The research program proposed by De Cock et al. puts a lot of emphasis on treatment and prophylaxis studies of opportunistic infections. We wonder whether the results of these studies will lead to a major improvement in the care of patients with HIV infection in developing countries. We would like to propose other research priorities. What is urgently needed is to know how care is organized, what the shortcomings are, and how these shortcomings can be overcome in the most cost-effective way with the available knowledge. Above all, we have to make an assessment of the needs of all persons with HIV infection, not only those who are terminally ill, as proposed by the authors.

Fighting against discrimination, trying to improve socioeconomic conditions, and improving general health care services may be what is most needed to improve the quality of life of persons with HIV infection. □

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3. *De Cock et al. Respond*

We appreciate the concerns raised by Dr Biggar about the difficult choices faced in providing an effective response to the human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) epidemic in Africa and the rest of the developing world.[1] Our point was never to suggest that the already limited funds for prevention should be diverted to provide care and treatment for persons with HIV infection. Rather, we argue that care and prevention are linked, that a complete response to the epidemic should also address the issue of care, and that without a rational response to the requirements for care funds risk being spent inappropriately.

Tuberculosis and sexually transmitted diseases, conditions closely associated with HIV infection in Africa, are examples of diseases that require treatment for their control and prevention. Both have been greatly neglected by international donors, perhaps in part because of aversion on the part of such agencies to financing the procurement of drugs. The developing world already spends about $340 million annually on the care of patients with HIV disease.[2] No matter what experts like Dr Biggar say, AIDS patients will continue to present to the health care system and ministries of health in developing countries will continue to grapple with the issue of how best to care for them. It is imperative that funds for AIDS care be spent in as effective a way as possible, and this is unlikely to happen without the kind of research that we outlined.

We agree with Drs Biggar, Foster, and Colebunders et al. that the use of antiretroviral drugs in Africa is inappropriate at the present time, especially because of their limited efficacy and great cost, and our article did not argue for their widespread use. Our purpose in discussing antiviral drugs was to highlight the needs of patients in resource-poor areas; the development of affordable and effective antiviral drugs should be a priority. The Global Programme on AIDS has already considered the possibility of studies incorporating zidovudine and other agents for the reduction of perinatal transmission of HIV. If truly effective therapies for AIDS were developed—as are available for tuberculosis, for example—it would simply be unacceptable to limit their use to industrialized countries for reasons of price, any more than an effective AIDS vaccine could remain out of range for Africa.

Dr Colebunders and colleagues make many valid points with which we agree. Certainly, maternal mortality is a hidden and neglected epidemic; equally, much more needs to be done in making optimal use of what is already available and in fighting discrimination. However, patients require care and treatment, and we need to define what is a minimum acceptable standard of care for HIV disease in a resource-poor environment.

Dr Biggar's caution about preventive therapy for tuberculosis is well taken, but it cannot be used as a justification to do nothing. Overall, the tone of Dr Biggar's editorial is one of acceptance of the status quo. We share the views of the references he quotes[2,3] that change is needed, above all an increase in funding for AIDS prevention and control. □

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Increasing the Effectiveness of HIV Counseling

Otten et al.[1] raise serious concerns about the impact of human immunodeficiency virus (HIV) counseling and testing among sexually transmitted disease clients. Lack of behavioral change subsequent to HIV counseling and testing (or increased risk behavior among seronegatives) warrants reassessment of HIV counseling and testing procedures. The apparent ineffectiveness of counseling, however, may be peculiar to this clinic's stated procedures.

The clinic's protocol was geared toward high-volume HIV testing among their sexually transmitted disease clients, 45% of whom were tested during the study period. Such a protocol does not allow for comprehensive, effective pre- and posttest counseling. A 5-minute pretest counseling session was used to (1) assess knowledge of HIV, (2) assess and discuss risk for HIV infection, (3) provide risk reduction education, and (4) offer testing. Five minutes is too short a time to accomplish all these objectives, and full information cannot be effectively conveyed or integrated. Severely abbreviated messages may serve to confuse the client. The data from Otten et al.'s study suggest that a negative HIV test may unintentionally serve to validate an individual's prior risk behaviors.