-economic circumstances, leads to ineffective malaria prevention. The actual malaria prevention behaviour practiced by community members differed significantly from methods known to the respondents. Beside bednet use, the major interventions implemented were bush clearing and various hygienic measures, even though these are ineffective for malaria prevention. Encouragingly, most respondents believed malaria could be controlled and were willing to contribute to a community-based malaria control program but felt they needed outside assistance. Conclusion Culturally sensitive but evidence-based education interventions, utilizing participatory tools, are urgently required which consider traditional beliefs and enable understanding of causal connections between mosquito ecology, parasite transmission and the diagnosis, treatment and prevention of disease. Community-based organizations and schools need to be equipped with knowledge through partnerships with national and international research and tertiary education institutions so that evidence-based research can be applied at the grassroots level.