CHAPTER SEVEN

THE HEALERS: TRIUMPH AND TRAGEDY

Oh tear-filled figure who, like a sky held back grows heavy above the landscape of her sorrow....

RAINER MARIA RILKE, "O LACTIMOSA," TRANSLATED BY STEPHEN MITCHELL, 1995

IN 1989, A TEAM of field researchers in southern Uganda, near the Tanzanian border, stumbled on an older man living by himself in a thatched hut. The man himself was incoherent, but neighbors told his story: his wife and eight children had all died of AIDS. Asked about the man's future, villagers said, "He will not marry again."

Fourteen years later, I am sitting in a health clinic in Soweto, South Africa, talking to a sad young woman named Constance. Constance tells me she is HIV-positive and is too sick to work to support her three children. Even when she is feeling better, she cannot find a job. The father of her children is also unemployed, and she rarely sees him. Constance didn't tell her mother that she is HIV-positive, for fear that her mother and stepfather would eject her and her children from the household. She says her stepfather complains bitterly about her not working and not contributing to the maintenance of her children. Left unspoken between us is Constance's fate, and the fate of her three children when she succumbs to AIDS.

Southern Uganda was one of the places where AIDS first appeared in the early 1980s, but in the years since then, the epidemic has spread to most of southern and eastern Africa. South Africa is the most recent casualty of its spread. Thirty percent of pregnant women in their twenties test HIV-positive in South African antenatal clinics.

A third of the adult population is now HIV-positive in Botswana, Lesotho, Swaziland, and Zimbabwe. In other eastern and southern African countries, between 10 and 25 percent of the adult population is HIV-positive. AIDS is spreading also to African countries outside of the "AIDS corridor," which now runs from Ethiopia to South Africa. In Africa as a whole, there are 29 million HIV-positive people. Tragedies like that of the man in southern Uganda and Constance have happened many times over the past decades, and will happen many more times in the future. More than 2 million people in Africa died from AIDS in 2002. Their places in the epidemic were taken by the 3.5 million Africans newly infected in 2002.

AIDS gets attention. Celebrities and statesmen—ranging from Bill Clinton and Nelson Mandel

to Bono and Ashley Judd—call for action. The anti-globalization activists also focus on AIDS Oxfam calls for access to life-saving drugs for AIDS patients in Africa. American activists a international AIDS conferences (such as American health secretary Tommy Thompson at a conference in Barcelona in 2002) shout down anyone not responding with sufficient alacrity, *pour encourager les autres.*

The foreign aid doyens have also woken up to the problem. The actors include the UN agency UNAIDS, the World Bank's multicountry program to fight AIDS in Africa, the World Healt Organization's Commission on Macroeconomics and Health, and the Global Fund to Fight AIDS, TI and Malaria.

In his 2003 State of the Union Address, President George W. Bush announced the release o fifteen billion dollars in foreign aid to fight AIDS. The initiative was passed by Congress, and Bus signed it into law on May 27, 2003.

It is great that public figures are publicizing the needs of AIDS victims. Many people fee compassion in the face of the death sentence of millions of HIV-positive people in Africa, and in the face of fear that the epidemic will keep spreading.

Yet behind this recent Western attention to AIDS is a tale of two decades of neglect, prevarication, incompetence, and passivity by all those same political actors and aid agencies. By the time researchers found the incoherent victim in southern Uganda in 1989, and even years before that, the West had all the information it needed to predict (and virtually every expert did predict) that AIDS would kill tens of millions of people worldwide, above all in Africa, if nothing was done.

Paradox of Evil and the White Man's Burden

Scholars of religion talk about the paradox of evil, which says you cannot have all three of the following conditions hold: (1) a benevolent God; (2) an all-knowing and all-powerful God; and (3) evil things happening to good people. If you have (1) and (2), then why would God (3) let bad things happen to good people?

Similarly, in the White Man's Burden, you cannot have all the following hold: (1) the White Man's Burden is acting in the interests of the poor in the Rest; (2) the White Man's Burden is effective at resolving poor people's problems; and (3) lots of bad things, whose prevention was affordable, are happening to poor people. If (3) happens, then either (1) or (2) must not hold. Religion is a matter of faith in an invisible Supreme Being, so the contradictions inherent in the Paradox of Evil are more easily tolerated by true believers. Foreign aid is not a faith-based area, however. It is a visible policy with visible dollars meant to help visible people.

The breakdown of the aid system on AIDS is a good test case of the paradox of evil in foreign aid. It reflects how out of touch were the Planners at the top with the tragedy at the bottom, another sign of the weak power of the intended beneficiaries. It shows how ineffective Planners are at making foreign aid work. It is hard to imagine anything more in the interest of the poor than preventing the spread of a fatal disease. Today, the Western aid community has finally woken up to AIDS. Now that community has moved from inaction to ineffective action. Aid for AIDS still appears mismatched to the choices of the poor.

Health Triumphs

The failure on AIDS is all the more striking when we consider that health is the area where foreign aid has enjoyed its most conspicuous successes.[1] Maybe the part of the White Man's Burden that addresses disease offers a more hopeful picture than the malfunctioning bureaucracy in other areas. The healers are working on an issue where the needs and wants of the poor are more obvious—they don't want to die—and so feedback is less critical. The outcomes are more observable, as deaths tend to get noticed by others.

The successes may tell us about the ability of aid agencies to be effective when they have narrow, monitorable objectives that coincide with the poor's needs and with political support in the rich countries for an uncontroversial objective like saving lives. As the previous chapters argue, areas with visible individual outcomes are more likely to put Searchers in charge—in contrast to the power of Planners in areas where nobody can be held individually accountable, such as economic growth. I also hypothesize that Searchers are more likely to succeed at their narrow goals than the Planners are to succeed at their more general goals.

