

Development of Health Systems: Potential Contribution of the Roll Back Malaria Initiative

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Malaria control efforts are not new to South-East Asia or other regions of the world affected by malaria. But the Roll Back Malaria (RBM) initiative, a global partnership with a single strategy and explicit focus on equitable outcomes, as well as consistent technical support, strong advocacy, and working methods reflecting the reality of country-led partnerships, is a new concept that is taking shape in over twenty countries across the world.

Burden of Malaria

The efforts to eradicate malaria globally during the 1960s were unsuccessful; however, economic development and health programs have resulted in reduced malaria mortality in many regions, especially Asia and Latin America. In Vietnam, the number of malaria-related deaths had fallen from more than two thousand in 1991 to below one hundred in 1997, reflecting the impact of strengthened malaria interventions. Progress is now threatened, because drug resistant forms of the parasite have emerged; new epidemics reflect climate change, population movements, and a reduction in public health capacity within the national health systems.

Every year, more than three hundred million episodes of acute malaria illness occur globally. As we reach the end of the twentieth century, the global death rates due to malaria are no longer falling. Current estimates indicate that a million people die each year from malaria, and most of them are children. Malaria-specific mortality rates in Africa have risen in recent years, and the disease has returned to Central Asia. Simultaneously, some of the existing control measures will need to be phased out because of their adverse consequences for human health and the environment, which will

have further implications for efforts to reduce the malaria burden.

Malaria is most intense in the world's poorest nations, with a great proportion of episodes causing serious illness and leading to a significant (as much as 25%) loss of household earnings. Indeed, malaria and its consequences can cost a country as much as 6% of its gross domestic product. Thus, malaria is a major contributor to poverty and a significant impediment to human and socioeconomic development in affected countries.

Challenges in Malaria Control

Malaria poses a variety of challenges. Malaria control management is not straightforward as no simple and universally effective intervention exists. Private sector investment has been limited in the development of new drugs and vaccine, and development assistance agencies have not always given a high priority to supporting countries' malaria efforts. Incompatible strategies and poor coordination characterize a great deal of the assistance. Consequently, malaria control interventions have often been inappropriately applied, resulting in the emergence of drug-resistant parasites and insecticide-resistant mosquitoes.

Recently applied research has demonstrated that a range of available interventions, when properly used, are highly cost-effective in reducing the malaria burden within poor communities. These include:

- § Use of insecticide-treated materials, including bed-nets, in the home
- § Early diagnosis and prompt treatment of malaria, with some combination medication use

- § Routine malaria treatment during pregnancy
- § Surveillance, prediction, and rapid response to epidemics
- § Widespread public awareness of malaria, its dangers, and prevention methods.

Many of these interventions have not been used to their full potential. A more intensive effort to make them widely available to all countries, including poor communities, would yield extraordinary benefits. Sustainable availability of these interventions requires effective public health systems with the ability to empower communities to confront a range of priority health problems. National efforts to reduce the malaria burden of poor people can only succeed if national institutions are capable of maintaining long-term action, are well-managed, and are staffed (at the central and local levels) by people with necessary skills and training to monitor progress and adjust responses.

Roll Back Malaria: An Innovative Approach

In the mid-1990s, the World Health Organization's (WHO) Regional Office for Africa and the World Bank concluded that a new initiative to address the impact of malaria in Africa could significantly reduce mortality within a decade, using available control measures. Responding to requests from the African Heads of States at the Organization of African Unity Summit in 1997, they proposed an initiative. Simultaneously, WHO mobilized additional funds to support existing malaria control efforts in Africa. The two initiatives began to examine the best method to improve the existing global response with interventions that enable countries to reduce their malaria burdens. In 1998, Dr. Gro Harlem Brundtland, when assuming the position of Director-General of WHO, responded to concerns from various heads of states, deciding that it was time to substantially increase the global response to malaria. She wanted better use of available tools and proposed that a range of other organizations and institutions, besides ministries of health, public sector health services, and health professionals, become involved in ensuring their

availability and endurance. The new effort would sponsor the development of effective new malaria control tools through innovative alliances between public and private sector entities. This new initiative, based on global partnership, was called the "Roll Back Malaria" initiative. She committed WHO to the efforts of initiating the partnerships and supporting innovative and effective action. Within months, several heads of states and a range of development organizations had committed to this initiative.

Dr Brundtland recognized that, for such an effort to succeed, malaria-affected communities, community-based organizations, private sector groups, and local and national governments must be fully engaged. Therefore, she proposed that malaria-related action should be viewed as an integral element of policies for health sector and human development. Because she wanted to assure that WHO would provide the strategic direction for this effort, a time-limited special project was established under the direction of the WHO headquarters' cabinet in July 1998. The RBM Cabinet Project has led WHO's contribution to the RBM partnership.

