

Trends in Reducing Child Mortality: Community Case Management to Provide to Life-Saving Interventions

THE GLOBAL CHILD MORTALITY CRISIS

Achievement of the millennium development goal of reducing child mortality by two-thirds by 2015 will require a major effort to prevent and control pneumonia, diarrhea and malaria in sub-Saharan Africa. Low coverage and poor performance of the health system contribute to a high mortality rate of otherwise preventable deaths due to pneumonia (21%), malaria (18%) and diarrhea (16%).

∴ The Case for Community Case Management

Pneumonia, diarrhea and malaria can be easily treated by trained, supervised community members using prepackaged anti-malarial combination therapies, Oral Rehydration Salts, Zinc and Antibiotics. Community Case Management (CCM) approach uses Community Health Workers (CHWs) to provide a clinical diagnosis of fever and dehydration due to diarrhea, and either provide the appropriate treatment of prepackaged ACTs, antibiotics or ORS/zinc, or refer the child to a health facility.

The objective of CCM is preventing progression of uncomplicated to severe disease and averting death in cases of severe disease. In the case of malaria, for example, it is critical that a child is given treatment within 24 hours of onset of symptoms. By moving services beyond public health facilities down to community level and teaching mothers to recognize symptoms of fever, treatment can be provided before the disease progresses. In cases of severe malaria, pneumonia and dehydration, the referral system is critical, as children identified for referral are often most at risk of death.

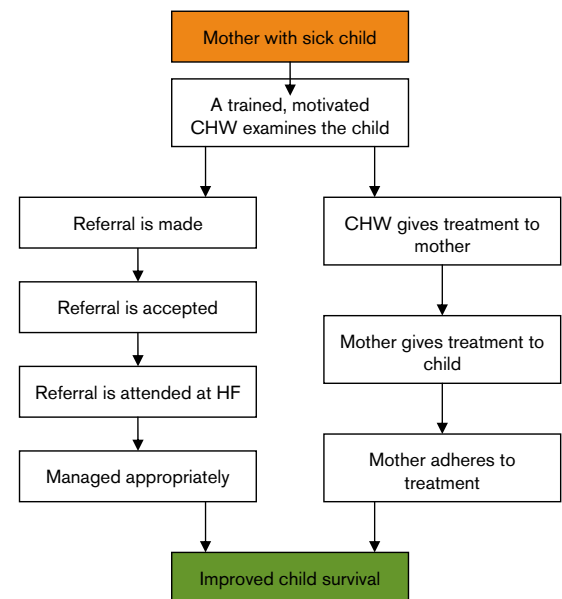
∴ The Case for Home Management of Malaria

The Home Management of Malaria (HMM) strategy is recommended by the WHO as a critical means to control malaria in sub-Saharan Africa through prompt access to effective antimalarial treatment for children living in underserved areas. The strategy relies on delivery of effective, pre-packaged, user-friendly, unit-dosed, antimalarial treatment (PPT) by a network of trained resource persons in the community, supported by an awareness campaign on recognition of fever and the correct treatment of malaria.

In studies carried out in the late 1990s using chloroquine, HMM has been shown to reduce malaria-specific and overall childhood mortality by over 40% (Kidane, 2000) and progression of uncomplicated to severe malaria by over 50% (Sirima, 2003). Recently it has been reported that ACTs can be successfully integrated into the HMM strategy (Ajayi, 2008). However, the impact of HMM with ACTs on childhood mortality has not been evaluated.

PSI RESPONDS

The Canadian International Development Agency (CIDA) has funded PSI and other NGOs to establish an evidence base for the impact on child mortality rates attributable to the community case management (CCM) approach. The CIDA-funded PSI Community Impact Program is a large-scale, multi-country initiative to increase access to life-saving interventions for children under five by providing diagnosis and treatment free-of-charge in communities where no health facility is present. It is estimated that this program can reduce under-five mortality by between 30 to 40% in the catchment areas and generate high quality data to support potential significant, future investments in CCM to achieve the Millennium Development Goals.



:: Developing Pilot Programs

Mali and Cameroon are currently developing pilot programs for community-based treatment of malaria, while the programs in DRC and Malawi include treatment of malaria, pneumonia and diarrhea in-line with the national policy and Integrated Management of Childhood Illness (IMCI) strategy. These programs will run for a period of 2 years, ending in early 2012. The programs will be evaluated for their impact on all-cause child mortality, helping to ensure an appropriate allocation of resources for such programs. Continuation and expansion of the program is contingent on a demonstrable impact on all-cause child mortality during the program's implementation.

The projects in the four countries are being developed in partnership with the Ministry of Health for catchment areas of between 1.5 to 2 million people, with the broader goal of taking the intervention to a national scale. PSI will design the project to the highest scientific and operational standards. Results from this program will guide plans for nationwide scale-up in target countries, provide models for how to introduce similar community-based treatment programs in other malaria endemic countries and potentially inform CCM policy in the African Region as a whole.

	Cameroon	DRC	Malawi	Mali
Total population covered	2 Million	1.5 Million	1.5 Million	2 Million
Diseases addressed	Malaria	Malaria, Pneumonia, Diarrhea	Malaria, Pneumonia, Diarrhea	Malaria
Products	Prepackaged ACTs	Prepackaged ACTs, ORS, Zinc, Antibiotics	Prepackaged ACTs, ORS, Zinc, Antibiotics	Prepackaged ACTs
Implementation period	24 months, 18 month control in 50% of population	24 months, 18 month control in 50% of population	24 months, 18 month control in 50% of population	24 months, no control
Research	TDR Evaluation Mid-term efficacy study of integrated CCM	TDR Evaluation	TDR Evaluation	TDR Evaluation

:: Evaluating Impact

PSI is partnering with World Health Organization, Special Programme on Tropical Disease Research (WHO/TDR) to evaluate the impact of this intervention. The main objective of this evaluation is to measure the reduction in all-cause post-neonatal child mortality (age 6-59 months) resulting from the implementation of CCM in three countries: Cameroon, Malawi and the Democratic Republic of Congo. Specific objectives are:

- To assess the level of post-neonatal mortality in intervention and control areas for each country using a birth history survey among reproductive aged women (15-49 years); and
- To assess the level of key intervention and contextual indicators on household socioeconomic status and child health.

PSI will also be conducting a 14,000 household mid-term mortality survey in Cameroon after 1 year of implementation.