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De-Politicizing Parasites: Reflections on Attempts to Control the Control of Neglected Tropical Diseases

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Large amounts of funding are being allocated to the control of neglected tropical diseases. Strategies primarily rely on the mass distribution of drugs to adults and children living in endemic areas. The approach is presented as morally appropriate, technically effective, and context-free. Drawing on research undertaken in East Africa, we discuss ways in which normative ideas about global health programs are used to set aside social and biological evidence. In particular, there is a tendency to ignore local details, including information about actual drug take up. Ferguson's 'anti-politics' thesis is a useful starting point for analyzing why this happens, but is overly deterministic. Anti-politics discourse about healing the suffering poor may shape thinking and help explain cognitive dissonance. However, use of such discourse is also a means of strategically promoting vested interests and securing funding. Whatever the underlying motivations, rhetoric and realities are conflated, with potentially counterproductive consequences.

Keywords anti-politics, global health interventions, neglected tropical diseases, Tanzania, Uganda

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"Please! No politics this time!" A senior member of staff from the Ugandan Ministry of Health greeted us with these words when we returned to Uganda to do more fieldwork in 2008. He was referring to an article that we had published a few months previously on the control of two neglected tropical diseases (NTDs): schistosomiasis and soil-transmitted helminths (Parker, Allen, and Hastings 2008). The article was based on fieldwork undertaken in Panyimur, north-western Uganda in 2005, and demonstrated the multiple ways in which political, historical, social, and economic processes influenced the rollout of a top-down, biomedical intervention run by the Ministry of Health. In particular, it highlighted that resistance to the take-up of free drugs was linked by many of those with whom we lived to a sense of marginalization, and sometimes outright oppression by the Ugandan government. Our conclusion made the point that while some people benefitted from the treatment program, it was unrealistic to assume that it would lift such impoverished and politically excluded populations out of poverty. It is mostly neglected people who are infected with neglected diseases—and this fact could not just be wished away.

The member of staff concerned was not alone in trying to evade public discussion of issues influencing the control program in Uganda. Indeed, his desire to avoid engaging with the political economy of NTDs resonates with those running similar programs in other parts of sub-Saharan Africa and elsewhere. Over the past 10 years, multi-million dollar grants have been made available by international donors in response to claims that it is possible to end diseases of poverty, and maybe even poverty itself, through dispensing medications, free of charge, to adults and children living in areas where NTDs are endemic (see, e.g., Molyneux, Hotez, and Fenwick 2005; World Health Organization [WHO] 2010). This is asserted as a just and moral cause—one that is above criticism and relatively easy to implement in all contexts. In private, however, many of those involved with implementing these programs openly recognize that such top-down approaches can be counterproductive, and that claims about what is happening on the ground are often overly positive. Nevertheless, they continue to act as if successful outcomes are inevitable. How is this cognitive dissonance maintained and managed? Is it so pervasive as to make evidence irrelevant? Or is it strategic?

In this article, we suggest that the rise of mass drug administration programs for the treatment and prevention of NTDs, without reference to local political, historical, social, and economic circumstances, are a remarkable example of how global public health remains chronically prone to what James Ferguson has called anti-politics. However, recourse to Ferguson's theoretical model, which suggests a hegemonic discourse that determines thinking and perceiving, misses key issues. In particular, locating the point at which rhetorics are actually believed by those articulating them can be hard to discern. It is, therefore, helpful to analyze how those promoting selective interventions for the control of NTDs respond to alternative perspectives. This throws light on underlying motivations and suggests that anti-politics discourse is sometimes less hegemonic than it seems. Rather, deliberate strategizing is involved, with discourse being used as an instrumental tool to promote vested interests.

ANTI-POLITICS AND MAGIC BULLET MEDICINE

Anthropologists engaging with international development issues, especially students doing so for the first time, often feel compelled to quote James Ferguson's book *The Anti-Politics Machine* (1990), or to at least make the point associated with his work that the aid industry de-politicizes

social realities as a way of asserting control over them. His work is invoked to indicate why social contexts are ignored. The language of 'doing development,' so the argument goes, enables the promotion of technical solutions which can be implemented in a context-free manner with largely international expertise. Power dynamics associated with the notion of development thus allows for a disengagement from the real world and results in ineffective strategies which maintain structural inequalities. The approach can be insightful, but like all theoretical models, it has limitations. It constructs a straw target out of the international development project; and it neither does justice to the complexities of analysis associated with actual development work nor to the intelligence of well-meaning (and less well-meaning) international organizations and their staff. It also tends to exaggerate the effects of aid, and pays curiously little regard both to the long involvement of anthropology with development agendas and to the sophistication and insight of earlier researchers. Perhaps most importantly, it largely sets aside the possibilities of strategic decision-making. Agency is down-played. Part of the problem lies with Ferguson himself. His book is engaging to read, and offers an 'off the peg' critique, which is easy to emulate. He writes so well that flaws in his argument are disguised.