During 1998, several heads of state, including those of the G8 nations, indicated their strong backing for the Roll Back Malaria concept and the new initiative taken by WHO's Director General. WHO moved forward by initiating a partnership of governments and development agencies to Roll Back Malaria. The President of the World Bank, the Executive Director of United Nations Children's Fund (UNICEF), and the Administrator of United Nations Development Program (UNDP) agreed to join the Director General of WHO, in October 1998, to found the Global Partnership to Roll Back Malaria. Each organization agreed to contribute within the context of its mandate. WHO would provide the technical assistance and secretariat functions to this partnership in ways that reflected its comparative advantage as the international agency for global health. A broader group of partners met in December 1998 and consolidated the RBM Global Partnership. Governments of countries affected by the disease, other donor agencies, non-governmental organizations (NGOs), international private sector representa-

tives, and research groups were among the participants. Alliances among the partners, particularly UNICEF, WHO, World Bank, and UNDP, are strong and effective at national and headquarters levels. The Global Partnership has an overall goal of decreasing in half the worldwide malaria-related disease burden by 2010.

Elements of the Roll Back Malaria Strategy

The widely supported strategy to Roll Back Malaria has the following six elements, formulated from WHO's Global Malaria Control Strategy, which was endorsed in Amsterdam in 1992:

- § Early detection of malaria outbreaks
- § Rapid diagnosis and treatment of illness
- § Multiple and cost-effective means for infection prevention
- § Focussed research to develop and test new products
- § Coordinated actions through health sector and community-level efforts
- § Dynamic global movement supported by a coalition of partners working with a common approach

These elements should be taken forward within a supportive environment of strong national institutions and sectorial collaborations.

Progress with Roll Back Malaria

During the eighteen months' preparatory phase of the RBM Cabinet Project, the first six months were focussed on concept development. In the next six months, a series of regional consensus-building meetings occurred throughout Asia, Africa and Central Europe, with national-level officials helping to develop the elements of the RBM strategy. Political leaders and officials from different government departments within malaria-affected countries debated and concurred on the concepts forming the basis of global partnership work. These principles for the

RBM partnership are as follows:

- The RBM partnership is not a project or program, but a social movement that is part of broader societal action for health and human development.
- The RBM strategy builds on past experience and is evidence-based, with a focus on outcomes.
- Country and community priorities will drive RBM actions and will be adapted to local realities.
- The interests of the people, particularly children and women in poor communities, will be the center of the RBM movement.
- The RBM movement is supported by partners who function independently, but in concert; the partners' contributions focus on their comparative advantage or interest.
- The RBM movement concerns building and strengthening the capacity of health services to help communities confront all illnesses that undermine good health.

Following the consensus building meetings, national delegations began to devise and advance their own national strategies to Roll Back Malaria, considering (and, where necessary, adapting) the principles and strategic elements and building on effective actions already in place. They established a process to produce statements of immediate action, and then embarked on long-term activities to incorporate the RBM strategy into national health and development programs.

National delegates also initiated work with representatives of partner organizations to launch their national RBM partnership. WHO, through the RBM project, is currently collaborating with other partners to develop guidance for the implementation of RBM action at national level, within the context of the health sector development.

Guidance also oversees the operation and maintenance of national-level partnerships and financial assistance for ensuring unified WHO technical support to national action, suggesting ap-

proaches to supporting community-level action through societal movements to Roll Back Malaria. This guidance indicates the potential roles of WHO and other partners in supporting country-level action, indicating clearly the procedures to be used to appraise funding proposals, in order to monitor fund use and to assess outcomes.

The consensus meetings, together with the earlier experiences of countries, were discussed by WHO in late May 1999, and, then, at a meeting of the Global Partnership in Harare in late June 1999. This question was addressed, "How can WHO, as an entirety, contribute to the RBM partnership?" A preliminary strategy and work plan for the cabinet project were developed and carefully analyzed by the partners. By December 1999, a more detailed work plan and budget will be formulated by WHO, and the partners will be invited to indicate how their investments contribute to the plan's outputs. Simultaneously, the partners will collaborate to support national stakeholders to take progressive actions to Roll Back Malaria at national level and a process defining milestones and indicators of progress will begin.

Through the Cabinet Project, WHO will establish harmonized systems for technical support, situation analysis, monitoring and evaluation, and approaches for effective community action, which will be appropriately used by the partners. Concurrently, mechanisms for more effective product development of new medicines and tools to control malaria will be established through strategic and operational research and efficiently managed public-private partnerships.

Progress of the RBM project and the Global Partnership will be reviewed again by the partners in January 2000. The members expect that encouragement will continue from the United Nations (UN) and other partners to work together effectively in a semi-formal framework which will be held together by a shared purpose and strategy, as well as shared values. The project will continue through processes of consensus building and negotiation, rather than rigid agreements and formal governance structures.