A vaccination campaign in southern Africa virtually eliminated measles as a killer of children. Routine childhood immunization combined with measles vaccination in seven southern African nations starting in 1996 virtually eliminated measles in those countries by 2000. A national campaign in Egypt to make parents aware of the use of oral rehydration therapy from 1982 to 1989 cut childhood deaths from diarrhea by 82 percent over that period. A regional program to eliminate polio in Latin America after 1985 has eliminated it as a public health threat in the Americas. The leading preventable cause of blindness, trachoma, has been cut by 90 percent in children under age ten in Morocco since 1997, thanks to a determined effort to promote surgery, antibiotics, face washing, and environmental cleanliness. Sri Lanka's commitment to preventing maternal deaths during childbirth has cut the rate of maternal mortality from 486 to 24 deaths per 100,000 births over the last four decades. A program to control tuberculosis in China cut the number of cases by 40 percent between 1990 and 2000. Donors collaborated on a program to wipe out river blindness in West Africa starting in 1974, virtually halting the transmission of the disease. Eighteen million children in the twenty-country area of the program have been kept safe from river blindness since the program began. An international effort eradicated smallpox worldwide. Another partnership among aid donors contributed to the near eradication of guinea worm in twenty African and Asian countries where it was endemic. Beginning in 1991, a program of surveillance, house spraying, and environmental vector control halted transmission of Chagas' disease in Uruguay, Chile, and large parts of Paraguay and Brazil. Worldwide, as we see in chapter 3, infant mortality in poor countries has fallen and life expectancy has increased.

Many of these programs benefited from donor funding and technical advice. In Egypt's fight against childhood diarrhea, for example, it was a grant from USAID and technical advice from the World Health Organization (WHO). In China's campaign against tuberculosis, it was a World Bank loan and WHO advice. In Morocco, the drug company Pfizer donated antibiotics to fight trachoma. Although the aid agencies have not calculated the aid impact in a scientifically rigorous way, the broad facts support the belief that aid was effective in many of the above health interventions. Alas, instead of expanding success in the many health areas where it had triumphed, the international health community was going to get bogged down in its equivalent of Vietnam: AIDS.

The Coming Storm

The health successes make the failure on AIDS stand out even more. As with any contagious disease early action is far more effective than later action. A bucket of water is enough to put out a campfire; it takes more to put out a forest fire.

On the plus side, it was the West that solved the scientific problem of what caused AIDS, making prevention efforts possible. Unfortunately, this knowledge did not translate into effective prevention in Africa.

The World Bank advertises that it is now the "world's single largest funder of AIDS programs" (the same claim is made by the World Health Organization and by the U.S. Agency for International Development). The World Bank doesn't mention that it did a total of one project dedicated to AIDS before 1993 (an eight-million-dollar loan to Mobutu in Zaire in 1988). The World Bank today endorses the WHO calculation that Africa needs one billion dollars a year in AIDS-prevention spending. Yet over the entire period 1988–99, the World Bank spent fifteen million dollars a year on all AIDS projects in Africa. In 1992, a World Bank study noted that the Bank "has done little to initiate prevention in countries in which the risk of spread is high."

Why did the West not act more vigorously early on in the AIDS crisis? Was it because people didn't know how bad the crisis would become, because action was ineffective, or simply because it took millions of deaths to make it a headline issue worth responding to?

The defense that the West didn't know is not credible. As long ago as 1986, AIDS in Africa was attracting international attention. On October 27, 1986, an article in the *Times* of London said: "A catastrophic epidemic of AIDS is sweeping across Africa…. the disease has already infected several millions of Africans, posing colossal health problems to more than 20 countries…. 'Aids has become a major health threat to all Africans and prevention and control of infection…must become an immediate public health priority for all African countries,' says report published in a leading American scientific journal."

Signs of the coming epidemic appeared even earlier. A sample of prostitutes in Butare, Rwanda, in 1983 found that 75 percent were infected. A later study by the group that reported this statistic dated the general awareness that Central Africa was at risk for the spread of AIDS back to 1983 as well.[2]

The World Bank did its first AIDS strategy report in 1988. The report said the crisis was urgent. It presciently detected "an environment highly conducive to the spread of HIV" in many African countries. It noted that the epidemic was far from reaching its full potential and that "the AIDS epidemic in Africa is an emergency situation and appropriate action must be undertaken now.[3] Yet the effort at the time was underwhelming: the World Bank made a grant of one million dollars to the World Health Organization (WHO) in the 1988/1989 fiscal year to fight AIDS.

A 1992 World Bank retrospective on the 1988 strategy damns it with faint praise: "In view of the 1988 decision to deal with AIDS using existing resource levels and the small PHN [Population, Health, and Nutrition] staff that has had to handle a steadily increasing work program, we conclude that the agenda in the 1988 Strategy Paper has been reasonably well implemented.[4]

The World Bank's 1993 World Development Report, whose theme was health, notes that "At present, most national AIDS programs are inadequate, despite international attention and the significant effort by WHO to help design and implement plans for controlling AIDS." Translation: it's the WHO's fault.

An article in 1991 in the World Bank/IMF quarterly magazine predicted that thirty million people would be infected worldwide by the year 2000 if nothing was done.[5] The actual figure would

turn out to be forty million, but the point is: more than a decade ago many knew that a catastrophic epidemic was under way.

The 1992 World Bank study, while noting the lack of progress, did sound the obligatory refrain that progress was under way, not least because "countries have been informed of the Bank's increasing attention to AIDS."

The World Bank itself was directing the tiny flows of AIDS financing to "currently affected countries," while "little has been done by the Bank to prevent AIDS in less affected countries with a high potential for spread.[6] The 1992 report closed with the curious admonition that "AIDS should no be allowed to dominate the Bank's agenda on population, health, and nutrition issues in Africa." Raising this issue early in the epidemic is strange, when an ounce of prevention *is* worth a pound of cure. Now AIDS work has crowded out treatment of other equally lethal threats to Africans because its spread was not averted. The best way to have kept AIDS from "dominating the Bank's agenda" was to have prevented its spread.