Ferguson studied the World Bank in Lesotho between 1975 and 1984, and cited reports that made ludicrous statements given the realities on the ground. However, many other World Bank reports and publications are less open to such ridicule. There are plenty that make realistic and controversial observations about the political dimensions of development programs, referring to corruption, the failure of projects to reach their objectives, and the lack of an evidence base for policymaking (e.g., World Bank 1981, 1997, 2011). Moreover, Ferguson does not discuss the various constraints faced by the World Bank in the 1970s and 1980s. It is an organization comprised of its member governments. It cannot say certain things, or if it does, it has to use a kind of code. World Bank staff may be frank in private, but they have to be diplomatic in public. This does not mean that they cannot work with other groups and individuals who are more explicit; they have always done so. At the time of Ferguson's fieldwork, Lesotho was surrounded by apartheid South Africa. The United Nations, of which the World Bank is formally affiliated, had agreed to implement sanctions. Work in Lesotho required that these sanctions were sidestepped, but such sensitive issues were unlikely to appear in the official reports of bilateral and multilateral organizations working there. This does not make the statements cited by Ferguson any less misleading, but it does beg the question of how seriously they were taken by those writing and reading them.

David Mosse's observations are apposite here: "Precisely because such a large proportion of the time and expertise of development personnel is organized with reference to writing and negotiating texts, they cannot be read at face value without reference to the arguments, interests and divergent points of view that they encode and to which they allude" (2005:15). Reports and articles by those involved in development work thus need to be analyzed in relation to the social relationships that produce them, and, in most cases, in relation to how soft funding is being deployed. This raises the issue of how far such texts end up shaping perceptions and policy decisions. A particular sort of language may be essential to 'keep the show on the road.' There is, however, a danger that those deploying arguments and information for strategic purposes end up taking seriously what they write and say. At one level, they may know about local realities and practical difficulties, and will talk about them at length in some settings. They are the staple conversation of restaurants, bars, and compounds frequented by aid workers. Yet, in other circumstances, they may appear to think official assertions, normative perceptions, and institutional

ideologies are factually correct, even when they are contradicted by their own day-to-day experiences. Cognitive dissonance of this kind relates to Ferguson's points about the power of language, but it suggests a much more complicated terrain than the one he depicts.

Cognitive dissonance is likely to be most pronounced where developers work within closed epistemic communities and networks operating within the aid world, and reinforced by broader belief systems associated with universal codes and principles (Mosse 2005:15). Examples of such codes include socially hegemonic ideas about human rights, poverty, economic liberalism, governance, and biomedicine. In some respects, the latter is the most extreme example. Ideas about biomedicine and related medical hierarchies comprise an almost unquestionable body of knowledge that legitimizes health-related development programs, and helps insulate the statements and motivations of biomedically orientated researchers and policymakers from critical scrutiny. The whole sector is elevated as a kind of moral good, to be assessed in special ways, by carefully trained and initiated analysts.

In this sector, perhaps more than any other, anti-politics discourse can shape ways of thinking and seeing. Ferguson draws on the ideas of Michel Foucault (1973), who argued that the clinical or medical gaze takes the human body out of its social context, turning it into an object for amoral and technical investigation. At a social level, it becomes an effective means of control, an aspect of biopower. Ferguson's theoretical contribution was to take Foucault's insights about the history of social policy in Europe and apply them in a distilled and simplified form to interpret a large-scale development scheme in Lesotho. He wrote mainly about mining, so he did not cite Foucault's *The Birth of the Clinic* (1973). However, he did use Foucault's idea of biopower. In this respect, it is interesting to note the period of Ferguson's fieldwork.

Although he makes no mention of health policy, Ferguson was researching at a time when the campaign for a new approach to basic health care was being promoted in Africa and elsewhere. The high watermark of the campaign was the 1978 Primary Health Care Declaration at Alma Ata. He was still doing fieldwork when the declaration was effectively set aside in favor of a more technological and vertical approach, one that might be viewed as illustrative of his core argument. These events in the 1970s and 1980s are germane to the more recent efforts to deal with NTDs.

The Alma Ata Declaration was arguably as unrealistic and impractical as the World Bank reports described by Ferguson. It provided a manifesto for mass access to health care that linked poor health with poverty, and proposed responses that moved away from relying on biomedical solutions to lessen the burden of ill-health. While reflecting similar kinds of concerns to those Ferguson raises, but in the health arena, it proposed a radical approach for changing the status quo. It drew on social research to propose a model of basic health care orientated to the needs of deprived populations, rather than the interests of medical establishments (WHO 2005). The social context that produced it included the increased influence of developing counties within the United Nations; recognition of the overall health outcome achievements of certain countries—mostly with socialist governments; a degree of international antipathy toward the United States, particularly in response to its activities in Latin America; skepticism about the political motivations of bilateral development aid and the World Bank; and suspicions about the interests of drug companies. The location of Alma Ata in the former Soviet Union was also significant. Inverting Ferguson, here was 'international development' as a kind of 'politics machine.'

The response was to counter the agenda set out in the declaration with a different kind of primary health care, namely 'selective primary health care' (Walsh and Warren 1979). Initially

focusing on vaccinations, selective primary health care expanded to include the promotion of breast-feeding, growth monitoring of children, and the use of oral rehydration salts to treat diarrheal diseases. Family planning and the provision of nutritional supplements were later added to the list. UNICEF took the lead in promoting the approach, and secured substantial international funding (Cueto 2004). Concerns were voiced from the outset, with critics drawing attention to the way in which biomedical interventions set up unsustainable approaches that not only undermined national health care systems, but also did little to address the fundamental causes of ill-health (Berman 1982; Unger and Killingsworth 1986). These points were subsequently shown to be largely accurate in a number of locations, with some researchers suggesting that published data highlighting the achievements of selective interventions had been exaggerated (Werner and Sanders 1997).

