

Rewarding safe sex

SUBMITTED BY DAMIEN DE WALQUE ON MON, 03/05/2012 - 10:48

Prevention strategies have had limited impact on the trajectory of the HIV/AIDS epidemic. New, innovative approaches to behavioral change are needed to stem the epidemic.

In a joint effort with many colleagues, and in collaboration with the Ifakara Health Institute in Tanzania and, the University of California at Berkeley, we launched a study with the acronym RESPECT ("Rewarding STI Prevention and Control in Tanzania").

We started with an observation: Conditional cash transfers (CCTs) have been used successfully to promote activities that are beneficial to the participants such as school attendance and health check-ups for children. The Tanzanian experiment asks whether CCTs can be used to prevent people from engaging in activities that are harmful to themselves and others, such as unsafe sex. This is a controversial idea. Shouldn't people be trusted to do what is good for them, without being promised financial incentives? Do African women have enough control over their sexual life so that they could respond to those incentives?

The results from the study have recently been published¹. The findings suggest that financial incentives – participants receive a cash payment if they remained negative for a set of curable sexually transmitted infections (STIs) – could be an effective prevention tool for STIs and possibly HIV. In rural Tanzania, among study participants who were randomly selected to be eligible for a \$20 payment every 4 months if they tested negative for a set of curable STIs, researchers saw a 27% reduction in the incidence of those STIs (adjusted results) after one year.

The RESPECT study is a randomized controlled trial testing the hypothesis that a system of rapid feedback and positive reinforcement using cash as the primary incentive can be used to reduce risky sexual activity among young people, male and female, who are at high risk of HIV infection. The study enrolled 2,399 participants in 10 villages in the Kilombero/Ulanga district of south-west Tanzania, located 100 kilometers south of the major highway linking Dar Es Salaam, with Zambia and Malawi. It had three separate arms – a control arm and two treatment arms (low-value treatment and high-value treatment). Study participants were randomly allocated across the three study arms. All participants have been monitored on a regular basis (every 4 months over a 12 month period) for the presence of common sexually-transmitted infections (STIs) that are transmitted through unprotected sexual contact and therefore serve as a proxy for risky sexual behavior and vulnerability to HIV infection. A small payment was provided to all participants (regardless of arm assignment) to minimize attrition from the study. Anyone testing positive for an STI (again, regardless of arm) received free treatment and counseling. Individual pre-test and post-test counseling was provided to study enrollees at each testing interval, and monthly group counseling sessions were also made available to all study participants in all villages.

The primary outcome for evaluating impact is a set of sexually-transmitted infections (STIs) that are prevalent within this population and have been incontrovertibly linked to risky sexual activity. These are: chlamydia, gonorrhea, trichomonas, mycoplasma genitalium, and syphilis. Each of these STIs is curable. This is a critical point, since enrollees who test positive for an STI could continue to participate in the study after they had been treated and cured of the infection. Thus, learning was encouraged through positive reinforcement, and mistakes

could be corrected and overcome. For both ethical and practical reasons, the cash transfers were not tied to HIV status, and HIV acquisition did not result in being dropped from any arm of the study.

The treatment arm received conditional cash transfers (CCTs) that depended on negative results of periodic screenings for incident sexually transmitted. The treatment arm was further divided into two sub-groups – one receiving a “high value” CCT payment of up to \$60 over the course of the study (\$20 payments every four months) and the other receiving a lower value payment of up to \$30 (\$10 payments every four months). These amounts represent a significant proportion of household income in a country where GDP per capita was \$440 in 2008, and particularly among our study participants who had mean individual annual earnings of approximately \$250. A comparison between the impact of the intervention in the high-value cash transfer arm to that in the low-value cash transfer arm allows us to better understand at which threshold CCT can be effective as an HIV/STI prevention tool. While the results showed a significant reduction in STI incidence in the group that was eligible for the \$20 quarterly payments, no such reduction was found for the group receiving the \$10 quarterly payments. Further, the impact of the CCTs did not differ between males and females.

While the results are important in showing that financial incentives can be a useful tool in preventing HIV/STI transmission, we are still at an early stage. This approach would need to be replicated elsewhere and implemented on a larger scale before it could be concluded that such conditional cash transfer programs (for which administrative and laboratory capacity requirements are significant) offer an efficient, scalable and sustainable HIV prevention strategy. The extraordinarily high social and economic cost of the current HIV/AIDS crisis suggests that prevention can be far cheaper than treatment. We must continue to search for innovative and effective prevention approaches.

1. de Walque D, Dow WH, Nathan R, et al. Incentivising safe sex: a randomised trial of conditional cash transfers for HIV and sexually transmitted infection prevention in rural Tanzania. *BMJ Open* 2012;2:e000747. doi:10.1136/bmjopen-2011-000747