Perhaps we can better understand the aid community's difficulties on prevention if we realize that prevention was not very visible to the rich-country public. Although insiders knew that a horrific AIDS crisis was brewing in Africa in the late 1980s and early 1990s, this attracted little attention from Western media or politicians. Part of the problem was probably that aid agencies didn't know what to do to address the crisis, but the above examples show little evidence that they were searching for answers. Only *after* a truly massive number of people were infected with HIV did AIDS gain the sufficient level of visibility for action.

Not Following Your Own Advice

By 1998, the World Bank had done ten stand-alone AIDS projects. Researcher Julia Dayton was hired by the Bank to analyze its programs.[7]

Dayton found that only half of the fifty-one World Bank projects with AIDS components promoted condom use or financed condom purchases. To understand this omission, consider another Dayton finding: almost none of the fifty-one projects did any economic analysis of what an effective AIDS interventions was.

Dayton also found that World Bank country teams were missing in action on AIDS. AIDS was already reaching epidemic levels in Côte d'Ivoire, Haiti, Kenya, and Zambia in the 1990s. The World Bank's Country Assistance Strategy Documents in the 1990s for those countries did not describe HIV prevalence or transmission, recommend STD-or HIV/AIDS-prevention or care, or in fact analyze HIV/AIDS at all. Ironically for aid agencies that often are trying to do everything, "everything" sometimes leaves out some high priorities.

Day of Judgment

Shortly after Dayton's report was issued, the World Bank produced another AIDS report. The World Bank Africa vice-president wrote in the introduction to this 2000 report that "AIDS is completely preventable." He gave a prediction that "those who look back on this era will judge our institution in large measure by whether we recognized this wildfire that is raging across Africa for the development threat that it is, and did our utmost to put it out. They will be right to do so.[8] He could

have spared us the use of the future tense.

The World Bank did produce a Monitoring and Evaluation Operations Manual, prepared jointly by UNAIDS and the World Bank.[9] The manual sensibly warns that "the more complex an M&E system, the more likely it is to fail." It then spends fifty-two pages laying out its extremely complex M&E system. This includes the ten-step M&E program (step 3: "NAC [National AIDS Councils] ar stakeholders engage in an intensive participatory process to build ownership and buy-in, particularly for the overall M&E system and programme monitoring"). There is also the list of thirty-four indicators (none of which involves monitoring "core transmitters"), the nineteen-point terms of reference for the M&E consultant to the NAC, and the "summary terms of reference for specialized programme activity monitoring entity." The accepted scientific standard for any program evaluation, the randomized controlled trial, did not make it into the manual.

The Kitty Genovese Effect

Winston Moseley killed Kitty Genovese, a twenty-eight-year-old bar manager, in Queens, New York, in 1964. Her murder is the first news story I remember from my childhood. As Moseley first stabbed Kitty, neighbors heard her screams but didn't call the police. Moseley drove away and then came back and stabbed her some more, till she died. Police later identified thirty-eight neighbors who saw or heard part of the attack. The eyewitnesses' failure to call police became a symbol of the callousness of urban America. I think my mother showed me the newspaper to illustrate the wickedness of big-city folks.

The last thing I want to do is defend such bad Samaritans, but economists point out that the callousness of each individual was not as great as their group behavior suggests. All the neighbors agreed that saving Kitty's life would have been worthwhile. Outraged commentators pointed out that only one out of those thirty-eight people had to call the police, but that was exactly the problem. Calling the police would have had some cost to the individual, who may later have had to testify and may have feared retribution from the associates of the killer. Each of the thirty-eight people might have been willing to bear this cost to save Kitty's life, but preferred that someone else make the call. With so many witnesses to the scene, each person calculated a high probability that someone else *would* make the call and save Kitty. Therefore, each person did nothing. If there had been only one witness, and if that person had known he was the only witness, he would have been more likely to call the police.

The Kitty Genovese effect is another plausible example of the problem of collective responsibility I mention in chapter 5, which leads to bureaucratic inaction. Each development agency is one among many responsible for solving crises in the poor countries. Each agency may altruistically care about the poor. Suppose that action by one agency will be enough to solve a problem, and all agencies will share in the glory of the triumph; it is difficult to tell which agency's effort made the difference. If effort is costly and diverts resources away from other organizational goals, each agency will prefer that some other agency make the effort. The more agencies that could act, the less likely that action will occur.

The Genovese effect can also operate within aid bureaucracies. Each department might wish that results happen, but would prefer that some other department achieve them, with glory for all. Departments then get into the game of shifting responsibility for difficult tasks onto other departments, which drives the leaders of even the most results-oriented agency insane.

Action does become more likely as the status quo deteriorates due to inaction. The crisis could eventually become big enough to outweigh the option of waiting for someone else to act. In the Kitty Genovese example, a neighbor did eventually call the police. Kitty was dead by then.

A story like this could help account for the long period of inaction on the AIDS crisis, until the crisis was so severe that finally aid agencies acted.

Orphans in the Storm

Mary Banda, about sixty-five, lives in Lusaka, Zambia.[10] Five of her eight children have died from AIDS. In Zambia, adult children usually care for their aged parents. AIDS reversed the equation for Mary Banda. Instead of her children caring for her, she is caring for eight orphaned grandchildren, ranging in age from six to twenty.

Mbuya (Grandmother) Banda doesn't get much help from her three surviving children. One of her children is in South Africa, and Mbuya hasn't heard from her. Her youngest daughter is unmarried and unemployed. Her remaining daughter is married, but does not work; her husband can only sporadically find work. She comes around with a bag of mealie meal (cornmeal) every now and then.

The biggest problem is finding food for the orphans. Mrs. Banda sells groundnuts by the road and grows a little maize, sweet potato, and greens. It is never quite enough. Only two of the children are in school, where they are sometimes refused entry because they lack fees, shoes, and uniforms.

When her children became sick from AIDS, she tried traditional healers as well as the hospital. Mary Banda believes her children died from witchcraft—a sign of the need to adjust to local conditions with prevention messages. Her four deceased daughters were businesswomen buying secondhand clothes in Lusaka and exchanging them for groundnuts in the villages, and then reselling the groundnuts in Lusaka. She believes villagers jealous of their success bewitched her daughters through their feet. She blames her son's death on witchcraft from jealous rivals after his work promoted him. She wishes her children had seen a witchdoctor to get preventive medicine to put on their feet.