However, 'de-politicized strategies' were popular with donors, and restored the authority of biomedical professionals. It was also easier to package such programs for large-scale fundraising than more locally contingent and grounded strategies. In particular, the idea of handing out medications that had the potential to save lives was compelling. It is, therefore, an approach that has been persistently reinvigorated—the adding of vitamin A to the mix in the 1990s being a good example (Ching et al. 2000). In addition, protagonists have become increasingly effective at setting aside critical perspectives with reference to higher values and morally loaded claims. The plight of the impoverished, suffering from curable diseases, is depicted in horrible images and harrowing stories; and dispensing free medicines is presented as a solution. Who could be against these kinds of programs? Human suffering demands social justice and vertical medical interventions appear to offer a form of it without complications.

From time to time, evidence continues to emerge that large-scale, top-down, context-free interventions are not as successful as they are reported to be. Occasionally, there are castigating assessments in the medical literature. A 2010 editorial in *The Lancet*, for example, bemoaned extravagant claims made about UNICEF's current Child Survival and Development program, pointing out that "(w)ithout proper monitoring and accountability, countries and donors—and taxpayers—have no idea whether or how their investments are working. . . . Evaluation matters. . . . It's time that the global health community embraced rather than evaded this message" (*The Lancet* 2010:526). Yet, apolitical, top-down biomedical interventions seem impossible to set aside. Indeed, the very next issue of *The Lancet* published a series of papers promoting what is in effect a new form of selective primary health care: the rapidly expanding global program of mass drug administration for the control of NTDs (Baker et al. 2010; Conteh, Engels, and Molyneux 2010; Gyapong et al. 2010).

CONTEXT-FREE MASS DRUG ADMINISTRATION FOR NEGLECTED TROPICAL DISEASES

Although mass drug administration is presented as health care implemented through existing systems, in practice it is another top-down, context-free, pathogen-focused strategy, modeled on the mass immunization campaigns of the 1980s. It is open to the same kinds of criticisms, notably with respect to monitoring, but it has successfully revamped the notion of a vaccine against poverty. As Allotey, Reidpath, and Pokhrel observed, under the guise of pro-poor arguments, "it remains a medical and technological fix; the 'magic bullet' to combat disease" (2010:e32).

The idea of distributing medication for particular diseases in endemic areas has been around for a long time. The current rapid up-scaling is connected to successful lobbying around the Millennium Development Goals (MDGs). The sixth goal aims to combat HIV/AIDS, malaria and 'other diseases.' Tuberculosis is mentioned as one of these 'other diseases,' but no more are named. The category 'other diseases' thus became the object of intense lobbying; and it was successfully captured by those concerned about a range of tropical diseases—the NTDs. The particular diseases included in the group vary, depending on the interests of those involved in control programs. However, the diseases most commonly included are parasitic, and they can potentially be controlled, eliminated, or even eradicated with available medications. The five 'core' NTDs are onchocerciasis, lymphatic filariasis, schistosomiasis, trachoma, and soiltransmitted helminths. A highly effective campaign pooled together the resources and networks of key individuals and institutions involved in combating these afflictions. Five years into the new century, the Millennium Development Project published a set of 'Quick Win' interventions, able to deliver rapid results in attaining the MDGs. Neglected tropical disease control was foregrounded as a quick win. In an influential article published the same year, this was described as "one of the most convincing ways to make poverty history [in sub-Saharan Africa]" (Molyneux et al. 2005:106). Molyneux and colleagues argued that it is possible for public-private partnerships to develop integrated control programs for the core NTDs in Africa with only four drugs: albendazole, ivermectin, praziquantel, and azithromycin.

Concerted pressure was placed on pharmaceutical companies to make these medications available on a massive scale. The companies needed to sustain the prices of the drugs in rich countries, and to counter the threat of influxes of generic products in poor countries. These factors, combined with a degree of institutional philanthropy, resulted in a positive response. Millions of tablets were provided free of charge and mass drug administration programs were established in a range of countries, with moves toward an integrated approach whereby multiple infections could be treated simultaneously. In Uganda, for example, an integrated program was introduced in 2007. This program linked together previously separate endeavors to control onchocerciasis and lymphatic filariasis with schistosomiasis and soil-transmitted helminths. In common with many other countries, the aim was to provide tablets to all adults and children living in endemic areas, irrespective of whether people were actually infected. This was considered ethical because the chances of infection were considered to be very high and the drugs themselves were said to be safe and efficacious.

Claims made about the success of such operations have been far-reaching. In 2008, for example, the elimination of lymphatic filariasis by 2020 was heralded as a real possibility (BBC 2008); and reported estimates of the numbers of people treated for schistosomiasis are remarkable. In Uganda, for example, more than 13-million received treatment in 4 years (http://ntd.rti.org, accessed on 28th September 2012, cited in Parker and Allen, 2011). In 2010, the WHO published the first ever global report on NTDs. This, too, provided a glowing assessment of the strategies being implemented (WHO 2010).

