## Malaria 2010: more ambition and accountability please

This year's strapline for World Malaria Day on April 25 is Counting Malaria Out. It indicates the hope of universal access to malaria prevention and treatment by the end of this year, as requested by UN Secretary-General Ban Ki-moon in 2008. Additionally, the World Health Assembly and Roll Back Malaria Partnership had called for a reduction of malaria cases and deaths by at least 50% by the end of 2010 compared with rates in 2000. There are less than 9 months to go, yet a strange sense of misplaced optimism seems to be prevailing in many quarters.

In the foreword to the *World Malaria Report* 2009, Margaret Chan praises "the tremendous increase in funding for malaria control" (from US\$0·3 billion in 2003 to \$1·7 billion in 2009), which is "resulting in a rapid scale-up of today's control tools" (31% of African households were estimated to have at least one insecticide-treated net in 2008 compared with 17% in 2006). She concluded that these programmes are "having a profound effect on health" (nine of 45 malaria-endemic African countries have achieved a reduction in cases by more than 50%).

There are the more pessimistic voices. They point out that the potential for more widespread artemisinin resistance, seen for the first time last year at the Thai-Cambodian border, would be a catastrophe for Africa in particular. Artemisinin monotherapy is still in use, making the potential for resistance more than a theoretical threat. There is currently no new drug class for treatment in advanced development. Similarly, the rising resistance of malaria vectors to insecticides, especially pyrethroids, is a concern. So, say the pessimists, all these—somewhat modest—achievements might be short lived.

Both sides are right, of course. There have been achievements, and certainly the political and global health community's engagement with this devastating disease has been far more visible than it has with many other neglected diseases. But malaria control and elimination via prevention and treatment can only go so far. The risk of serious setbacks is ever present. What is still needed is the only tool that has ever truly conquered any infectious disease: an effective and affordable vaccine. And here, the global malaria community has been too complacent.

Malaria vaccine development has long been hampered by two major issues: the complicated lifecycle of the Plasmodium parasite, and the fact that malaria is a disease that affects almost exclusively people in low-income countries. Perhaps even more shamefully for the current optimists, 85% of those who die from malaria are children—a group that has no political traction at all in global health. In particular, for the principal party in any vaccine-development programme—the pharmaceutical industry—the return on investment would not satisfy shareholders. Perhaps this perception would change if global warming brought malaria back to the USA and Europe? It is certainly sobering to reflect on the remarkable response by industry to the threat of H1N1 last year. The prospect of multibillion dollar sales led to an unprecedented mobilisation of scientific creativity and capacity.

There is some glimmer of hope on the horizon, however. GlaxoSmithKline's (GSK) RTS,S plus adjuvant ASO1 is a first-generation pre-erythrocyte-stage vaccine with modest and time-limited efficacy. It entered phase 3 clinical trials in 16 000 children in 11 African countries last May and it is hoped that this study will lead to the licensing of a first malaria vaccine in 2013. This vaccine has been in development for about 20 years and has cost GSK £300 million with an extra £200 million covered by the Bill & Melinda Gates Foundation. Earlier this year, Andrew Witty, GSK's Chief Executive, pledged to price the vaccine at just 5% above cost and invest profits back into research for diseases in developing countries.

Although a welcome gesture, this commitment simply does not begin to go far enough. And here the global malaria community has remained dismayingly silent. What is urgently needed is serious investment into a broad research and development strategy towards a malaria vaccine. Bill Gates has pledged \$20 billion for the decade of vaccines. There must be greater public commitment by the pharmaceutical industry to support not only this personal pledge, but also the desperate cries from countries to help solve one of their greatest health predicaments. WHO, the Global Fund, UNICEF, and others must speak loudly and demand true publicprivate partnerships on a far larger scale. We cannot afford to wait a further 20 years for the next generation of pre-erythrocyte vaccines, for a transmission-blocking vaccine, or a vaccine targeted against P vivax. It is now, not tomorrow, that the global health community must show more ambition and accountability in combating malaria beyond its current control targets. ■ The Lancet



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For more on the **World Malaria Report 2009** see http:// whqlibdoc.who.int/ publications/2009/ 9789241563901\_eng.pdf