"How indeed?" asks Young. "This is a very real problem. We're not in a position to say to the affected governments, 'You ought to treat the mothers.'" But if the governments feel the mothers should be treated, Glaxo should provide pricing consistent with the current reductions. That would involve indefinite treatment with triple-combination therapy and protease inhibitors, which would be "pretty ambitious," says Young. "But if the parties participating feel that the mothers deserve to be treated in their own right, we don't want to be left as the solitary impediment because we're charging western prices."

Research like Shaffer's has given rise to controversy over the ethics of placebos, which has, in turn, generated research into the efficacy of placebo vs. equivalency trials. James G Kahn, an associate professor with the University of California San Francisco (UCSF) Institute for Health Policy Studies and the AIDS Research Institute, compared the accuracy of data collected through placebo-controlled and equivalency trials of short-course AZT therapy in Africa. "I didn't do an ethical analysis," says Kahn, "but part of the ethical debate is that we could just do equivalence trials. For a variety of reasons, I concluded that they wouldn't work." Those reasons include problems with extrapolating results from studies of American women to an African population where immune status and breast-feeding practices, among other things, differ significantly.

While western ethicists argue against different standards of research and care in rich and poor nations, Joseph Saba, a clinical research specialist, says using placebos is a matter of pragmatics. "There are already multiple standards," he says. "We're aiming for a single one." That requires rapid accumulation of accurate, clear-cut data within the real context of the country. For example, only 20% of Ugandan women seek prenatal care prior to 34 weeks gestation. Therefore, equivalence trials extrapolated from ACTG 076, which starts as early as 14 weeks, only apply to 20% of the Ugandan population. "What about the other 80%?" asks Saba.

"Now we've dropped the placebo because the regimen is workable," he says. "We have a gold standard. That doesn't mean we have two standards. If a woman comes to us before week 36, we'll give her treatment. But now we're also able to provide treatment to women who come at week 36."

Placebo also provides hard data for donors, says Saba. "You can't go to donors and ask for CHF30 million when you only have vague data. What would they say? Already when we have clear data, we have to fight to get the money. You can't make policy with wishy-washy data."

A similarly pragmatic approach guided Saba and Kahn's research with Elliot Marseille, a doctor of public health at UCSF, on the cost effectiveness of short-course therapy in Tanzania and Thailand. It's research that's bound to make many people uncomfortable. Basically, it gives those who allocate resources a tool with which to perform economic triage, a monetary scale that weighs the cost of intervention against the fiscal value of years of life saved. (For an explanation of their analytical method, see box above.)

"We haven't chosen this epidemic and we're not happy with it," says Saba. "But maybe AIDS will break ground for some creative solutions to distribution of, at least, health-care resources," he says. Thirty million people worldwide need treatment, while millions more can benefit from prevention. But over the last five years, while the epidemic has raged in the South, spending on global communication has increased six-fold and health budgets have increased by zero.

Explaining the motivation for much of the controversial thinking taking place in the developing world today, Saba says, "I truly think it's time to look outside the box."

Testing + counselling + treatment = lives

by Lynne Melcombe

Marseille, Kahn, and Saba's research into the cost effectiveness of short-course AZT therapy is an example of the harsh pragmatics driving decision making around the world and sparking ethical debate in the North. Their analysis involves calculating the cost of intervention, which includes counselling and testing (C&T) plus treatment, and subtracting the life-time medical costs averted for infants in whom HIV infection is avoided.

For example, says Marseille, for every 100 Tanzanian women who go to a clinic for C&T, 15 are HIV positive. Nine of those will complete the C&T, of which six or seven will agree to AZT therapy and infection will be averted in three or four infants.

Consequently, the cost of providing C&T to 100 women in Tanzania, at CHF6 each, will be added to the CHF60 cost of providing AZT to each of six or seven women. These numbers are then compared with years of life saved and their monetary value.

"This kind of economic appraisal of health benefits makes a lot of people uncomfortable," says Marseille. "You can take issue both with the philosophical underpinnings and the way they're used." But it provides a common metric for comparing otherwise different types of programmes such as immunisation and perinatal intervention, and comparing the costs of similar programs in different areas.

It may seem crazy, says Marseille, but it gives those who provide and allocate resources a basis for determining how much money spent on which programmes in which areas will save the most lives and limit the damage of one of history's worst epidemics.

Thousands of children throughout Asia are born infected with HIV due to lack of adequate treatment.

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