By that point, the GATES Foundation, US Agency for International Development, the UK Department for International Development (DfID), and other donors were already committing themselves to releasing substantial funds; and on January 30, 2012 further pledges were made by donors and pharmaceutical companies at a meeting in London. These included pledges to sustain the supply of free drugs until the threat of infection with the targeted diseases had been controlled and, in some cases, eliminated. The UK DfID alone pledged more than £240 million to

the ongoing operations. In May 2012, Margaret Chan, the Director General of WHO, proclaimed in her address to the World Health Assembly that "these Cinderella diseases, long ignored and underappreciated, are a rags-to-riches story" (WHO 2012).

Perhaps, predictably, as the enthusiasm of medical establishments, pharmaceutical companies, and donors cohered around the agenda, the context-free qualities of mass drug administration became more pronounced. Statements were made about the need to work closely with target populations, provide good health education, ensure adequate community mobilization, and encourage local ownership of the treatment regimes. However, in practice, as Allotey and colleagues (2010) noted, the tendency has been to rely, ever more, on vertical, externally audited, biomedical interventions. Pointing this out has become increasingly controversial, and it has led to a turning away from evidence highlighting the realities of mass drug administration on the ground. What are these realities?

This is a surprisingly difficult question to answer. There is plenty of literature asserting that millions of people have been treated for a variety of NTDs across sub-Saharan Africa. In Uganda and Tanzania, for example, these statements are often based on the number of tablets that are recorded as passing through national and/or district headquarters on their way to villages for distribution (e.g., Fleming et al. 2009; Malecela et al. 2009). However, it is not possible to use this type of data to gauge the proportion of children or adults living in villages who have actually received, let alone consumed, tablets. Village drug distributors are required to, and in some cases keep, detailed registers of the names and ages of villagers receiving tablets, but they rarely record the names of people who have not received treatment, and they rarely mention whether the distributed drugs have been swallowed (Parker and Allen, 2011, 2013).

There is also a paucity of epidemiological information documenting changing rates of infection following mass treatment. Available data are mainly based on a small number of sentinel sites and/or cohort studies (e.g., Kabatereine et al. 2007; Mohammed et al. 2006; Simonsen et al. 2010). Ethnographic research highlights the limits of these approaches, and suggests that it is inappropriate to assume that findings from such studies are being replicated in the wider population (Parker et al. 2012, 2013).

Research exploring local responses to mass drug administration was undertaken by the two of us between 2005 and 2011. This research primarily focused on two NTDs: schistosomiasis and lymphatic filariasis in different parts of Tanzania and Uganda (see Parker et al. 2008, 2012; Parker and Allen 2011; Parker and Allen 2013 for further details). Grounded in ethnographic fieldwork (and thus paying close attention to the use of language and the contexts in which it is possible and sometimes impossible to speak openly about the distribution and consumption of drugs), we showed that drug uptake among adults and children varies considerably within and between districts, with many locations falling short of the recommended levels deemed necessary to achieve control.

With respect to schistosomiasis, fieldwork undertaken at selected sites in northwestern and southeastern Uganda, Ukererwe Island, and parts of Morogoro and Tanga regions in Tanzania demonstrated that drug uptake among adults rarely reached the World Health Organization's target of treating 75% adults living in endemic areas. Indeed, in Panyimur subcounty, northwestern Uganda, Bugiri district, southeastern Uganda, and Ukererwe Island, Tanzania, it often fell below 45%. By contrast, the uptake of drugs among adults was quite high in Lumino subcounty, southeastern Uganda, and exceeded the recommended 75% target level in a few villages in Moyo and Adjumani districts (both located on the River Nile, bordering South Sudan). Considerable

variation was also noted among school children. Drug uptake tended to be higher than that recorded for adults especially in northwestern Uganda, but this was not always the case. In 2008, for example, mass drug administration had to be halted in parts of Tanzania due to the interventions of angry parents and the refusal by some teachers to participate in the program (IRIN Humanitarian News and Analysis 2008; Daily News Online Edition 2008).

Research on lymphatic filariasis in Pangani and Muheza districts, northern coastal Tanzania, revealed that drug uptake among adults and children from 2004–2011 was consistently below 50% at the majority of field sites. While higher rates were found in a few places close to district capitals (where the main hospitals are located), they were still mostly below the 70%–90% uptake levels thought to be necessary for sustained control or elimination to occur (Michael et al. 2004).

A variety of historical, political, social, and economic factors help explain these findings from East Africa. They include historical experiences of previous endeavors to control tropical diseases, population movement across borders, subjective experiences of side effects from treatment, alternative understandings of affliction, rumors about the 'real' purposes of treatment, ineffective communication about the rationale for mass treatment, too great a reliance on volunteers to distribute drugs, and responses to social control measures. Our research shows how vital it is to engage with these issues and to adapt mass drug administration programs to specific local circumstances if there is to be any prospect of controlling schistosomiasis, let alone eliminating lymphatic filariasis. It is striking, however, that little effort has been made to amend current strategies in the light of local level evidence. Why?