Functions of WHO in Roll Back Malaria

Malaria is a complex illness; strategies to Roll Back Malaria must be based on the most current evidence, generated through sound operational research. The Roll Back Malaria project will help ensure that WHO, with other partner agencies, responds appropriately. WHO will continue to examine malaria situations in different countries, to review current policies and recommend the most appropriate strategies for controlling malaria, and to discuss resources needed to address pertinent problems with national authorities. Clear-cut positions on critical issues in Rolling Back Malaria, based on the best available evidence and experience, will continue to be established. WHO ensures that high quality technical guidance will be accessible for groups of countries and individual countries. Through the Roll Back Malaria Cabinet Project, WHO has begun to sponsor and supervise networks of experienced professionals who help personnel develop the skills needed to implement this guidance. Key technical issues handled in this manner include:

- Situation analysis: the malaria burden faced by poor people
- Mapping of the risk of malaria
- Monitoring of drug resistance
- Developing combination therapies and new techniques for medication administration
- Using insecticide-treated materials for personal protection
- Improving responses to malaria epidemics
- Reducing the malaria burden through health sector development
- Reducing the malaria burden in countries affected by complex emergencies
- Gender issues in diagnosis, treatment, and prevention of malaria
- Home and community-based action to reduce the burden of malaria

In addition, the RBM project will work with the Multilateral Initiative on Malaria to support the development of critical malaria research capacity in developing countries, working closely with the cosponsored UN research program for Tropical Disease Research, providing seed funds to support critical areas of strategic research (for example, reduction of drug resistance through appropriate combination therapies). This program will sponsor partnerships to develop and distribute new low-cost treatments for malaria (such as the Medicines for Malaria Venture) and will offer any available support to initiatives aimed at developing malaria vaccines.

The Roll Back Malaria Project involves all relevant units and levels in WHO and works with national institutions in malaria-affected countries through HQ departments, regional, and national efforts to maximize health outcomes as countries develop their health systems. The Global Partnership to Roll Back Malaria is currently working with governments of over twenty countries in planning a more intense response to the risks of malaria. WHO is currently establishing systems for monitoring, documenting, and disseminating information on the impact of Roll Back Malaria interventions so that informed advice can be provided to decision makers, and the lessons learnt in other countries can be well utilized.

Resources

Using available tools, the overall cost of decreasing morbidity and mortality associated with malaria, throughout the world, is estimated to be between \$375 million and \$1.25 billion yearly at current costs (World Health Report, 1999). The additional funds that are required to implement the Roll Back Malaria strategy (that can be absorbed) are around \$200 million per year. Dollar 500 million is needed for research and product development. The amount of national funding required may increase significantly, given the pressure for alternatives to DDT utilization for mosquito control. Global RBM partners will contribute some of these funds, primarily directly to individual countries, with some funds contributed by WHO. UNICEF is designating substantial resources, the World Bank is providing loans and grants to sup-

port country efforts to RBM, and UNDP is supporting critical work on malaria and poverty. The budget for WHO's RBM Cabinet Project will be approximately \$55 million yearly for 2000 and 2001. The RBM project will ensure that the Global Partnership has clear mechanisms for transferring resources to countries, and that countries are helped to pursue strategies and approaches most likely to yield effective returns on their investments. Each activity supported by the partnership's contribution, whether it is a country partnership or a specific area of research or project development, will be properly appraised and summarized with a framework showing planned outputs, indicators of progress and monitoring arrangements. Regular reports of progress will be available to the partners.

Monitoring

Roll Back Malaria action is already being undertaken in some countries. To support national-level activity, a system is being established to track progress of RBM Global Partnership action, to monitor its impact on the reduction of the malaria burden in communities, and to assess the response of national health sectors. This system will help national authorities and RBM Global Partners obtain reliable information, by using data from pre-existing sources when possible, in relation to a range of important criteria. An Internet-based data handling system, organized by country and indicator, will yield a relational database to serve as a basis for monitoring progress. Every attempt will be made to standardize data collection and analysis with respect to definitions of crucial variables, collection and analysis procedures, as well as population groups. The intent is that this system will evolve as a global information system for malaria (substituting for current multiple approaches) and will progress with endorsement from national authorities. When possible, it will be incorporated into national plans for integrated disease surveillance and health information systems.

For monitoring impact, activities to improve baseline data on core indicators will be undertaken in 2000. This information has been difficult to obtain because of community problems of differentiating malaria episodes from other causes of fe-

ver. To examine the overall impact of Roll Back Malaria on poverty and human development, a monitoring system is being developed that will examine data, considering such factors as measures of economic impact, poverty reduction, and overall human development.

