The World Bank: false financial and statistical accounts and medical malpractice in malaria treatment

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The World Bank has an annual budget of US$20 billion, and is the largest organisation operating with a mission to reduce poverty worldwide. Malaria destroys about 1 million lives a year; the disease is the leading parasitic cause of death for Africa's children and impoverishment for their families. Here we examine how these factors meet in the new Global Strategy & Booster Program, which is the Bank's plan for controlling that disease in 2005–10.[1]

We believe this plan is inadequate to reverse the Bank's troubling history of neglect for malaria. In the past 5 years, the Bank has failed to uphold a pledge to increase funding for malaria control in Africa, has claimed success in its malaria programmes by promulgating false epidemiological statistics, and has approved clinically obsolete treatments for a potentially deadly form of malaria. Crucially, the Bank also downsized its malaria staff, so that it cannot swiftly execute the restoration it plans under the Global Strategy & Booster Program. We summarise the evidence, show that the Bank possesses demonstrably little expertise in malaria, and argue that the Bank should relinquish its funding to other agencies better placed to control the disease.

Historical antecedents

8 years ago, the World Bank launched the Roll Back Malaria campaign, promising to halve malaria deaths this decade. After studying its options, the Bank made an unprecedented pledge before Africa's heads of state in 2000: it would spend (or rather, loan) $300–500 million to fight malaria in Africa.[2] This promise of funding was warmly welcomed, because contemporary economic arguments held that malaria cost Africa dearly—perhaps even tens of billions of dollars a year. But the Bank failed to lend Africa the funds for malaria control that it said it would, and rather than admit this with candor, the Bank concealed the fact by using untransparent and contradictory accounting.

In 2001, the year after its pledge to Africa's heads of state, the Bank made the impressive claim that it had "about $450 million out in various forms of anti-malaria programs".[3] But by 2002, it appeared to backtrack, writing that "Bank direct financing for malaria control activities is over US$200 million".[4] The Bank also cut the number of countries where it supported antimalaria programmes, from 46 to about 25.[3,4] Although the Bank's statements lack complete precision, they do give the appearance that in just 1 year, the Bank slashed a quarter of a billion dollars of malaria-control funding, and nearly halved the number of countries it assisted.

For this reason, we and others started to question the Bank's commitment to increasing malaria funding for Africa.[5] In oral and written inquiries dating back to 2003, we asked the Bank to disclose precisely its malaria-related disbursements by country and amount.[6,7] Without exception, the Bank refused to do so. We informed the Bank that its lack of public transparency was inappropriate, given that it had an "obligation of transparency to the public" when spending public money.[8] The Bank again refused, characterising our inquiries as "overly-hortatory", and "constant threats…going back many months".[9]

Finally, the Bank confirmed our suspicions. Instead of increasing malaria funding as promised for Africa, the Bank furnished further evidence that it had cut malaria funding worldwide. Its most recent accounting, published in April, 2005, reads that from 2000 to 2005, the Bank committed "about US$100–150 million in earmarked funds for malaria control" worldwide, plus an unspecified amount of non-earmarked funds that it says are "difficult to quantify".[1,10] No one knows how much money the Bank actually disbursed, but even if it disbursed every dollar that it earmarked, the total is still very much less than the pledge of $300–500 million for Africa alone.

The most disturbing fact, however, is that the Bank actually does not know, and at best guesses, how much money it spends or loans for malaria. In stating that it earmarked $100–150 million, plus other "difficult to quantify" funds, the implication is that the Bank operates with a 50% or more margin of inaccuracy. No commercial high-street bank could keep such imprecise accounts for its clients, without running a serious risk of civil or criminal illegality. That the Bank's management tolerates such vague accounting when serving its clients, the African states to whom it pledged an increase of malaria-control funds, is extraordinary.