CONTROLLING THE DEBATE, IGNORING THE EVIDENCE

Just as economic and political forces shape the way in which policy is formulated, so they also shape responses to data suggesting that the uptake of drugs falls short of the requisite levels to control NTDs. These responses take multiple forms, but collectively reveal an endeavor to set aside discomforting information and, increasingly, to control the terms of the debate and marginalize critics. In so doing, it becomes possible for mass treatment programs to not only be scaled up at speed but also for funds to continue to be concentrated in a small number of institutions promoting context-free, mass treatment as a technical, a-political, and morally appropriate response to aspects of grinding poverty. This section illustrates these points with reference to our research in Uganda and Tanzania, as well as to research undertaken by other scholars who, grounded in the disciplines of epidemiology and parasitology, have questioned the merits of current mass treatment programs.

To start with research in Uganda: The reluctance to consume free drugs for the treatment of schistosomiasis in Panyimur was a disappointing finding for those advising and running Uganda's national control program. Initial responses in 2005 included shock, concern, and distress. A junior member of staff, for example, broke down in tears at a meeting when she heard that many villagers were rejecting the drugs, because they were afraid that the treatment might damage their fertility, and in some circumstances, kill them. More senior colleagues thanked us for highlighting difficulties and problems that had gone unnoticed, and told us that this was exactly the sort of local level assessment that was needed to help the national disease control program achieve its objectives. Disturbed by our findings, they subsequently dispatched a member of staff to our field site to track down our research assistants and check with them that our assessment of the

situation was 'correct.' When they confirmed our analysis, they were told that they had a duty as Ugandan citizens to report that the drugs were welcomed. If they did not do so, then it was likely that treatment would be withdrawn and other adverse consequences would follow for them personally. Although the attempt to intimidate our research assistants was not authorized from 'above,' the views expressed by the member of staff gave voice to fears and concerns at a district and national level that information which did not suggest the smooth running of the program seeking to control schistosomiasis could easily be construed as 'failure.' This, in turn, could have negative effects on the funding that would be made available by international donors.

An attempt was also made to contain and contextualize the results by commissioning a new report (Lubanga 2007). This replicated parts of our research in Panyimur, north-west Uganda, with some of our locally trained research assistants even contributing to focus group discussions about local understandings and responses to mass drug administration! However, this new report made no reference to the fact that the uptake of drugs fell short of the coverage levels recommended by the WHO. Instead, findings from qualitative work in Panyimur, exploring knowledge and attitudes about mass treatment for schistosomiasis, were compared with findings from similar work undertaken in Busia, south-eastern Uganda, where the program was said to be working well. The differing political and historical contexts in which mass treatment was being rolled out was not mentioned nor, therefore, were the various ways in which this was affecting the uptake of drugs. It was hard not to conclude that this was an effort to re-package and de-politicize our findings.

Commissioned reports aside, the prevailing view behind the scenes, at least among those responsible for running the mass treatment program, remained the same: it was better to know about difficulties arising from the program than not to know about them. As one senior colleague said, "There is no point spending large sums of money on the control of schistosomiasis if the program is not going to work." It was important, too, not to assume that difficulties with the program in one part of the country were being replicated in other parts of the country. We were thus asked to undertake further research at selected sites in Moyo and Adjumani districts, north-western Uganda and Busia district, south-eastern Uganda in 2008 and 2009.

Findings from this research were presented in an article by Parker and Allen (2011). A draft was circulated prior to publication and it was amended in the light of some of the comments received. One colleague, having read the draft, acknowledged that it highlighted some important and complex issues in a helpful way, but expressed concern that it would be interpreted as a 'negative' assessment of mass drug administration programs. With ongoing uncertainty as to whether funding would continue to be forthcoming for programs seeking to control NTDs, he asked us to consider amending the abstract and conclusion so that it sounded more positive. The same colleague also asked us to be careful about the findings we presented at seminars and conferences. To quote one e-mail: "I am worried [by] . . . what you are saying. . . . You could endanger our fund raising efforts by negativity."

However, as with the paper published in 2008, it was not until the article was published that controversy really broke out. Some of those implementing mass drug administration were furious that it was available in the public arena. One particularly irate communication said: "People who have read this [paper] say 'Are they for you or against you?' On balance I have to say it reads like against. Which considering all the support you have received is disappointing." The latter comment is revealing. Despite the fact that the paper is broadly supportive of mass treatment, and made numerous suggestions about how to improve existing programs (such as using existing

public health legislation to foster behavioral change), it did not provoke substantive discussion about how policies could be refined in the light of the available evidence.

Research exploring local understandings and responses to the mass distribution of drugs for the treatment and prevention of lymphatic filariasis, schistosomiasis, and soil-transmitted helminths in northern coastal Tanzania generated a different set of responses, although arguably with the same outcome: to set aside evidence suggesting that mass drug administration may not be as effective as that suggested by global policymakers, and to control debate. By way of illustration, it became apparent within the first six weeks of fieldwork that there were substantial difficulties rolling out free drugs for the treatment of lymphatic filariasis. These early findings were reported to senior figures running mass treatment programs at the government's headquarters in Dar es Salaam. Their response led to two rather different courses of action.

