

# The microeconomic impact of interventions against HIV/AIDS, tuberculosis and malaria

© Jonathan Ernst / World Bank

## KEY FINDINGS

- While the majority of interventions against HIV/AIDS, tuberculosis, and malaria had positive short-term effects, these were frequently not translated into long-term sustainable results
- Cash transfers may have the potential of reducing HIV transmissions but the effect is so far insignificant.
- Increased access to HIV/AIDS treatment and nutrition results in significant improvements in employment and productivity
- While microcredit interventions have a positive effect on household income of patients, access to these loans among individuals who are very poor or who have bad credit histories, and who are usually the most affected by these diseases, continues to be limited. Out-of-pocket spending on transportation, cost of diagnosis, and care continue to be catastrophic among families affected by these diseases even when access to treatment itself is facilitated.

HIV/AIDS, tuberculosis (TB) and malaria remain the leading causes of morbidity and mortality, with 99 per cent of people who die from these diseases living in developing countries. However, besides the health burden, these diseases also have negative macroeconomic effects due to decreased economic growth, primarily in sub-Saharan Africa. At the micro level these effects are far more relevant for vulnerable households, which are evident as losses in wages and income; absenteeism from education and work; cost of treatment; and other expenses involved with care and transportation to health centres. What interventions have been most successful in mitigating the microeconomic effects of these diseases?

## Interventions and their impact on individuals

Attempts by donors and governments to mitigate and prevent the negative effects of these diseases can be broadly divided into three separate types of interventions:

### 1. Providing financial support

Increasing financial resources allow patients to access more treatment and care, as well as support their families from the sometimes catastrophic costs of the disease. These interventions take the form of cash transfer programmes and microfinance loans to help people remain in work/education, and comply with treatment or access preventive measures.

While microcredit interventions often have a positive effect on household income of patients, access to these loans among individuals who are very poor or who have bad credit histories—who are often the most affected by these diseases—continues to be limited. For example, in one study in Peru of interventions against TB, less than a quarter of households were able to obtain microcredit.

Cash transfers have the potential to reduce transmission of HIV. However, one study in Malawi that provided financial incentives to encourage young women to stay in school (associated with lower HIV risk) did not find a significant change.



An HIV/AIDS patient lies in bed at the Bairo Pite clinic for comprehensive community health service in Dili, Timor-Leste. Photo: © UN Photo/Martine Perret

## 2. Promoting positive behavioural changes

Training and providing incentives can encourage positive behavioural changes. Such interventions are usually school-based initiatives for children, or training focused on adults.

Behavioural incentives appear to have an impact in the short term but often do not translate into long-term positive practices. For example, financial incentives to own insecticide-treated nets to prevent malaria infections in Madagascar increased net use by 24 per cent in the short term. However after six months net ownership and use was lower among the intervention group than the control group



Families receiving malaria bed nets. Ghana.  
Photo: © Arne Hoel / The World Bank

## 3. Improving access to treatment

These interventions include those which provide free access to care or treatment and others that increase access to resources such as transportation and nutritional programmes.

Interestingly, increased access to treatment and nutrition, especially among individuals affected by HIV/AIDS, results in significant improvements in employment and productivity. However, even when the treatment itself is free-of-charge other spending on things such transportation can lead to

the cost of diagnosis to continue to be significant. This is a particular problem among patients with TB. For example in Pakistan, one study found that a TB treatment programme, even when provided free to patients, required four hours of time for transportation and waiting. Similarly in Malawi, where TB services are also free, the costs of getting a diagnosis are equivalent to 41 days of a typical patient's average income, and more than double the monthly income of the poor. To be effective, funding for treatment must be coupled with support measures to avoid secondary costs associated with seeking treatment, such as transportation.

Mixed interventions that include a behaviour change component—as well as those that provide microfinance loans and increase provision of treatment for these diseases, and help to cover the costs associated with accessing such treatment—show the most promise. However policy makers should bear in mind that, to be effective these must be coupled with policies which ensure equitable

access to funding, and must be based on long-term plans to foster adherence to treatment and uptake of preventive measures.

### IMPLICATIONS

- Donors should couple initiatives that provide greater access to treatment with support measures to avoid secondary costs associated with seeking treatment.
- Interventions which combine measures intended to encourage behavioural changes with financial and medical assistance are the most effective.

---

*This Research Brief is based on a draft WIDER Working Paper 'Policy Interventions against HIV/AIDS, Tuberculosis and Malaria in Developing Countries: What are their Micro-Economic effects?' by Ana B. Amaya and Miguel Niño-Zarazúa.*