Arrears

On the assumption that $100–150 million is truly what the Bank disbursed for malaria, there would be arrears of $150–400 million on its pledge to Africa (from a commitment of $300–500 million). There are two competing theories of how the arrears occurred. The theory offered by the Bank blames "limited absorptive capacity" in poor countries, meaning that their demand for money was insufficient.[1,11] The evidence, however, is stronger for the opposing theory: that the Bank's own limited capacity throttled its supply of money to poor countries.

Shortly after the Bank's pledge to Africa, managers downsized the malaria team, from seven Bank staff in 1998 to zero in 2002.[1] Without even a single worker, the

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malaria programme could do little. Visiting UK evaluators reported the Bank's funds were "either not available or, where they are, [were] difficult to make use of and slow to disburse".[11] This was certainly the experience of the Africans, and of 13 malaria-programme managers who the Bank surveyed: all rated it "very poor" in helping them to access funds.[1]

We cannot know what lay behind the downsizing of the Bank's malaria team, and whether the reduction in staff is explained by careless management or an intention to renege on the funds pledged to Africa. Regardless, funds stalled just as Africa's malaria cases rose sharply, destroying several million children's lives and deepening the poverty that the Bank had promised to ameliorate.[12]

The new malaria Booster Program

By December, 2004, enough of these failures were known that a leaked Bank document frets anxiously about "a growing reputational risk", fuelled by "perceptions that the Bank had not lived up to its 2000 pledge to substantially increase…funding for malaria control".[13] That concern drove the development and hasty launch of the Global Strategy & Booster Program[14] in April, 2005 (relaunched in June, 2005, to fix a few errors[1]). The Bank publicised the launch heavily, with press releases, briefings, and free ready-for-television video.

The Global Strategy & Booster Program candidly admits that "some of the earlier commitments of the Bank have unfortunately not been always followed by action"—presumably a reference to the Bank's failure to honour its pledge to Africa in 2000.[15] Bank officials have emphasised that it is now "extremely important for the Bank…to rededicate itself".[15]

But the Bank is not rededicating itself. Rather, our analysis shows the 2005 Global Strategy & Booster Program further cuts the Bank's financial commitment relative to its earlier pledge in 2000. The Bank's pledge in 2000 was blunt: it "pledged US$300–500 million towards the eradication [actually, control] of malaria in Africa".[2] But in 2005, the Booster Program is much more tentatively worded: it calls for "a total commitment of US$500 million to US$1·0 billion…over the next five years, *including co-financing that the Bank anticipates from partners*".[16]

The words we have placed in italics create a serious loophole, because obviously the Bank can only commit its own budget, and has no control over the budgets of its "partners". We accordingly asked the Bank how much of its own funds—excluding partners—it would commit to malaria control in the coming 5 years. The Bank answered that it could finance "up to 50% of the estimated total".[17] If so, the Bank's renewed commitment would result in $250–500 million for malaria control (being 50% of the $500 million to $1 billion mentioned in the Booster Program). Thus today, the Bank is committing nominally less money for malaria control than in 2000 when the pledge had been $300–500 million. Further, the smaller pot of money is also spread more thinly, because the Global Strategy & Booster Program is truly global and not earmarked solely for Africa as the pledge in 2000 was. The shrinking and thinning of funding is yet more severe in light of inflation and the weakening of the dollar's value from 2000 to today. On every score, the Bank is pledging less money for malaria now than it did 6 years ago.