First, the suggestion that mass treatment was running into difficulties was taken very seriously. It resonated with concerns filtering through from other sources: namely, that mass treatment programs primarily benefit those who are infected, asymptomatic, and likely to develop visible signs of infection (such as swollen limbs and/or enlarged scrotums) in years to come; rather than those who are infected and already display visible signs of infection, for whom treatment can do relatively little. While the clinical benefits of treating those who are infected and asymptomatic are irrefutable (as the drugs kill the filarial worms and thus prevent the emergence of visible signs of infection), it does not follow that those being treated recognize the benefits of treatment. On the contrary, the absence of information about the etiology of lymphatic filariasis and the rationale for mass treatment fostered close questioning about the 'real' purposes of handing out free treatment, and fuelled resistance to the consumption of medicines. Indeed, many posed the question: Why should someone who has no visible signs of infection consume tablets for an affliction they do not think they suffer from? Concerned by these findings, a senior figure said that she would look for additional funding to supplement the roll out of mass treatment with other interventions, including hydrocelectomies. This was a hugely positive response. Indeed, in 2008, funding was secured to enable 200 men in Pangani district, northern coastal Tanzania to be given surgery on swollen scrotums (Malecela et al. 2009).

However, our findings simultaneously provoked a second less positive response, aimed at limiting the dissemination of findings. Ethnographic fieldwork had been funded as part of a broader program of work monitoring integrated mass treatment of NTDs. In northern coastal Tanzania, it was anticipated that this would involve monitoring the roll out of drugs for the treatment for schistosomiasis and soil-transmitted helminths; and this was stated in our initial permission documents. It transpired, however, that schistosomiasis and soil transmitted helminths were not being treated together. Instead, the treatment for soil-transmitted helminths was being combined with the treatment for lymphatic filariasis. This made good sense. Soil-transmitted helminths and lymphatic filariasis are both endemic in this part of Tanzania; and the drug, albendazole, has the dual purpose of treating both soil-transmitted helminths and, in combination with ivermectin, lymphatic filariasis. The tablets were thus being distributed together, and it proved impossible to investigate the take-up of albendazole without also noting the take-up of ivermectin.

Additionally, it became apparent that the low uptake of albendazole was directly connected with local attitudes to mass treatment for lymphatic filariasis. District medical staff and researchers working with Tanzania's National Institute of Medical Research in the region encouraged us to collate and report our results. However, matters were not perceived in the same way at a national level. In fact, the Director of the lymphatic filariasis program in Dar es Salaam took

the view that it was unacceptable to record low rates of drug uptake for this disease, even if these were identical to those for soil transmitted helminths. A protocol deviation had to be secured first, and this might take quite a while. In the meantime, research on drug uptake should cease. Without a doubt, bureaucratic procedures were being used to prevent information about local resistance to mass treatment for lymphatic filariasis being more widely known.

Having said that, the protocol deviation was accepted almost a year later as part of a broader submission to work on a wide range of NTDs in different parts of Tanzania; and it was back-dated to the time of our 2007 research. Nevertheless, apprehension about the possible consequences of disseminating our results remained. We were explicitly asked by an international figure involved in the promotion of mass treatment not to publish our findings, as he feared it would jeopardize future funding for the program. Sympathetic to the pressures, especially in the wake of the riots that took place in Morogoro and other parts of Tanzania in 2008 (in response to mass drug administration for schistosomiasis), we agreed to do this, and decided to wait until we could carry out follow up research at our field sites. Perhaps naively, we expected to find some significant changes when we returned to northern coastal Tanzania in July–August 2011. That was not the case.

Despite making our findings available to those running the programs, there had been no substantive alterations to the way in which the mass treatment program for the elimination of lymphatic filariasis was being administered. There was still much too much reliance on volunteers to distribute the drugs, and the rationale for the program remained poorly understood by both those handing out the tablets and those supposed to be receiving them. Not surprisingly, fear of treatment remained widespread and the uptake of drugs continued to fall short of the levels required to interrupt transmission.

Why did the situation remain unchanged? In contrast to Uganda, there was a reluctance to impart information by those funding the research to their Tanzanian collaborators for fear of disrupting fragile relationships. Thus, a detailed report was not circulated for comment, and requests were made not to place findings in the public arena. This is by no means the only explanation. Within Tanzania, officials working at a district and national level were acutely aware of the challenges of implementing mass treatment, but felt unable to address the difficulties with the resources available. District officials talked of institutional pressures 'to cook' the data in such a way as to suggest that drug uptake levels were in line with national targets; and officials working at a national level spoke of the difficulties of challenging global policy for fear of jeopardizing future funding and the provision of drugs. Indeed, one senior figure in the Ministry of Health, reflecting on the pressures, said "We must swallow the bile to keep the drugs coming." The colleague concerned undoubtedly felt that there was little choice but to accept the drugs on offer as a more holistic approach (involving mass treatment alongside the provision of hydrocelectomies for scrotal swellings, lymphodema management, and vector control of the mosquitoes carrying filarial worms) would not be funded by international donors. Another official, reflecting on the difficulties of speaking out, said "We are black guys with no money, and they are white guys with lots of money."

