

A social network-based intervention increases HIV self-testing and linkage to health facilities among fishermen in Kenya

C.S. Camlin¹, L. Sheira², Z.A. Kwenya³, E.D. Charlebois⁴, K. Agot⁵, J. Moody⁶, B. Ayieko⁵, S.A. Gutin⁷, A. Ochung⁵, P. Olugo⁵, J. Lewis-Kulzer¹, H. Nishimura⁴, M. Gandhi⁴, E.A. Bukusi³, H. Thirumurthy⁸

¹University of California, San Francisco, Obstetrics, Gynecology & Reproductive Sciences, San Francisco, United States, ²University of California, San Francisco Epidemiology & Biostatistics, San Francisco, United States, ³Kenya Medical Research Institute, Nairobi, Kenya, ⁴University of California, San Francisco, Medicine, San Francisco, United States, ⁵Impact Research & Development Organization, Kisumu, Kenya, ⁶Duke University, Durham, United States, ⁷University of California, San Francisco, Community Health Systems, San Francisco, United States, ⁸University of Pennsylvania, Philadelphia, United States

General

Category: C6: Population-specific interventions for HIV prevention

Country of research: Kenya

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Abstract Text

Background: Engaging men in HIV prevention and treatment is crucial to ending the AIDS epidemic in sub-Saharan Africa, but many men are unaware of their serostatus and highly-mobile men like Lake Victoria fishermen have particularly low uptake of prevention and treatment. We conducted a cluster randomized trial to determine if an HIV status-neutral, social network-based approach could improve testing and linkage outcomes among fishermen.

Methods: The *Owete* study (NCT04772469) mapped the male social networks of fishermen in three beach communities in Siaya, Kenya, and identified distinct social networks ("clusters") with a highly-connected, network-central man ("promoter") in each network. Clusters were randomized to an intervention group in which promoters were trained and offered (a) multiple HIV self-tests (HIVST) to distribute to cluster members, and (b) transport vouchers (US\$4) to encourage cluster members to link to HIV treatment or pre-exposure prophylaxis (PrEP). In control clusters, promoters received HIV information and referral vouchers for free self-tests in nearby clinics, and encouraged to offer them to cluster members. We compared self-reported HIV testing in past three months among participants in intervention and control clusters at three-month follow-up visit, using a cluster-adjusted two-sample test of proportions. Participants with missing data were coded as failure unless known to be living with HIV (per health facility records). Secondary analyses examined testing via any modality (counselor or HIVST) and linkage to facility.

Results: A total of 934 men in 156 social network clusters were mapped. Of these, 733 completed baseline and 666 follow-up surveys, with 14 deaths due to study-unrelated causes. Participants' average age was 37 years; 78% were married, 22% in polygynous relationships. Self-reported HIV testing via HIVST at three months was significantly higher in intervention clusters (60% vs. 10%, $p < 0.001$, intent-to-treat). HIV testing via any modality was also significantly higher in intervention clusters (47% vs. 27%, $p < 0.001$). Following testing, linkage to facility for HIV treatment or PrEP was significantly higher in intervention clusters (70% vs. 17%, $p < 0.001$).

Conclusions: A social network-based, status-neutral intervention in Kenya improved men's HIV testing and linkage outcomes and is a promising way to engage hard-to-reach populations of men in prevention or treatment.

Ethical Research Declaration

Ethical research declaration: Yes

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Please specify why this is a late breaker abstract The primary outcome findings from NCT04772469 that we present in this abstract were not available by the regular submission deadline; follow up data collection was still underway through March 2023. The data we present here were unblinded and analyzed in April 2023.

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