Study finds cutbacks in foreign aid for HIV treatment would cause great harm

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Credit: Yale University

Proposed reductions in U.S. foreign aid would have a devastating impact on HIV treatment and prevention programs in countries receiving such aid, an international team of investigators reports. In their paper published online in *Annals of Internal Medicine*, the team led by researchers at Massachusetts General Hospital (MGH) and the Yale School of Public Health describes how a 33 percent cutback in funds

earmarked for HIV/AIDS prevention, treatment and research in recent budget proposals would only save $900 per year of life lost in the countries of South Africa and Côte d'Ivoire.

"This study is the first to document the health and economic returns of a reduced global investment in HIV prevention and care," said lead author Rochelle P. Walensky, M.D., of the MGH Division of Infectious Disease. "Over the past decade and a half, we've spent considerable money to save lives in these and other African nations. Would the relatively small savings realized by currently proposed budget reductions be worth these large humanitarian costs?"

She and her colleagues note that, since the late 1990s, global HIV prevention and treatment initiatives in resource-limited settings have enjoyed robust support and remarkable success. But recently funding has plateaued, suggesting both donor fatigue and mounting political resistance to continuing the scale-up of these programs.

In order to project the impact of proposed cutbacks to U.S.-funded programs in South Africa, which has the greatest prevalence of HIV infection of any country, and the west African nation of Côte d'Ivoire, which has a different kind of epidemic and a different level of foreign aid dependency, the researchers used a widely-published mathematical model along with epidemiologic and cost data from each country to project the outcomes of potential programmatic responses. These include scaling back HIV screening activities, restricting access to antiretroviral therapies to only the sickest patients, eliminating backup treatment strategies for patients who do not respond to initial therapies, minimizing laboratory monitoring of diagnosed patients and decreasing efforts to retain patients in care. Among their considerations were how much money could be saved by each strategy, how many new infections and deaths would occur, and how many additional years of life would be lost.

The results revealed that the savings are likely to be small and transient. Existing commitments to patients already receiving care for HIV infection would restrict overall saving to no more than 30 percent. Over time, those saving would dry up, as the increase in HIV transmissions would lead to accumulating costs for the care of those patients. In contrast, the epidemiological consequences would be large and lasting. In South Africa alone, cutbacks could result in more than 500,000 additional cases of HIV and more than 1.6 million more deaths over the next 10 years.

The researchers are quick to caution that they are neither endorsing any of these painful choices nor excusing the political decisions that may make them necessary, said senior author A. David Paltiel, Ph.D., professor at the Yale School of Public Health. "Our aim is to confront donor nations with the clinical and economic consequences of any decision to substantially cut HIV program funding and to help recipient nations respond in the least harmful ways possible to the actions of countries in the developed world," he said.

Study co-author Linda-Gail Bekker, M.D., Ph.D., of the Desmond Tutu HIV Centre, University of Cape Town, South Africa, and current president of the International AIDS Society, said that "whether the yardstick is mortality, life-expectancy or new transmissions, these reductions would almost certainly produce proportionally greater harm than savings—do more human harm than economic good."

In Côte d'Ivoire, HIV-related deaths could be as much as 35 percent higher if the cutbacks were implemented. Co-author Xavier Anglaret, M.D., Ph.D.—University of Bordeaux, INSERM and PAC-CI Programme, Côte d'Ivoire – says, "Given the extraordinary investments and progress made to date, now is the time to redouble our efforts, not to cut back and witness the reversal of hard-earned successes."

The study is also the first to consider how recipient nations might tailor their response to impending cutbacks. In South Africa, the researchers found that, for any given level of budget cutting, policies that delay the presentation of the healthiest patients to care would do the least harm in terms of deaths, years of life lost and new HIV transmissions. In Côte d'Ivoire, the optimal policy would be to reduce investments in patient retention.

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