Health Systems Goal

The efforts to Roll Back Malaria will only be sustained if they are incorporated within efforts to maintain and further develop health systems and public health efforts. We see Roll Back Malaria as an opportunity to strengthen health systems' response to critical public health problems, not in isolation, but cooperatively within health systems. Synergy is being explored among approaches to Roll Back Malaria and priority health interventions designed to control HIV/AIDS, extinguish tuberculosis, and make pregnancy safer.

In many countries, the health systems are not equipped to cope with the present demands, let alone future challenges. Defining priorities and identifying key interventions is not useful where health systems cannot deliver them or reach the poor. Health sector development has now become a strategic direction for all of WHO's work. With WHO's support to malaria control, we hope for a stronger health system that can more effectively and efficiently combat tuberculosis and HIV/AIDS, deliver immunizations, make pregnancies safer, and decrease mortality and morbidity.

WHO will assist member states in fulfilling their role in directing health policy, creating an appropriate regulatory environment, securing financial support for basic health services, and providing a framework for the growing private sector of health care delivery. The World Health Report, that is being prepared for the year 2000, will provide a complete analysis of health systems and help governments measure health system performance, both nationally and internationally.

WHO, as an institution, is generally expected to focus on technical, political, and institutional realities by providing technical support, building partnerships, managing resources, monitoring progress, and supporting strategic research and product

development. WHO supports member states in effective achievement of health system goals within a given level of resources.

The focus of WHO's work on essential health service functions for decreasing the diseases of poverty is guided by three fundamental principles: to achieve a real reduction in malaria burden, to mobilize extra resources for health, and to improve the capacity of health systems to deliver priority health interventions cost-effectively. This work has fundamental implications for the manner in which health systems respond and the roles of national and international development partners, such as:

- New roles for disease control programs in overall health systems development
- Inclusion of malaria issues in sector-wide planning
- Examination of the needed capacity requirements of needed systems and additional investments in institutional and organizational development, and general capacity building.

Health Systems Challenges

Health systems' goals are improving the health of the population, requiring health systems to respond to legitimate expectations of its population, and fairly manage finances. These overall goals will, beginning with the World Health Report in year 2000, be used to measure the performance of health systems uniformly across the globe. Performance, in this context, is the achievement of goals specifically related to resources, and efficiency is the achievement of the socially desired combination of goals. There is a need to focus attention on the following questions:

- What are the major global health system development challenges we face today, and how are they addressed?
- How is the proper balance achieved between focussing on health outcomes and addressing fundamental structural problems in health systems development (potentially involving the redirection of resources to human resources development,

institutional and organizational development, and general capacity building)?

- How can we ensure that the one billion people, who are still outside effective reach of existing health systems, can be reached in the near future?
- How can we allocate the number, functions, and distribution of health institutions so that priority health interventions are provided cost-effectively within the resource capacity of countries?
- What mechanisms should be introduced to improve the performance of health workers?
- What are improved responses to the particular demands in complex emergencies?
- What are improved assessments to the global impact on health systems development, and what are more proactive responses to these changes?

Thus, the major health systems development challenges include: balancing health outcomes and health systems development, improvement of the health of the poor and disadvantaged, encouraging private sector growth, increasing salaries and incentives in the health sector, and responding to complex emergencies and globalization.

WHO's Response to Health Systems Challenges

The RBM Project has emerged as a pathfinder for an approach to health and human development that reflects the current consensus of best practice. Partners will soon be able to gauge whether the RBM concept, project, partnership, and national movements are strong enough to yield the expected results. However, this work has risks; several factors could constrain the degree to which the Cabinet Project and the Global Partnership

add value to community, national, and international efforts to Roll Back Malaria.

The RBM initiative must receive sufficient political attention within countries, societal health movements must ignite, sectorial action must occur, and disease control and health sector development interests should fuse within national ministries of health. Ensuring that current tools to control malaria remain effective is another major issue, given the parasite's biology, the vector's behavior, anticipated climate changes, population movements, and conflicts in malaria-affected countries. The project and partnership have emphasized new product development, strategic research, operational research (to predict changes in transmission and severity), and strong and well-informed technical support (to ensure that central tools are well used). Potentially, the most serious challenge is availability of sufficient resources and sustaining enthusiasm of malaria-affected countries for the RBM partnership. Implementation of the strategic approach and working practices are necessary to support the RBM partnership; a reform process is taking place within WHO, including the recently created Global Cabinet and the Director-General's focus on RBM as a pathfinder for changes in working practice.

The World Health Organization's contribution to Rolling Back Malaria is one aspect of its wider effort to meet health systems' challenges. It has pioneered methods for new concepts in international health, new institutional arrangements in WHO, new techniques for working with development partners, and, importantly, new ways in which WHO collaborates with countries. The RBM Project illustrates the potential for reducing the disease burden through decentralization, cost sharing, allocating resources for priority interventions, strengthening health sector reforms, forming partnerships, and informing decision makers.