Discussion of African beliefs in witchcraft is taboo in aid agencies, as nobody wants to reinforce ill-informed stereotypes. Unfortunately, political correctness gets in the way of making policy, as conventional public health approaches may not work if people *do* believe that witchcraft causes illness and turn to traditional healers. Americans and Europeans also believed in witches when they were at similar levels of income as Africa (and many Americans still do today; hence the spiritualism section at the Barnes & Noble bookstore in Greenwich Village—one of the intellectual capitals of the United States—is three times the size of the science section). Moreover, many American evangelicals believe divine intervention can cure illness.

Beliefs in invisible malign forces in Africa are not so surprising when a virus visible only to scientists is killing previously healthy young people. Princeton political scientist and ethnographer Adam Ashforth documented the widespread belief in Soweto, South Africa, that witchcraft causes many symptoms of illness, including symptoms similar to AIDS.[11] AIDS-prevention efforts would do much better to work with traditional healers on fighting HIV transmission than to ignore beliefs in witchcraft because of political sensitivities.

Mrs. Banda speaks for her generation of Mbuyas: "I'm an old woman who's suffering. When I was young, I never thought such cruel things could happen. When I think about it, I pray and cry, but I don't like to cry because it'll upset the children."

At least Mrs. Banda's grandchildren have her to care for them. A group even more unlucky is Lusaka's growing population of street children. AIDS orphans with no one to care for them are on the street. The manager of a shelter for abandoned kids, Rodgers Mwewa, noticed the increase in orphaned children coming into Lusaka. The traditional extended-family system of caring for children is breaking down because too many of its adult members are dead. "HIV is destroying families and family bonds," says Mwewa.[12]

The street children don't live long: cars frequently hit them, they get into fights, and they resort to petty crime, drugs, or sniffing glue. They are beaten up by the police. Worst of all, the children sell themselves for sex, and thus sooner or later acquire the HIV virus that killed their parents.

Less anecdotal evidence confirms that orphans in Africa face a rough road. The less orphans can rely on family, the worse off they are. Princeton University scholars Anne Case, Christine Paxson and Joseph Ableidinger found in a study of orphans in ten African countries that orphans who live with unrelated adults get less schooling than orphans who live with non-parental relatives, who themselves get less schooling than children living with their parents. These effects show up even as discrimination within the household. For example, an orphan living with her aunt and uncle typically gets less schooling than her cousin, the aunt and uncle's child.[13]

Africa's AIDS crisis is leaving a generation of undereducated, undernourished, underparented orphans who will soon be adults. As if Africa's development crisis weren't bad enough for the current generation, the orphans of AIDS complicate development even more.

Treating the Sick

Now that twenty-nine million people in Africa are HIV-positive, compassion would call for treating the sick, right? Yet pity is not always a reliable guide to action. By a tragic irony, compassion is driving the fight against AIDS in Africa in a direction that may cost more lives than it saves. It is political suicide in rich countries to question AIDS treatment. Too bad—what should matter is what helps the poor the most, not what sells politically in rich countries. This political pressure led Planners to fixate on the goal of treatment even when the costs were so prohibitive that it diverted money from cheaper actions that Searchers had found to save many more lives.

The Western aid community is now installing a gold-plated barn door after the horse has been stolen. Foreign aid programs are now starting to finance the "triple-drug cocktail" known as highly active antiretroviral therapy (HAART), which has dramatically lowered AIDS mortality in the West. All of the actors described earlier signed on to financing AIDS treatment. The UN General Assembly Special Session passed a resolution calling for AIDS treatment. This used to be impossible for low income African AIDS patients, because of high drug prices (ten thousand dollars a year per patient). However, competition from a growing number of generic HIV/AIDS drugs has cut prices, which are now as low as $304 per year per patient.[14] This caused leaders of international aid agencies, such as former WHO director-general Grö Harlem Brundtland, to ask, "Does anyone deserve to be sentenced to certain death because she or he cannot access care that costs less than two dollars a day?" The WHO started a "3 by 5" campaign to get three million HIV-positive patients on antiretroviral therapy by the end of 2005.

Saving lives is not so simple. First of all, the focus on drug prices under-states the expense and difficulty of treatment. Three hundred and four dollars is just the price of the first-line therapy drugs per year. The population first needs to be tested to see who is HIV-positive. Patients need to have

their viral load tested to see if they should start taking drugs and, after taking them, if the drugs are working to decrease the viral load. The drugs are toxic, with potentially severe side effects. Health workers need to adjust the combination of drugs when side effects are too extreme. Patients need counseling and monitoring to make sure they are taking the medicine (if there is less than full adherence to treatment, the virus builds up resistance to the drugs). Patients also need treatment for the opportunistic infections that afflict AIDS sufferers. So treatment is more expensive than just the cost of the drugs. The World Health Organization is working with a figure of $1,500 per year per patient for delivering treatment to prolong the life of an AIDS patient by one year. Even if the WHO can drive down the price of the drugs further, the cost per year would still be $1,200. Other experts use similar fig-ures.[15] But is even this number too high to justify giving a person another year of life?

The advocates for treatment stress the universal human right for HIV-positive patients to have access to life-saving health care, no matter what the cost. This is a great ideal, but a utopian one. There are also other ideals—first of all, prevention of the further spread of AIDS. And what about the universal human right for health care for other killer diseases, freedom from starvation, and access to clean water? Who chose the human right of universal treatment of AIDS over the other human rights? A non-utopian approach would make the tough choices to spend foreign aid resources in a way that reached the most people with their most urgent needs.