The Bank introduced this funding cut by dishonest means. After inviting a committee of scientists, policymakers, and non-governmental organisations to peer-review the Booster Program in draft, Bank officials informed the peer reviewers of a "major decision…enabling the Bank"—no mention of partners was made—"to commit up to a total of $0·5–$1·0 billion for malaria control in a 5-year period".[18] It also told the peer reviewers that such an amount would be "programmed directly from the Bank".[13]

Yet when the Global Strategy & Booster Program was launched 4 months later, that commitment was gone. In its place was new language shifting half or more of the financial burden off the Bank, and onto unnamed "partners" instead.[14,16,17]

In short, the Bank won the peer reviewers' imprimatur by presenting a draft having a generous financial commitment. Then in the final document, it reneged. There is no way to know whether the peer reviewers would have assented to a plan that was hundreds of millions of dollars less generous, but that has not stopped the Bank from touting that the Global Strategy & Booster Program is "extensively reviewed, and…widely supported".[16]

False claims and statistics

Had the Bank done things in the usual order—finalising the Global Strategy & Booster Program first, and holding the peer-review second—it might have avoided a large number of false claims and statistics in that document. Some of these are astonishingly jarring: eg, that at last report Kenya had 135 malaria deaths (in 2002), and Iran had 1·4 million malaria deaths (in 2003), when Kenya is one of the world's most malarious countries and Iran is one of the least.[1] Other errors are more troubling, because they reveal that the Bank's claims of "success stories" in India and Brazil are wrong.[1]

Brazil

The Booster Program claims that in Brazil, the Bank's $73 million malaria-control project was a success because "reported malaria cases dropped by 60%, from 557787 in 1989, to 221600 in 1996". That claim seems to be based on malaria incidence statistics that Bank employees and others published in 1999, but on closer inspection, the statistics show a peculiar trend: no reduction in malaria cases for 6 years of the Bank's work (1989–95), and suddenly, a 60% drop in the final year (1996).[19]

We compared the Bank's statistics (figure 1, pink bars) with those of the Brazilian Government (parasite-positive slides, green line) and the Roll Back Malaria Partnership (reported cases, red line).[20,21] The Brazilian Government

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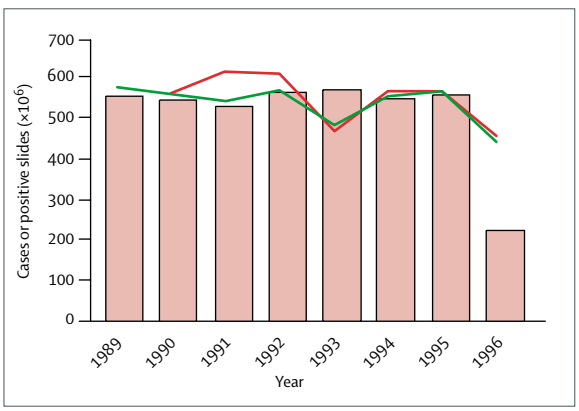

***Figure 1*: Brazil's confirmed malaria cases (parasite-positive blood slides)**
Numbers of cases according to World Bank's data are in pink.[19] Green line=number of cases according to Brazilian Government;[20] red line=number of cases according to Roll Back Malaria Partnership.[21] Note that in final year of the Bank's project (1996), when pressure would have built to show success, the Bank claims sudden drop in malaria cases, which is not corroborated by other data sources.

and Roll Back Malaria statistics roughly agree with each other. But neither is consistent with the Bank's claim that malaria cases dropped 60% during its project, and according to the first-hand statistics of the Brazilian Government, the decline was just 23%.

Overall, neither the Brazilian Government nor the Roll Back Malaria Partnership statistics support the Bank's interpretation that its project achieved a deep reduction in malaria in Brazil. Yet the Bank has long maintained that Brazil is one of its success stories, writing in the Global Strategy & Booster Program that it "prevented nearly 2 million cases of malaria and 231000 deaths" in Brazil.[1] That claim, assessed in light of Brazil's own data, is certainly wrong.