Extreme Examples of Exerting Control

The self-silencing of dissent discussed previously is understandable, but it is also worrying, especially when reflecting on broader strategies deployed to control information in the public

arena. These strategies are discussed in this subsection. Citing examples, it demonstrates how morally imbued discourse is used, with recourse to technical solutions putatively aimed at resolving complex social problems. At one level, the examples illustrate Ferguson's anti-politics machine thesis. Indeed, they could even be viewed as adding to it with reference to Foucault's clinical gaze, as well as his notion of biopower. A striking dynamic in terms of the language deployed is that anti-politics with respect to mass drug administration is often promoted in a highly political way, linked to accusations that those raising concerns are acting immorally. In so doing, there is a drawing on notions about biomedical knowledge having access to some sort of deep reality, above the mundane details of day-to-day events or other kinds of evidence. However, it is misleadingly deterministic to push this kind of analysis too far. It is also a less compelling explanation when dealing with debates between biomedical professionals than debates between biomedical professionals and social scientists. Moreover, in all the instances that follow, it is clear that instrumental choices are also part of the story. Evidence raising concerns with the orientation of programs is purposefully obscured, ignorance is deployed strategically (Mcgoey 2012), and anti-politics discourse is used instrumentally to achieve particular outcomes.

These points are underlined by the public treatment of Professor Gryseels, Director of the Institute of Tropical Medicine in Antwerp. An expert on schistosomiasis, Gryseels expressed reservations about mass treatment programs in a letter to the *Financial Times* (2006). His concerns included the possible emergence of resistance to frontline drugs for the treatment of schistosomiasis, doubts about the efficacy of distributing drugs for very different tropical diseases alongside each other, and the likelihood that scaling up the mass distribution of drugs for NTDs would undermine endeavors to develop comprehensive, sustainable health services and create a top-down, 'vertical monster.' The published response, ostensibly authored by African advocates of mass treatment programs, made light of Gryseels' concerns, and rejected them on the basis that it was inappropriate for him to express them. To quote "[Gryseel's] position from an African perspective is unethical and a violation of the fundamental right to health and contrary to the health policy of African countries" (Tchuente et al. 2006).

Gryseels is not the only biomedical researcher to be treated in this way. In 2011, David Molyneux, a well-known advocate for the mass distribution of drugs for the treatment and prevention of NTDs, combined forces with a Tanzanian government official to critique an article published a year earlier by Cavalli and colleagues (2010). The data presented in this article suggested that the additional burden of work placed on those rolling out mass treatment programs in Malawi detracted from other essential work that had to be done, and thus undermined already fragile health services. Rather than engage with the methods and analysis, the argument presented by Cavalli and colleagues was set aside as inappropriate and "counter to 'The Right to Health'." A moral statement about the merits of mass treatment was asserted. To quote: "We ask a simple question . . . would it be acceptable NOT to distribute ivermectin and azithromycin to communities where there was a severe risk of blindness when free drugs and other resources were available, which if they were not given would commit many thousands of people . . . to a life of misery" (Molyneux and Malecela 2011:e234). Thus, the probity of Cavalli and colleagues was questioned, because they suggested that treatment of those in need should be undertaken in a less vertical and externally driven manner.

Molyneux and Malecela similarly took issue with an article written by the two of us (Allen and Parker 2011). In this article, we highlighted the disjuncture between global rhetorics (suggesting

that mass treatment for NTDs could alleviate the suffering of 'the bottom billion' and 'end poverty') and local realities (suggesting that it was unlikely that mass drug administration would be able to alleviate poverty in the way anticipated). At one point, we briefly illustrated our argument with reference to the low drug uptake rates in Tanzania mentioned previously. The response was to misrepresent key points that we made, dismiss them as inaccurate, and to question our integrity. For example, Molyneux and Malecela (2011:5) incorrectly claimed we believed that mass treatment has no beneficial clinical effects for those suffering from lymphatic filariasis. A series of articles are then cited to discredit such a position, while our points about monitoring, running, and understanding the program in Tanzania were simply ignored. With respect to drug uptake data, they again misrepresented our findings, and set aside information that the uptake of drugs in Pangani and Muheza districts, northern coastal Tanzania, was too low to enable effective and sustained control. They even cited a paper (Simonsen et al. 2010) that makes similar points to us as if it contradicted our findings. Echoing the response to Gryseels, they then asserted that raising problems with mass treatment is "disrespectful to endemic countries . . . unethical and grossly negligent."

The publication of Molyneux and Malecela's article in *Parasites and Vectors* subsequently prompted discussion in *The Lancet*, with many of the same authors participating and largely restating their positions (see Allen and Parker 2012a; Meheus et al 2012; Molyneux et al. 2012). In those exchanges, leading advocates of context-free treatment made their underlying motivations explicit, articulating a fear that funding would be withdrawn and international agreements to provide free drugs abandoned, if it became known that there were difficulties rolling out treatment. Highlighting difficulties was said to be "cynical" and something that would do "the poor a disservice" if it ended up leading to the withdrawal of drugs (Molyneux et al. 2012:1099).