Poor people have many other needs besides AIDS treatment. The total amount of foreign aid for the world's approximately three billion poor people is only about twenty dollars per person per year. Is the money for AIDS treatment going to be "new money" or will it come from these already scarce funds? President Bush's 2005 budget proposal increased funding for the American AIDS program (especially treatment), but cut money for child health and other global health priorities by nearly a hundred million dollars (later reversed after protests).[16]

Bush's cut in other health spending was particularly unfortunate when two and a half times as many Africans die from other preventable diseases as die from AIDS. These diseases include measles and other childhood illnesses, respiratory infections, malaria, tuberculosis, diarrhea, and others. Worldwide, in 2002 there were 15.6 million deaths from these causes, as opposed to 2.8 million deaths from AIDS.[17]

A well-established public health principle is that you should save lives that are cheap to save before you save lives that are more expensive to save. That way you save many more lives using the scarce funds available. Prevention and treatment of these other diseases cost far less than AIDS treatment.

Granting life through prevention of AIDS itself costs far less than AIDS treatment. A years supply of condoms to prevent HIV infection costs about fourteen dollars. In a 2002 article in *The Lancet,* Andrew Creese from the World Health Organization and co-authors estimated that AIDS prevention interventions such as condom distribution, blocking mother-to-child transmission, and voluntary counseling and testing could cost as little as one to twenty dollars per year of life saved, and twenty to four hundred dollars per HIV infection averted (even though this study may overstate the confidence that these things always work). Other studies come up with similar estimates.[18]

Then there are other diseases for which Searchers have found cheap interventions (although we have seen that the Planners' domination of aid often interferes with making these things work). The medicines that cure TB cost about ten dollars per case of the illness. A package of interventions designed to prevent maternal and infant deaths costs less than three dollars per person per year. Worldwide, three million children die a year because they are not fully vaccinated, even though

vaccines cost only pennies per dose. One in four people worldwide suffers from intestinal worms, though treatments cost less than a dollar per year. A full course of treatment for a child suffering even from drug-resistant malaria costs only about one dollar. In fact, Vietnam, a relatively poor country, reduced deaths from malaria by 97 percent from 1991 to 1997 with a campaign that included bed nets and antimalarial drugs.[19] A bed net program in Tanzania also reduced mortality significantly.[20] (The availability of such cheap remedies makes it all the more tragic that malaria is still so widespread—we are back to the second tragedy of the world's poor.)

Overall, the World Bank estimates the cost per year for a variety of health interventions like these to range from five to forty dollars, compared with the fifteen-hundred-dollar cost of prolonging the life of an AIDS patient by a year with antiretroviral treatment. The $4.5 billion the WHO plans t spend on antiretroviral treatment for one more year of life for three million could grant between seven and sixty years of additional life for five times that many people—fifteen million. For the HIV-positive patients themselves, you could reach many more of them to prolong their lives by treating the opportunistic infections, especially TB, that usually kill AIDS victims.

Other researchers come up with similar numbers. For example, Harvard economics professor Michael Kremer noted in an article in *The Journal of Economic Perspectives* in 2002: "for every person treated for a year with antiretroviral therapy, 25 to 110 Disability Adjusted Life Years could be saved through targeted AIDS prevention efforts or vaccination against easily preventable diseases."

A group of health experts wrote in the prestigious medical journal *The Lancet* in July 2003 about how 5.5 million child deaths could have been prevented in 2003, lamenting that "child survival has lost its focus." They blamed in part the "levels of attention and effort directed at preventing the small proportion of child deaths due to AIDS with a new, complex, and expensive intervention.[21]

The WHO expects the added years of life for AIDS patients from antiretroviral treatment to b only three to five years—not exactly a miracle cure.[22] The United Nations Population Division i 2005 similarly estimated that the added years of life from antiretroviral treatment to be a median of3.5 years.[23] After that, resistance to the first-line treatment (the one with the cheap drugs, which is all that is on the table in Africa, outside of South Africa) builds up and full-blown AIDS sets in Other estimates are even more pessimistic. The average length of effectiveness of the first-line treatment in Brazil, which has a large-scale treatment program, has been only fourteen months.[24]

The big question is whether poor Africans themselves would have chosen to spend scarce funds on prolonging some lives with AIDS treatment, as opposed to saving many lives with other health interventions. Would the desperately poor themselves, such as those on an income of one dollar a day, choose to spend fifteen hundred dollars on antiretroviral treatment? Should the West impose its preferences for saving AIDS victims instead of measles victims just because it makes the West feel better?

Path of Least Resistance

Getting a complex AIDS and development crisis under control just by taking a pill is irresistible t politicians, aid agencies, and activists. We see here again the bias toward observable actions by aid agencies. The activists' cause plays well in the Western media because the tragedy of AIDS victims even has a villain—the international drug companies that were reluctant to lower the price on life-saving drugs—which makes mobilization for the cause even easier.

AIDS treatment is another example of the SIBD syndrome—rich-country politicians want t convince rich-country voters that "something is being done" (SIBD) about the tragic problem of AIDS in Africa. It is easier to achieve SIBD catharsis if politicians and aid officials treat people who are already sick, than it is to persuade people with multiple sexual partners to use condoms to prevent many more people from getting the disease. Alas, the poor's interests are sacrificed to political convenience. When the U.S. Congress passed Bush's fifteen-billion-dollar AIDS program (known a the President's Emergency Plan for AIDS Relief, or PEPFAR) in May 2003, it placed a restrictio that no more than 20 percent of the funds be spent on prevention, while 55 percent was allocated for treatment.[25]

In a fit of religious zealotry, Congress also required organizations receiving funds to publicly oppose prostitution. This eliminates effective organizations that take a pragmatic and compassionate approach to understanding the factors that drive women into prostitution. Programs that condemn prostitutes are unlikely to find a receptive audience when they try to persuade those prostitutes to avoid risky behavior.

