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Perspectives

Halting the Toll of Malaria in Africa

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Abstract. A renaissance in commitment to malaria control is transforming the perspectives and aspirations of the global community, prompting a consideration of goals for confronting a disease that is responsible for legendary death and suffering in Africa. The results in several countries are producing confidence that current control interventions can result in a dramatic reduction in the burden that malaria causes. However, the complexities of the challenges that must be addressed for comprehensive Africa programming are formidable in terms of the time required and the resources that will have to be mobilized. Progress toward elimination of the malaria burden in the African region in the next 5 years will be the critical benchmark for the feasibility of a comprehensive global campaign to eliminate and potentially eradicate malaria.

THE CONVERGENCE OF POTENTIAL AND IMPERATIVE

An almost three-decade lull in malaria control support has given way to a remarkable global commitment to bring malaria under control in the African region. The current intensity of support raises the possibility of an unprecedented golden era where technology, funding, and commitment converge to radically reverse the minimalism that has hampered global approaches to the most common cause of death and suffering in children younger than 5 years of age in Africa.

Today, there is a greater range of tools to fight malaria than ever before—more efficacious drugs, insecticide-treated nets (ITNs), indoor residual spraying (IRS)—with the promise of more to come, including vaccines and a new generation of drugs. The entry of new and innovative financing partners, including the Bill & Melinda Gates Foundation; the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM); the World Bank Booster Program; and the US President's Malaria Initiative, has dramatically changed the malaria control landscape, raising expectations and making national scale-up feasible.

With funding support increased 10-fold between 1998 and 2006,[1] a partnership of donor agencies and countries has focused in Africa on comprehensive national scale-up of malaria control programming. The GFATM, launched 6 years ago, has alone increased global malaria funds by several orders of magnitude compared with pre-2000 levels. Its recent approval of US$471 million in Round 7 grants to fight malaria represents a critical contribution to the malaria equation. In addition, all major donors in the African region have committed with the GFATM to coordinate funding with national business plans.

Global interest and commitment to fighting malaria in Africa have also reached new heights. With the recognition that reducing the burden of malaria is a critical investment for achieving the Millennium Development Goals, made explicit by the report of the Commission on Macroeconomics and Health in 2001,[2] global supporters have rallied to prioritize malaria control in Africa. They are coordinating their efforts with increasing effectiveness through the Roll Back Malaria (RBM) Partnership, working toward the strategic goal of reaching 80% national coverage with proven interventions by 2010.[3]

In 2004 and 2005, the RBM Partners invoked the scale-up for impact (SUFI) approach to focus on comprehensive national planning and implementation of malaria control programming (Steketee RW and others, unpublished data). At that point, few countries had attempted to rapidly scale up proven interventions to achieve and sustain high coverage rates. The strategy was based on the supposition that the well-documented experiences of a few countries with SUFI would build confidence in the African region that a more aggressive commitment would produce rapid and compelling evidence for investments in malaria control.[5]

AFRICA LEADING THE WAY

African nations and their leaders have shown their determination to harness the emerging commitment to malaria control and to prioritize a comprehensive national approach to reversing the malaria burden. Leaders in several countries, notably Zambia and Ethiopia, have shown that countries are defining their malaria agenda and not waiting for donor funding before launching ambitious programs.[4,5] More recently, many countries have begun implementing sound malaria control business plans to scale up access to a range of interventions (ITNs, IRS, prevention and treatment medicines), in the context of SUFI, to achieve population-based impact on health and economic burden.

Adopting a structured, public health approach—modeled after the Expanded Program on Immunization—to an iterative cycle of program planning, resourcing, implementing, monitoring, and evaluating has optimized program performance. Data-based programming has been the framework by which Zambia is achieving population-based impact on health and economic indicators and has served as a sound approach to quality improvement for business operations in the national RBM partnership.[6]

EVIDENCE OF PROGRAMMING SUCCESS AND IMPACT

A report published recently by UNICEF and RBM documented that 16 of the 20 sub-Saharan African countries for which trend data are available have at least tripled their ITN coverage since 2000.[7] Nearly all countries in this region have changed their national drug policies to artemisinin-based

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combination therapies (ACTs). Although across the region, the overall ITN use still falls short of global targets and only 34% of children with fever receive antimalarial medicines, the data show that countries and their partners are mobilizing to scale up programming.

Findings from several countries are shedding light on the real promise of rapid scale-up. Data from Zambia show that use of ITNs produces a rapid impact on rates of parasitemia and severe anemia (Miller JM and others, unpublished data); IRS coverage rates of > 85% have been achieved; ITN coverage rates are on track to reach 80% in 2008. Ethiopia has distributed 20 million long-lasting insecticidal nets (LLINs) since 2005, meeting the national goal at the end of 2007 of covering 100% of at-risk families with at least two LLINs.[8]

These early national experiences give confidence that governments and their partners can negotiate consensus planning for impact; that implementation challenges, such as procuring and distributing ITNs, can be readily resolved; and that communities can and will manage their malaria control activities.

