

Case-Study 3 Eradicating Malaria in Zanzibar

Overview

Zanzibar finds itself at a crossroads: it can seek to maintain and marginally improve its current control operations in order to indefinitely keep malaria suppressed or it can attempt to eliminate malaria from the islands altogether. Zanzibar has already achieved a high degree of control, achieving a prevalence rate of 1% and indoor residual spraying (IRS) coverage of 96% of households (ZMCP, 2009). The choice between continued control and elimination of Malaria in Zanzibar presents a unique case study to illustrate approaches to planning and assessing feasibility and cost effectiveness with regard to health interventions as key components of the planning process.

Context

Malaria presents major obstacles to social and economic development in sub-Saharan Africa. It has been estimated to cost Africa more than US\$ 12 billion every year in lost GDP, even though it could be controlled for a fraction of that sum. Malaria is Africa's leading cause of under-five mortality (20%) and constitutes 10% of the continent's overall disease burden. It accounts for 40% of public health expenditure, 30-50% of inpatient admissions, and up to 50% of outpatient visits in areas with high malaria transmission. Since 2002, Zanzibar has enjoyed a well-funded program courtesy of the Global Fund to Fight Aids, Tuberculosis and Malaria (GFATM) and the President's Malaria Initiative (PMI) funded by the US Government. This has contributed to the parasite prevalence being driven down from historic levels of more than 70% to less than 1% currently. The malaria programme is almost entirely funded by donors, to the extent that in FY2009/10, there were no government funds spent on the development budget of the Zanzibar Malaria Control Programme (ZMCP). The ZMCP is located within the Directorate of Preventative Services in the MoH. It is divided in four departments: case management; information, education and communication; vector control; and monitoring and evaluation.

The policy/finance dilemma: Continued control or elimination?

Sustained control is considered to be the status quo, with no interventions being scaled back. Therefore, it will maintain activities such as distributing bed nets and indoor spraying.

Elimination is the process of reducing the current 1% transmission rate to zero and further taking steps to ensure that malaria is not reintroduced. Additional measure will include:

- A detection system that needs to be put in place with the capability of detecting at least 75% of the population and promptly investigating and treating any new case;
- Technical capacity among officials to implement the programme.
- Substantive reduction of importation risk in mainland Tanzania or through screening of travellers;
- A state of the art surveillance system will need to be put in place;
- An inter-ministerial committee needs to be formed to ensure continued leadership and financing of the program.

Questions for dialogue:

1. Is elimination a worthy investment if we could derive the total benefits and show that they are higher than the marginal cost from moving from sustained control to elimination?
2. What are the risks and trade-offs /concerns of pursuing malaria elimination?

Notes: Defining the costs and benefits of sustained control or elimination can be very complex. Most of the work that has been done is around costing the different interventions required for each stage of the process. However, calculating the benefits presents greater challenges. Ideally, you would not only want to calculate the financial benefits of implementing a programme (in terms of future costs savings), but also the 'socio-economic benefits' e.g increased school enrolment, lower health costs, etc, at the macroeconomic level – increased tourism, economic activity, productivity, etc as well as the indirect effects.