To make things even worse, the religious right in America is crippling the funding of prevention programs to advocate their own imperatives: abstain from sex or have sex only with your legally married spouse. Studies in the United States find no evidence that abstinence programs have any effect on sexual behavior of young people, except to discourage them from using condoms.[26] The evangelists' message has not convinced American youth, so the evangelists want to export it to African youth. Moreover, devout women who follow the sex-within-marriage mantra are still at risk if their husbands have sex with other partners without using condoms before or during their marriage. The religious right threatens NGOs that aggressively market condoms with a cutoff of official aid funds, on the grounds that those NGOs are promoting sexual promiscuity. Pushed by the religious right, Congress mandated that at least one third of the already paltry PEPFAR prevention budget go for abstinence-only programs.

The Vatican is also pushing its followers to oppose condom distribution in Africa because of religious doctrine that forbids the use of birth control.[27] These religious follies are one of the most extreme examples of rich peoples' preferences in the West trumping what is best for the poor in the Rest.

While prevention is tied up in religious knots, everyone seems to agree on treatment. The gay community, a group usually not identified with the religious right, is also emphasizing treatment. Activist groups such as ACT UP helped along the push for treatment—in their Web site for the 2002 Barcelona AIDS conference, they mentioned "treatment" eighteen times, but didn't mention "prevention" once.[28] Why do we have a well-publicized Treatment Access Coalition when there is no Prevention Access Coalition? Why didn't the WHO have a "3 by 5" campaign intended to *prevent* three million new cases of AIDS by the end of 2005? The activists have been only too successful in focusing attention on treatment instead of prevention. A LexisNexis search of articles on AIDS in Africa in *The Economist* over the previous two years found eighty-eight articles that mentioned "treatment" but only twenty-two that mentioned "prevention."

Instead of spending ten billion dollars on treatment over the next three years, money could be spent on preventing AIDS from spreading from the 28 million HIV-positive Africans to the 644 million HIV-negative Africans. Thailand has successfully implemented prevention campaigns targeting condom use among prostitutes, increasing condom usage from 15 percent to 90 percent and reducing new HIV infections dramatically. Senegal and Uganda have apparently also had success

with vigorous prevention campaigns promoted by courageous political leaders (although the Ugandan government is now backing off from condom promotion under pressure from religious leaders).

If money spent on treatment went instead to effective prevention, between three and seventy-five new HIV infections could be averted for every extra year of life given to an AIDS patient. Spending AIDS money on treatment rather than on prevention makes the AIDS crisis*worse,* not better. If we consider that averting an HIV infection gives many extra years of life to each individual, then the case for prevention instead of treatment gets even stronger. For the same money spent giving one more year of life to an AIDS patient, you could give 75 to 1,500 years of additional life (say fifteen extra years for each of five to one hundred people) to the rest of the population through AIDS prevention.

We should ask the aid agencies why they want to put this much money now into the treatment of AIDS for twenty-nine million people when the same money spent to prevent the spread of HIV might have spared many of the twenty-nine million from infection. This past negligence is *not* an argument for or against any particular direction of action today—we must move forward from where we are now. But it does show how politicians and aid bureaucrats react passively to dramatic headlines and utopian ideals rather than according to where the small aid budget will benefit the most people. Is this what poor people themselves would choose to spend the money on?

Trade-offs

It is the job of economists to point out trade-offs; it is the job of politicians and Planners to deny that trade-offs exist. AIDS campaigners protest that AIDS treatment money is "new money" that would have been otherwise unavailable, but that just begs the question of where new money is best spent. Why are there not campaigns to spread even further the successful campaigns against children's diarrhea, where a given amount of money—raised from the same sources—would reach many more people than money for AIDS treatment?

The utopian reaction is that the West will spend "whatever it takes" to cover *all* the health programs described above. This was the approach taken by the WHO Commission on Macroeconomics and Health in 2001. This commission recommended that rich countries spend an additional twenty-seven billion dollars on health in poor countries by 2007, which at the time was more than half of the world's foreign aid budget to poor countries. They ramp this number up to forty-seven billion dollars by 2015, of which twenty-two billion would be for AIDS. The commission's report was influential in gaining adherents for AIDS treatment in poor countries.

In an obscure footnote to the report, the commission notes that people often asked it what its priorities would be if only a lower sum were forthcoming, but it says it was "ethically and politically" unable to choose. The most charitable view is that this statement is the commission's strategy to get the money it wants. Otherwise, this refusal to make choices is inexcusable. Public policy is the science of doing the best you can with limited resources—it is dereliction of duty for professional economists to shrink from confronting trade-offs. Even when you get new resources, you still have to decide where they would be best used.

If you want priorities and trade-offs, you can get them in the WHO itself. The WHO's 2001 World Health Report contains the following common sense: "Not everything can be done in all settings, so some way of setting priorities needs to be found. The next chapter identifies costs and the impact on population health of a variety of interventions, as the basis on which to develop strategies to reduce risk.[29]

The next chapter in the WHO report actually states that money spent on educating prostitutes saves between one thousand and one hundred times more lives than the same amount of money spent on antiretroviral treatment.[30]

Getting back to the WHO Commission on Macroeconomics and Health, the commission's sum according to its own assumptions, did not eliminate all avoidable deaths in the poor countries. These sums, not to mention total foreign aid, are paltry relative to all the things that the world's three billion desperately poor people need. The commission *did* place some limit on what it thought rich countries were willing to spend to save lives in poor countries. *Everybody* places limits on what they spend on health. Even in rich countries, people could maximize their chances of catching killer diseases early enough for treatment by, say, having a daily MRI. Nobody, except possibly Woody Allen, actually does this, because it's too costly relative to the expected gain in life and relative to other things that rich people would like to spend money on. Virtually nobody was advocating AIDS treatment in Africa when the drug cocktail cost more than ten thousand dollars per year. Everybody, except political campaigners, knows that money, whether "new" or "old," is limited.

