Community-based HIV prevention can boost testing, help reduce new infections

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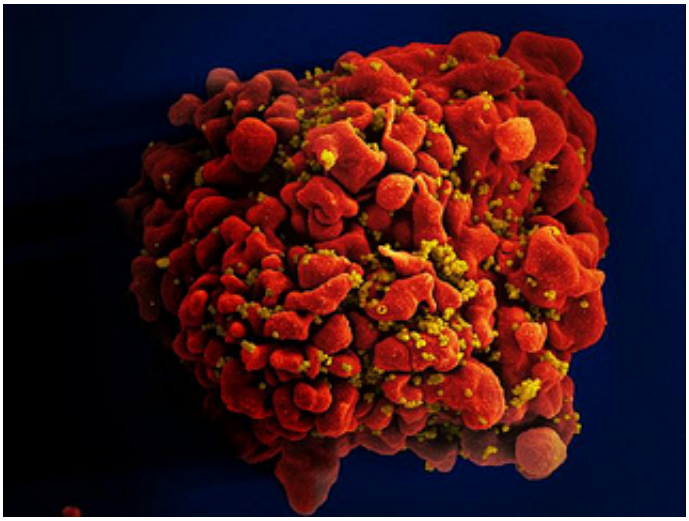

Scanning electron micrograph of an HIV-infected H9 T cell. Credit: NIAID

(Medical Xpress)—Communities in Africa and Thailand that worked together on HIV-prevention efforts saw not only a rise in HIV screening but a drop in new infections, according to a new study in the peer-reviewed journal *The Lancet Global Health.*

The U.S. National Institute of Mental Health's Project Accept—a trial conducted by the HIV Prevention Trials Network to test a combination of social, behavioral and structural HIV-prevention interventions—demonstrated that a series of community efforts boosted the number of people tested for HIV and resulted in a 14 percent

reduction in new HIV infections, compared with control communities.

Much of the research was conducted in sub-Saharan Africa, which has particularly high rates of HIV. The researchers were interested not just in how the clinical trial participants' behavior changed, but also in how these efforts affected the community as a whole, said Thomas Coates, Project Accept's overall principal investigator and director of UCLA's Center for World Health.

"The study clearly demonstrates that high rates of testing can be achieved by going into communities and that this strategy can result in increased HIV detection, which makes referral to care possible," said Coates, who also is an associate director of the UCLA AIDS Institute. "This has major public health benefit implications—not only suggesting how to link infected individuals to care, but also encouraging testing in entire communities and therefore also reducing further HIV transmission."

These findings were previously presented at the 2013 Conference on Retroviruses and Opportunistic Infections in Atlanta.

The trial was conducted in 34 communities in South Africa, Tanzania and Zimbabwe and in 14 communities in Thailand. It consisted of mobile testing for HIV, post-test support services and real-time feedback.

The aim of the intervention was fourfold: to increase access to voluntary counseling and testing, as well as post-test services; to change community attitudes about HIV awareness and particularly about the benefit of knowing one's HIV status; to remove barriers to knowing one's HIV status; and to increase the safety of testing and minimize the potential negative consequences of testing by providing various forms of support.

Communities were matched into pairs based on sociodemographic, cultural and infrastructure characteristics, with one community randomly assigned to the intervention and one serving as a control for comparison. (The randomization was performed centrally, and the assignment was not blinded, due to the nature of the intervention.)

Among the findings:

- Rates of testing were 45 percent higher in intervention communities than in control communities, especially among men and young people.
- Individuals in intervention communities, particularly those infected with HIV, reported a lower number of sexual partners and were less likely to have multiple partners concurrently. This was particularly true among HIV-positive men, who reported 18 percent fewer sexual partners overall and 29 percent fewer concurrent sexual partners than those in control communities.
- HIV infections were diagnosed at a higher rate in intervention communities.
- Social acceptance of the importance of testing was greater in intervention communities.
- Modest reductions in HIV incidence occurred in the intervention communities compared with the control communities, particularly among women in the 25-to-32 age range.

Study participants who learned they were infected with HIV were directed to the study's post-test services, which included counseling and referrals to health and social services assistance. Those who tested negative were also directed to post-test services for further counseling, referrals and support—to help ensure they remained uninfected. Local health authorities were thoroughly briefed on the study findings and encouraged to continue the efforts.

Dr. Wafaa El-Sadr, principal investigator of the HIV Prevention Trials Network, under whose auspices the trial was conducted, said the findings reinforced that people need to be made aware of their HIV status through testing in order to receive the necessary care and treatment and to learn how to prevent infection.

"These study findings provide clear and compelling evidence that the provision of mobile services, combined with appropriate support activities, is a strategy that can increase testing rates and also reduce HIV incidence," she said.

More information: "Effect of community-based voluntary counselling and testing on HIV incidence and social and behavioural outcomes" (NIMH Project Accept; HPTN 043): a cluster-randomised trial. Prof Thomas J Coates PhD,Michal Kulich PhD,Prof David D Celentano ScD,Carla E Zelaya PhD,Prof Suwat Chariyalertsak MD,Alfred Chingono MSc,Glenda Gray MBBCH,Jessie K K Mbwambo MD,Prof Stephen F Morin PhD,Prof Linda Richter PhD,Michael Sweat PhD,Heidi van Rooyen PhD,Nuala McGrath ScD,Agnès Fiamma MIPH,Oliver Laeyendecker PhD,Estelle Piwowar-Manning BS,Greg Szekeres BA,Deborah Donnell PhD,Prof Susan H Eshleman MD,the NIMH Project Accept (HPTN 043) study team . *The Lancet Global Health* - 9 April 2014. DOI: 10.1016/S2214-109X(14)70032-4

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