India

When the Bank launched the Booster Program in April, 2005, it wrote that "India achieved dramatic reductions in malaria morbidity in the states of Gujarat (58%), Maharashtra (98%) and Rajasthan (79%) through the Bank-supported Malaria Control Project". Remarkably, the Bank claimed these very large reductions came about in just 1 year, from 2002 to 2003.[14]

We doubted that malaria could be reduced so markedly in such a short time. We requested and obtained official statistics from India's Directorate of National Vector Borne Diseases Control Programme (NVBDCP), and found those data corroborated none of the Bank's claims. According to NVBDCP, in 2002–03, far from malaria cases declining in the three states the Bank names, actually the numbers rose sharply in all of them.[22]

We asked the Bank to disclose the data source supporting its claims.[7] For a month, the Bank did not respond. Later it replied that "an error" was made.[23]

After our discovery of the Bank's erroroneous statistics (which at time of writing are still on its website[16]), the Bank published a further edition of the Global Strategy & Booster Program containing revised statstics.[1] In that revision, the Bank claims that "reported cases of malaria declined by 93·3%, 80·8%, and 40·6% for the states of Maharashtra, Gujarat, and Rajasthan, respectively, from 1997 to 2002".[1] But even the Bank's revised statistics remain highly inconsistent with the NVBDCP's own (figure 2). For example, the NVBDCP statistics report that in Gujarat malaria cases declined much less from 1997 to 2002 than the Bank states (by 48%, not 80·8%), and even this improvement was unsustainable, because by 2004 Gujarat had more malaria than when the Bank's project started in 1997.

We wondered whether the Bank had made a language error: that possibly, its claims and statistics related only to those few districts within those states where the Bank's malaria project operates and not to the entirety of the states. If that is the correct interpretation, what the Bank calls a success would actually be a below-average performance for the states. For example, in Rajasthan, the Bank claims to have reduced malaria 40·6%, but statewide, NVBDCP reports malaria reduced 74·8%.

To understand these puzzling discrepancies, we asked the Bank to share the India project status report from which it drew its statistics. The Bank refused to do so, stating that the report belonged to India and was "not the Bank's to give".[9] The Bank suddenly asserted India's ownership of the status report, despite having given us two pages of it only a week earlier, and having cited it in the publicly available Booster Program.[1,24] When the Bank instructed us to request the report from NVBDCP, we did so unsuccessfully.

Because we were refused access to the original data source, we cannot discern the cause of the Bank's many statistical errors, and particularly whether those errors arise from unintentional mistakes or from intentional

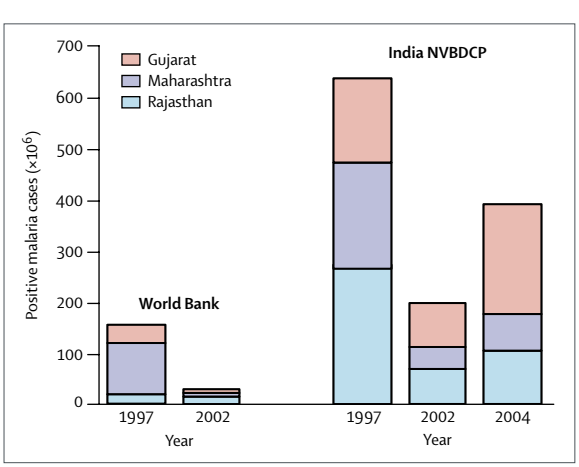

***Figure 2*: India's confirmed malaria cases**
For states of Gujarat, Maharashtra, and Rajasthan, World Bank claims large percentage reductions in malaria from 1997 to 2002.[1] However, data from Indian Government over same period show smaller percentage reductions.[22] Progress made over this period was not sustained, as Indian Government data show that cases rose above 2002 numbers by 2004.[2]

data falsification or fabrication. Either explanation casts doubt on the Bank's fitness to oversee the proposed Booster Program. We note that most of the statistical errors we located exaggerate the performance of the Bank's projects.

The wrong medicine

The Bank's secrecy and technical errors combine dangerously when we look at malaria treatment. Our investigations suggest that the Bank wasted money and lives on ineffective medicines.