RBM PARTNERS REALIZING THE POWER OF WORKING FOR NATIONAL PROGRAMS

In 2006, the RBM Partnership undertook a comprehensive self-assessment, called the RBM Change Initiative, which culminated in an intensified mission focusing on country program scale-up support including the development of essential tools and methods.[9] Rapid mobilization of RBM's Harmonization Working Group to provide on-demand technical assistance and training to countries developing applications for Global Fund Round 7 funding resulted in nearly doubling the 2006 proposal approval rate and tripling that of 2005.[10,11] RBM's Monitoring and Evaluation Reference Group has developed the consensus standard for effective methods and tools to ensure that countries measure impact consistently and accurately.[12] RBM today is viewed as an authoritative, strategic convener of global dialog and country programming support.

ITNs and ACTs generally constitute > 50% of all program scale-up costs. RBM partners have made substantial progress in assuring adequate global supplies of ITNs and ACTs, and several innovative approaches, such as the Affordable Medicines Facility–malaria,[13] are being implemented to alleviate the bottlenecks in national procurement and financing that have impeded programming acceleration.

WHAT LEVEL OF MALARIA CONTROL IS ENOUGH?

The rapid pace of advances in the malaria control landscape in Africa is encouraging many national leaders and global financing partners to elevate the health and political priority for investing in national malaria program scale-up. Has malaria control now moved irrevocably to a credible program framework, and will the success of early-adopting countries predictably translate into an African regional set of investments incorporating all malaria endemic countries?

In < 5 years, the global community has moved from lamenting sparse national progress in controlling malaria in Africa to exploring whether regional elimination or even global eradication are feasible goals.[14] Invoking eradication at this stage as the ultimate goal of our investments in malaria control in Africa has the potential power to build the long-term commitment and sustained attention to malaria programming that is required. However, calling for global eradication at this point must not draw attention away from the formidable challenges and critical importance of the African agenda.

Achieving 80% program coverage no longer qualifies as visionary, or perhaps even adequate, in light of recent advances. A goal of regional elimination sets our shared vision where it should and can be in the lifetime of Africa's children. While encouraging even higher coverage rates now could be viewed by some as moving the goalposts early in the game, it is in reality the logical and ethically imperative progression of our recent collective successes and commitment to African communities. There is no longer an acceptable level of death and suffering from malaria.

CHARTING THE ROADMAP

The enthusiasm for a comprehensive attack on malaria throughout the African region poses an opportunity to translate demonstrated country-level success into a regional imperative. First, and most urgently, national leaders and the global malaria community must in the near future articulate and commit to a comprehensive African agenda aimed at rapidly scaling up efforts to bring about a drastic reduction of the malaria burden regionally in the next 3–5 years.

It must be shown that the experience of countries that have embarked on SUFI constitutes an evolving framework and sustaining commitment for regional malaria elimination that will coalesce into a community of national success and a set of programming approaches relevant to the entire region.

The country-level SUFI agenda is definitely not realized, and success is by no means certain. Furthermore, the national SUFI experiences to date have not yet addressed the more ambitious national targets such as the elimination of mortality. Scale-up to between 60% and 80% coverage by campaign approaches will prove to have been the easier component of the agenda; the hard work of achieving mortality elimination through a sustaining national malaria control infrastructure is a path yet uncharted. At the same time, we cannot wait until 80% program coverage is achieved to develop the strategies and targets for national malaria elimination. Operational research is urgently needed to define the most economical mix of interventions to maintain high levels of burden reduction and transmission elimination.

The RBM Partnership will be the critical global forum to assure effective coordination of partners in their support of national programs. RBM partners have invested in the Partnership over the past few years, and the results of enhanced coordination are becoming evident through the development of a systems approach to malaria control programming. The global malaria control community has committed to evidence-based investments, and the Partnership must increasingly support national programs to develop strong program evaluation to document that malaria control investments predictably impact malaria burden.

Despite the marked increase in financing that has become available for malaria control in recent years, it is still far short of what will be required for a regional elimination program. Recent estimates are that at least US$3 billion per year, or US$4.02 per African, is required.[15] An agenda as bold and comprehensive as malaria elimination in Africa mandates that the resources be mobilized. We must not victimize malaria con-

trol programs with the vagaries of the typical 2- to 3-year funding cycles of many financing agencies or incessant planning without upfront commitments on resources.

Along with the current rapid scale-up of existing interventions that must be intensified and expanded to other countries, there must be intensified investment in research and development to produce more effective and accessible prevention and treatment methods, medicines, and vaccines. ACTs must be readily available and affordable in the remotest regions where malaria kills. New and better drugs must be developed to replace ACTs when resistance renders them less effective. The potential breakthrough intervention, a malaria vaccine, will not be the only highly efficacious control method. By the time that one or more program-ready vaccines are available, a majority of current malaria-endemic countries may have functioning control programs and be planning for malaria elimination.

Much of the national success in SUFI to date stems from countries with inspired leaders and relatively stable economies and political systems. The level of our determination will be shown through partnerships with countries whose leaders are less committed—or who face more pressing governance challenges—to a regional push for malaria elimination and eventual eradication. Approaches applied successfully in early-adopting countries must be adapted for African countries where war, political strife, persistent poverty, and social discord are entrenched. Invoking nation-building and peace as requirements for success in malaria control will guarantee our collective failure.

MALARIA CONTROL: THERE IS NO TURNING BACK

There is no mother in Africa who mourns the death of a child without questioning why it could not have been prevented. The global community has made a contract with Africa, and that contract is about the lives and potential of the most vulnerable. Africa is seizing the moment; now is the time for the global community to turn the promise of this moment into a sustaining commitment to malaria control and to Africa's mothers and communities.

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