A political campaigner giving a graphic description of AIDS patients dying without life-saving drugs is hard to resist, making the trade-offs described earlier seem coldhearted. But money should not be spent according to what the West considers the most dramatic kind of suffering. Others with other diseases have their own chronicles of suffering. The journalist Daniel Bergner describes the relentless wailing of mothers in Sierra Leone who have lost a child to measles, the wailing that never stopped in a village during a measles epidemic. The high fever of measles stirs up intestinal worms, which spill out from the children's noses. Sores erupt inside their mouths. The parents in desperation pour kerosene down the children's throats. The graves of the dead children lie behind their parents' huts, mounds of dirt covered by palm branches.[31]

Take also the small baby dying in his mother's arms, tortured by diarrhea, which can be prevented so easily and cheaply with oral rehydration therapy. *Many* deaths can be prevented more cheaply than treating AIDS, thus reaching many more suffering people on a limited aid budget. Nobody asks the poor in Africa whether they would like to see most "new" money spent on AIDS treatment as opposed to the many other dangers they face. The questions facing Western AIDS campaigners should not be "Do they deserve to die?" but "Do we deserve to decide who dies?"

Constance, the HIV-positive mother from Soweto whom I mention at the beginning of this chapter, had an interesting perspective on priorities. When I asked her to name Soweto's biggest problem, she did not say AIDS or lack of antiretroviral treatment. She said, "No jobs." Finding a way to earn money to feed herself and her children was a more pressing concern for her than her eventual death from AIDS.

The more sophisticated way to deny that trade-offs exist is to insist that each part of the budget is necessary for everything else to work. When asked to choose between guns and butter, the canny politician insists that guns are necessary to protect the butter. In the AIDS field, strategic responses gave us the mantra "prevention is impossible without treatment." The proposition rests on the plausible reasoning that people will not come forward to be tested (most HIV-positive Africans do not know they are HIV-positive) unless there is hope of treatment. Some bits of evidence support this intuition, but the notion has not really been subjected to enough empirical scrutiny. Moreover, it is also plausible, and there is also a little evidence, to support the idea that treatment makes prevention more difficult. There is evidence that people in rich countries engaged in riskier sexual behavior *after* HAART became available.[32] Prevention campaigns did work in Senegal, Thailand, and Uganda without being based on treatment. Finally, there remains the risk that treatment with imperfect

adherence will result in emergence of resistant strains of HIV, so that treatment itself will sow the seeds of its own downfall.[33]

Dysfunctional Health Systems

Admittedly, these trade-offs are oversimplified. Cost-effectiveness analysis—which compares different health interventions according to their estimated benefits (years of lives saved) and costs (drugs, medical personnel, clinics, hospitals)—gives us these numbers. This is the mainstream approach in the international public health field. Many of the advocates for treatment, such as Gro Harlem Brundtland and WHO staff, buy into this approach. They just fail to follow the logic through to the conclusion that you could save many more lives spending on other health interventions—including AIDS prevention—with what they propose to spend on AIDS treatment.

Lant Pritchett of Harvard's Kennedy School and Jeffrey Hammer and Deon Filmer of the World Bank criticize these cost-effectiveness calculations for the oversimplifications they are. Just because it costs a dollar to treat a person's illness, it doesn't follow that giving a dollar to the national health system will result in treating that person. We have already seen what a difficult time international aid planners have in getting even simple interventions to work.

Despite the health successes noted earlier, Filmer, Hammer, and Pritchett talk about "weak links in the chain" that leads from the donor's dollar to the person's treatment. The second tragedy of the world's poor means that many effective interventions are not reaching the poor because of some of the follies of Planners mentioned in previous chapters.

Because of the insistence on working through governments, funds get lost in patronage-swollen national health bureaucracies (not to mention international health bureaucracies). In countries where corruption is as endemic as AIDS, health officials often sell aid-financed drugs on the black market. Studies in Cameroon, Guinea, Tanzania, and Uganda estimated that 30 to 70 percent of government drugs disappeared before reaching the patients. In one low-income country, a crusading journalist accused the ministry of health of misappropriating fifty million dollars in aid funds. The ministry issued a rebuttal: the journalist had irresponsibly implied that the fifty million dollars had gone AWOL in a single year, whereas they had actually misappropriated the money over a *three-year* period.

I have heard from multiple sources of AIDS money disappearing before it reached any real or potential victims. In Cameroon, the World Bank lent a large amount for AIDS, which the health ministry handed out to local AIDS committees. Critics allege there was virtually no monitoring and no controls and are not quite sure what the local committees did, except for vaguely defined "AIDS sensitization." In one alleged case, a local committee chair threw a large party for his daughter's wedding under the category of "AIDS sensitization."

Many doctors, nurses, and other health workers are poorly trained and poorly paid. The AIDS treatment campaigners are oblivious to these harsh realities of medical care in poor countries. The worst part about the heart-felt plea for money for AIDS treatment is that it will save many fewer lives than campaigners promise.

Of course, similar arguments would also weaken the case for the allegedly more cost effective health interventions on illnesses such as diarrhea, malaria, and measles. They do not work everywhere as well as they should, as the rest of this book makes clear. But this complication does not strengthen the argument for funding AIDS treatment in Africa. The cheap interventions have some

successes, as noted earlier. They are cheap because they are simpler for Searchers to find ways to administer—a measles vaccination has to happen only at one given point just for each child. A bed net impregnated with insecticide has to be handed out just once to each potential malaria victim, along with the information on how to use it, then impregnated again periodically.

The treatment of AIDS with drugs is vastly more complicated and depends on many more "links in the chain": refrigeration, lab tests, expert monitoring and adjusting therapy if resistance and toxic side effects emerge, and educating the patient on how to take the drug. In Europe and North America 20 to 40 percent of AIDS patients do not take their drugs as prescribed. Resistance will emerge if there are lapses from the correct regimen. Even with good intentions, government bureaucrats currently do a poor job making sure that drug supply matches demand in each locale. Unfortunately for the patients, it is critical that AIDS treatment not be interrupted by drug shortages (critical both for effectiveness and for preventing resistant strains from developing). A 2004 article in the *Journal of the American Medical Association,* while generally positive about treatment in developing countries, sounded some concerns:

> *Finally, how will the tens of thousands of health care professionals required for global implementation of HIV care strategies be trained, motivated, supervised, resourced, and adequately reimbursed to ensure the level of care required for this complex disease? To scale up antiretroviral therapy for HIV without ensuring infrastructure, including trained practitioners, a safe and reliable drug delivery system, and simple but effective models for continuity of care, would be a disaster, leading to ineffective treatment and rapid development of resistance..*[34]

Even doing the huge amount of testing required to find out who is HIV-positive and eligible for treatment would likely overwhelm health budgets and infrastructure in poor countries.