There is a widespread public-health crisis caused by clinically obsolete malaria medicines, such as chloroquine. The deadly species of the malaria parasite (*Plasmodium falciparum*) has evolved resistance to chloroquine, so treatment often fails and patients progress to more severe disease or die.[25] Epidemiological studies show that rising chloroquine resistance is associated with an increase of two to 11 times in malaria deaths, particularly in children.[26] Accordingly, WHO's policy since 2003 has been that chloroquine never should be used when the treatment failure rate exceeds 15%, and instead, first-line treatment with artemisinin-combination therapies should be offered.[27,28]

The Bank has disregarded these medical realities. Although claiming that it "applies WHO policies and guidelines", we found six occasions in 2004 in which the Bank approved purchases of chloroquine in its projects knowing the drug would be used to treat chloroquine-resistant *P falciparum* malaria.[29]

In India, the Government's current, official policy is to presumptively treat all malaria patients with chloroquine.[30] The Bank's own information on India, as published in the Global Strategy & Booster Program, refers to 25 studies which show that chloroquine typically fails to treat 34% (and up to 96%) of Indian malaria patients—well above the 15% threshold at which WHO's policy calls for chloroquine to be abandoned.[1] Further, since the Bank's project in India began, *P falciparum* is increasingly and very rapidly displacing other non-fatal species in malaria, such as *P vivax*.[31] Scientists have known about the spread of chloroquine-resistant *P falciparum* across India for many years, and as long ago as 2000, published evidence that this danger exists in the very states (eg, Maharashtra) where the Bank's project operates.[32]

Yet despite these abundant warnings, the Bank supplied India with chloroquine knowing the drug would be used for *P falciparum* malaria. In 2004, the Bank approved five separate purchases of chloroquine for India, totalling about $1·8 million.[29] The quantities of chloroquine involved exceed 100 million tablets, making it probable that millions of patients having *P falciparum* malaria received such treatments inappropriately.[29] Both money and lives are needlessly wasted by these decisions, which violate WHO's guidance.

Had a doctor or pharmacist behaved as the Bank did, ignoring expert guidance and unethically supplying ineffective treatments for a potentially fatal disease, the person would be condemned, and possibly sued for medical malpractice.[33] Similarly, the Bank has a duty not to supply the wrong treatment to patients, and could have made its financing conditional on India adopting effective malaria treatments. The Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) has applied just that conditionality in Africa, to make unprecedented progress in updating the standard of care for malaria patients.[34] That the Bank continued to finance India's malaria programme well after the Booster Program, while never exerting the leadership to stop patients receiving medically ineffective treatments, is striking proof that it remains unfit for any operational role whatsoever in malaria control.

The unaccountable Bank

Shortly after discovering these serious, indeed sometimes fatal problems, we contacted the Bank to share our findings "in a constructive dialogue at its most senior levels".[35] Our wish was to fix the problems cooperatively, without losing time. The Bank refused to meet. We therefore introduce our recommendations here, for concerned citizens to contact their elected representatives and urge the necessary changes on the Bank.

Retrospectively, we believe that the Bank needs an independent externally staffed inquiry into the mistakes of its malaria efforts. The value of this is to draw lessons, applicable to all international aid efforts. Such an inquiry will make clear how the Bank failed to make available timely and accurate statements of its financial accounts; failed to align staffing levels with its major financing pledges; failed to make accurate use of epidemiological statistics in assessing its project performance; and failed to incorporate current medical knowledge and treatment practices into its operations.

We note that these failures continued in part because of the Bank's inadequate policy on disclosing information, which allowed it to withhold information when asked.[36] Greater transparency would have brought the problems to light sooner, saving both money and lives. A more open disclosure policy must be a priority for the Bank's Executive Board.