Mindful of Murray Last's influential paper, "The importance of knowing about not knowing" (1988) and Wenzel Geissler's more recent paper "Public secrets in public health" (2012), it is helpful, at this juncture, to reflect on what is not said as well as what is said in the public sphere. Just as government officials may privately acknowledge fundamental problems with strategies relying on mass treatment for the control and elimination of NTDs, but publicly feel compelled to support the programs, so academics find themselves in similarly difficult situations. One parasitologist in Europe, for example, let it be known that while he recognized that the mass distribution of drugs was unlikely to eliminate lymphatic filariasis at certain highly endemic locations, the political economy of research made it little short of impossible to speak out. To quote from an e-mail:

I would like to contribute [to current debates in The Lancet, but] . . . it could easily cause problems for our current activities. . . . As long as we are heavily involved in field work I think I need to be relatively quiet . . . I could get into severe trouble with the NTD people [if I speak out]. But I am happy that other people [are] express[ing] alternative views on the ongoing NTD programs.

Another leading parasitologist wrote in a comparable vein, stating that he had already had some grants cut, and feared losing others, if he spoke out. Meanwhile, another academic specializing in global health emailed us. She, too, expressed support. Nevertheless she wondered, while noting difficulties with current approaches to the control of NTDs, if there was any value in directly challenging dominant voices. It was, she argued, a battle that could not be won, because there was too much riding on the status quo and it was not worth fighting.

CONCLUSION

How should anthropologists working in the arena of NTDs respond to endeavors to set aside biological and social data suggesting current programs to control these diseases are unlikely to achieve their objectives at some locations? One approach is to follow the advice of the academic working in public health, mentioned previously, and to write scholarly articles with the intention of gradually refining and developing existing approaches. This may work in time, but it assumes that accumulated evidence will eventually prevail over entrenched rhetoric. At present, there is little sign of that happening with the global campaign of mass drug administration for NTDs. While local level data identifying the complexities and challenges of rolling out free treatment may privately be recognized as providing useful information that could be drawn upon to improve existing strategies, the reality is that vertical, context-free policies have been expanded. Moreover, a wide range of strategies are increasingly being deployed to limit the kind of information gathered and to contain debate. If anything, antipathy to assessing alternative strategies or refining existing ones is increasing over time. This is discouraging, but for medical anthropologists there is an alternative project.

While we may share normative values with those running medical projects about the imperative to heal the sick and to alleviate suffering, we also have the option to stand back and assess the projects themselves as part of our ethnography. We have found Ferguson's anti-politics thesis to be a useful starting point, not least because it helps us understand the way in which technical and moral rhetorics are used to de-politicize the highly politicized arena of controlling the control of NTDs. It is, however, not without its limitations. Despite its postmodern theoretical status, the anti-politics gaze lends itself to functionalist interpretations. It is like an old anthropological study of African linage shrines that explains the underlying structures of ritual action, and omits the intense competition between elders for authority.

In the world of NTDs, there are doubtless times when cognitive dissonance is so pervasive that rhetoric and realities cannot be separated by those committed to mass drug administration. However, analyzing responses to alternative points of view is revealing of ways in which conscious strategic decisions are also being made. It shows that hegemonic rhetoric is sometimes a tool, used instrumentally to secure grants, impose hierarchies, and promote institutional interests. Incentives to do this have been apparent in global health programs at least since the selective primary health care campaigns of the 1980s. The current renewed emphasis on impacts and targets can only be expected to increase the trend. As we noted in our discussion of Ferguson's book, *The Anti-Politics Machine*, there is a danger in using his model in ways that actually ignore such political realities. It cannot be assumed that manifestly misleading statements are not recognized as such by those articulating them.

Similar problems arise with the tropes of 'mobile' or 'scientific' sovereignty. The latter shares associations with Foucault's biopower thesis, ascribing to highly qualified, medical-scientific technocrats, decisions ordinarily reserved for state organs. Samsky (2012) used the idea in his interesting study of onchocerciasis in Tanzania; but this, too, can end up suggesting a web of thinking that shapes behaviors in specific and consistent ways. In some respects, an alternative, if again related, theoretical notion is potentially more insightful in assessing the global control programs for NTDs. Examining who is infected with NTDs lends itself to analysis drawing on ideas about structural violence (Farmer 1999). It is overwhelmingly the poor and marginal who are infected. In this respect, the issue for those involved in NTD policy is whether they are working

to challenge such structures or whether they are perhaps inadvertently involved in sustaining them.

The approach is predictably controversial and can be impossible for researchers dependent on soft funding (Allen and Parker 2012b). Medical anthropologists, however, are often less constrained in this respect than epidemiologists and parasitologists. Our research is not so costly, and we are not so restricted by clinical protocols and biomedical hierarchies. Potentially, this gives us greater academic freedom. It can place us in a position to present evidence in ways that others cannot, and it can force debates into the public arena. This is what we have endeavored to do with respect to context-free mass drug administration for NTDs. It is what we can contribute as critically engaged medical anthropologists. Perhaps naively, we have done so in the hope that there will be a greater emphasis on monitoring and an adjustment of existing policy, leading to the more effective delivery of treatment to the millions who certainly need them. While acknowledging the strength of the anti-politics perspective, to take the implications too far is misleading. If there is deliberation involved in the use of hegemonic discourse, there is the possibility of different choices being made. Small shifts in the incentives provided by donors can have big effects. We remain optimistic that such changes are possible.

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