The tardy response to the AIDS crisis has meant that it has built up to an unbearable tragedy—to the point that it's now too late to save many millions of lives. Spending money on a mostly futile attempt to save all the lives of this generation of AIDS victims will take money away from saving the lives of the next generation, perpetuating the tragedy. The political lobby for treatment doesn't mention that no amount of treatment will stop the crisis. The only way to stop the threat to Africans and others is *prevention,* no matter how unappealing the politics or how uncomfortable the discussion about sex. The task is to save the next generation before it is again too late.

Let's commend the campaigners wanting to spend money on AIDS treatment in Africa for their dedication and compassion. But could they redirect some of that compassion to where it will do the most good?

Feedback and Idealism Again

Why did the health system fail on AIDS when foreign aid successes are more common in public health than in other areas? The AIDS crisis was less susceptible to feedback, and the interests of the poor were not coincident with rich-country politics. The necessary actions were in the area of prevention, which doesn't involve just taking a pill or getting a shot, as in many of the other

successes. The donors showed shamefully little interest in researching the sexual behavior that causes AIDS to spread or in which prevention strategies work to change that behavior. Donors should have asked, "How many people have we prevented from becoming HIV-positive?"

A patient who is already HIV-positive is a highly visible target for help—a lot more visible than someone who is going to get infected in the future but doesn't yet know it. The rich-country politicians and aid agencies get more PR credit for saving the lives of sick patients, even if the interests of the poor would call for saving them from getting sick in the first place. This again confirms the prediction that aid agencies skew their efforts toward visible outcomes, even when those outcomes have a lower payoff than less visible interventions.

The politicians and aid agencies didn't have the courage to confront the uncomfortable question of how to change human sexual behavior. The AIDS failure shows that the bureaucratic healers too often settle for simply handing out pills.

Heroes

The AIDS disaster in Africa features many ineffective bureaucrats and few energetic rescuers. But there are a few heroes. A group called HIVSA works in Soweto, South Africa, helping people like Constance. Its energetic director, Steven Whiting, was formerly an affluent interior designer. He stumbled on the AIDS issue by chance when he got the contract to renovate the headquarters of the Perinatal HIV Research Unit at the largest hospital in Soweto. He was so moved by what he saw there that he decided to quit his job and devote his efforts full time to fighting AIDS.

HIVSA does the little things that make a difference. It provides the drug nevirapine to block transmission of the HIV virus from mothers to newborns. Doctors give just one dose during labor, an intervention that is highly cost effective compared with other AIDS treatments. To follow up, HIVSA provides infant formula to HIV-positive new mothers, since breast-feeding can also transmit the HIV virus to newborns. Less tangibly, HIVSA provides support groups meeting in health clinics throughout Soweto to help HIV-positive mothers confront the stigma of HIV and their many other problems. (One hint of such problems: the signs all over the clinics announcing that no guns are allowed inside the clinics.) When the mothers visit the clinics, they get a free meal and nutritional supplements. Mothers and HIVSA staff work in community gardens attached to each clinic to provide food. HIVSA staff are almost all from the Soweto community and are HIV-positive.

Constance has problems that are overwhelming, but her most recent baby was born HIV-negative, thanks to nevirapine. HIVSA's free meals, nutritional supplements, and emotional support make her life a little more bearable.

If only all the West's efforts at fighting AIDS were so constructive at giving the poor victims what they want and need. The West largely ignored AIDS when it was building up to a huge humanitarian crisis, only to focus now on an expensive attempt at treatment that neglects the prevention so critical to stop the disaster from getting even worse.

SNAPSHOT: PROSTITUTES FOR PREVENTION

PROSTITUTES IN SONAGACHI, the red-light district of Calcutta, India, form a world unto themselves. Social norms about female sexual behavior in India are such that prostitution carries an even larger stigma in India than elsewhere. Cut off from the wider world, prostitutes have their own subculture, with an elite of madams and pimps. As in any subculture, its members strive for status. Prostitutes who aspire to greater status attain it most commonly by attracting long-term clients.

Many well-intentioned bureaucrats have tried to help the prostitutes by "rescuing" them and taking them to shelters to be trained in another profession, such as tailoring. However, sex work pays a lot better than tailoring, and former prostitutes face harassment and discrimination in the outside world. Hence, most "rescued" women returned to prostitution. But the advent of the AIDS epidemic in India and the well-known role of prostitutes in spreading AIDS caused increased concern about these failures.

Dr. Smarajit Jana, head of the All India Institute of Hygiene and Public Health, had another idea in 1992. He and his team would learn the subculture of the prostitutes and work with it to fight AIDS. They formed a mutually respectful relationship with the madams, pimps, prostitutes and clients. They noted the class system within Sonagachi. By trial and error, and with feedback from the prostitutes, Dr. Jana and his team hit upon a strategy for fighting AIDS. The strategy was awfully simple in retrospect: they trained a group of twelve prostitutes to educate their fellow workers about the dangers of AIDS and the need to use condoms. The peer educators wore green medical coats when they were engaged in their public health work, and they attained greater status in Sonagachi. Condom use in Sonagachi increased dramatically. By 1999, HIV incidence in Sonagachi was only 6 percent, compared with 50 percent in other red-light districts in India.

The project had other, unexpected consequences. The increased confidence of the peer educators and the media attention on the success of prevention efforts led the community to aspire to greater things. The prostitutes formed a union to campaign for legalization of prostitution and a reduction in police harassment, and to organize festivals and health fairs. Dr. Jana's approach based on feedback from the intended beneficiaries succeeded when so many other AIDS prevention programs had failed.