Prospectively, the Executive Board must also cut back the role of the Bank's troubled Health, Nutrition and Population unit (HNP), for which malaria is only the latest in a string of incredible failures this decade. An earlier failure was HIV/AIDS, which, despite abundant early warnings, HNP neglected so completely that by 1999, the Bank's project pipeline for HIV/AIDS had run completely dry.[37] The Bank's Executive Board dealt with HNP's mismanagement in 2000 by stripping it of primary responsibility for HIV/AIDS, entrusting that instead to the Bank's vice-president for Africa, along with $1 billion of new grant (not loan) financing.[38]

Thus, in only the past 6 years, HNP lost control of HIV/AIDS, and failed to deal satisfactorily with malaria—

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arguably the two greatest epidemics of the past century, which each destroy billions of dollars of economic growth and endanger people living in extreme poverty.[39,40] HNP's record could hardly be poorer, and it seems indisputable that as now constituted, HNP is a net liability to the Bank's poverty reduction mission. The Global Strategy & Booster Program, containing false data as it does, only reinforces this conclusion.

We accordingly believe that the job to fix malaria must no longer be based in the Bank. Instead, the Bank should revert strictly to its core competence as a financier—a bank—and deposit the pledged commitments for 2005–10, plus the arrears from 2000–05, into a dedicated fund for the exclusive use of other, more technically competent and transparent agencies.

We underscore: the Bank should have no role beyond providing unprogrammed financing. There are several reasons for this conclusion.

First, the Bank's malaria performance lags far behind the more agile GFATM. Recall the Bank's statement that it disbursed at most $150 million in earmarked malaria funds during the past 5 years. By comparison, GFATM disbursed roughly the same amount ($151 million) in under 7 months.[41] Not only is GFATM much quicker to assist, but the Fund is reasonably transparent, and publishes grant agreements and financial accounts (commitments and disbursements), which the Bank refuses to disclose. GFATM is logically the better funding mechanism, but to meet its anticipated malaria control obligations, it will need over $2 billion by 2007—money it currently lacks, but which the Bank can redirect from its budget.[41]

Second, the Bank's technical expertise is insufficient. Recall that the Bank now has no malaria expertise—it was all downsized. The Bank also has no plans to rebuild this expertise, and according to the Booster Program, "no new full-time staff members will be recruited" for malaria inside HNP.[1] Instead the Bank hopes to meet its core technical needs by borrowing one malaria expert from WHO, an obviously inadequate plan. Even where WHO has a whole regional team of technical experts (eg, the Southern Africa Malaria Control team) the workload of planning, monitoring, and evaluating malaria control exceeds their available staffing.

Third, the Bank is institutionally unsuited to deliver excellence on malaria. In a perspicacious article entitled *The World Bank's Mission Creep*, Jessica Einhorn recommends that it "shed areas where its comparative advantage is no longer compelling", which includes "distributing some of its programs to other existing institutions with overlapping missions".[42] Einhorn worked at the Bank for nearly two decades, and is the Dean of the Nitze School of Advanced International Studies, a position formerly held by the Bank's current President, Paul Wolfowitz. We agree with her reasoning, and add our observation that in the world's health ministries, the Bank has no compelling advantage, whereas GFATM and WHO clearly do.

Seen this way, the options for the Bank are either to spend years plodding to rebuild competence in malaria—years in each of which over a million people will die—or to speedily honour its past and future funding commitments by handing that money to more expert institutions that are swifter to act. In our view, there can be no serious debate about which of these options is preferable. We accordingly recommend that the Bank set aside its malaria funding in a dedicated fund, mainly for GFATM to provide grants for effective antimalarial tools (medicines, bednets, insecticidal spraying), and secondarily for WHO to provide the necessary technical services.

Our recommendation would require the Bank to wind down its malaria projects, and to become a provider of unprogrammed finance to institutions that are better situated to save lives more quickly. With $500–1000 million pledged for 2005–10, and previous unfulfilled pledges of perhaps $150–400 million from 2000–05, it would be laudable for the Bank to allocate $1 billion to the dedicated fund we propose. It should do so with speed and grace.

Conflict of interest statement

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