Engaging social networks to increase HIV case finding among key populations in Zambia

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BACKGROUND

As gaps on undiagnosed, HIV-positive individuals begin to close in the global HIV response, it is becoming increasingly important for health systems to develop deliberate and focused strategies for reaching those untested. Key population members often fall into this category, as a result of social exclusion from health services.¹ UNAIDS estimates that 62% of all new adult HIV infections are among KP members and their sexual partners globally,² demonstrating where the focus of epidemic control must be centered.

Utilizing social networks to reach KP groups can be an effective method for disseminating health education and improving HIV testing uptake. The social network strategy (SNS) assumes that individuals within the same social circle share "similar norms, attitudes, and HIV risk behavior"³ making it a high-yielding intervention for HIV case finding. Individuals who may have previously been unreached are now accessible through trusted

channels.³ Recent research has shown that the HIV positivity rate among KP individuals tested through social networks can be significantly higher than traditional voluntary testing and counseling.4

In Zambia, the USAID Open Doors project (ODP), led by FHI 360, uses SNS to reach high-risk, untested female sex workers, men who have sex with men, and transgender people. Since 2016 the project has provided nondiscriminatory access to comprehensive HIV prevention, care, and treatment services to KPs in eight high-prevalence districts. However, after observing that the project's initial HIV case-finding rate among KPs was lower than the national general population yield of 12% in the first year of implementation, SNS was introduced in 2017 to increase case finding, shifting focus from traditional HIV testing services at project wellness centers and mobile clinics. We share lessons from implementation in eight project sites for October 2017–September 2019.

LESSONS LEARNED

After implementation of SNS, project case finding increased (see Figure 2) from 13% in FY17 (FSWs=1,221 [16%]; MSM=117 [5.6%]; transgender people=30 [11%]) to 28% in FY19 (FSWs= 3,574 [32%]; MSM=774 [19%]; transgender people=119 [36%]). There was a significant increase in project yield in FY19 (M=1105.75, SD=370.3) compared to FY17 (M=342, SD=119.7), t(3)=-3.21, p < .05 whenmajority of HIV testing was untargeted through static or mobile outreach channels. By the end of FY19 the total SNS positivity contribution to project yield was 32%, and 2,115 (76%) coupons were returned from 2,799 distributed to clients across all sites (Table 1).

FIGURE 2. Case finding among KPs FY17–19

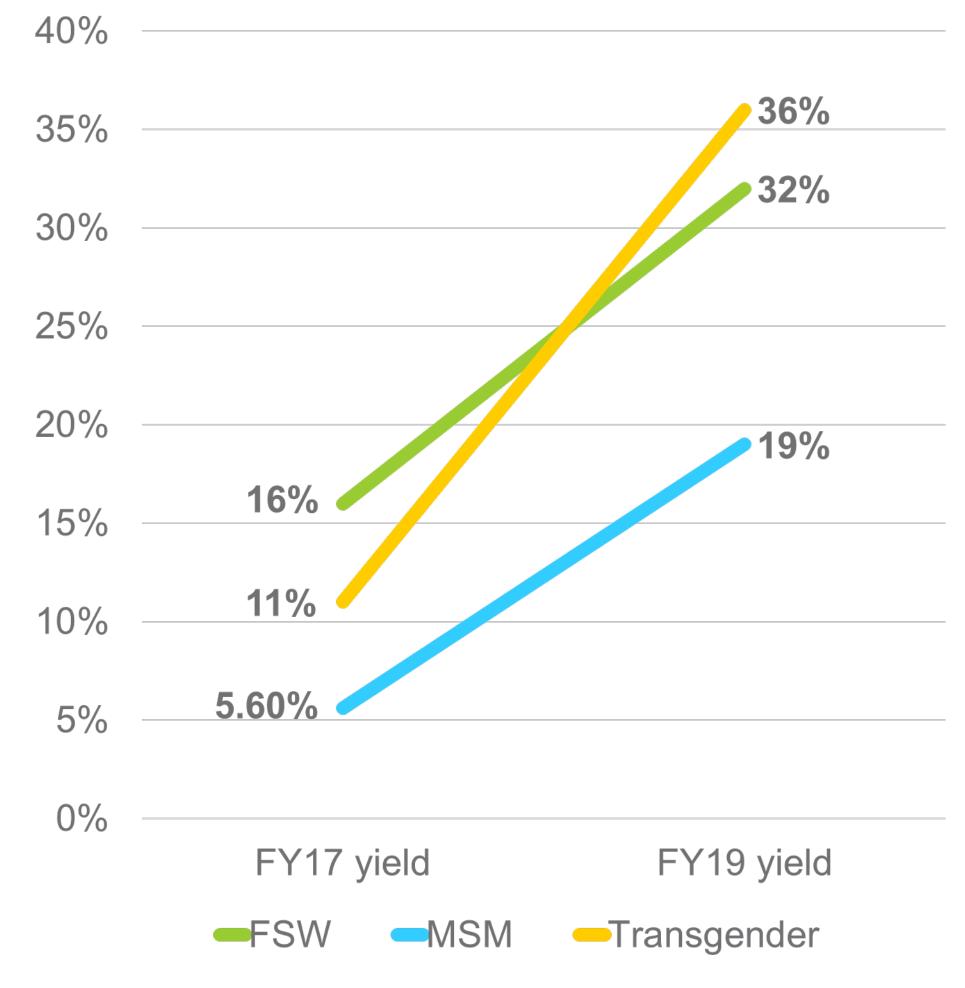


TABLE 1. Paired *t*-test comparing project yield before and after SNS implementation

Fiscal year	Project yield	Mean	Std. dev	Paired <i>t-</i> test		
				t value	df	Sig (two-tailed)
Oct 2016 – Sept 2017	13%	342	119.7	3	-3.21	0.05
Oct 2018 – Sept 2019	28%	1105.75	370.3			

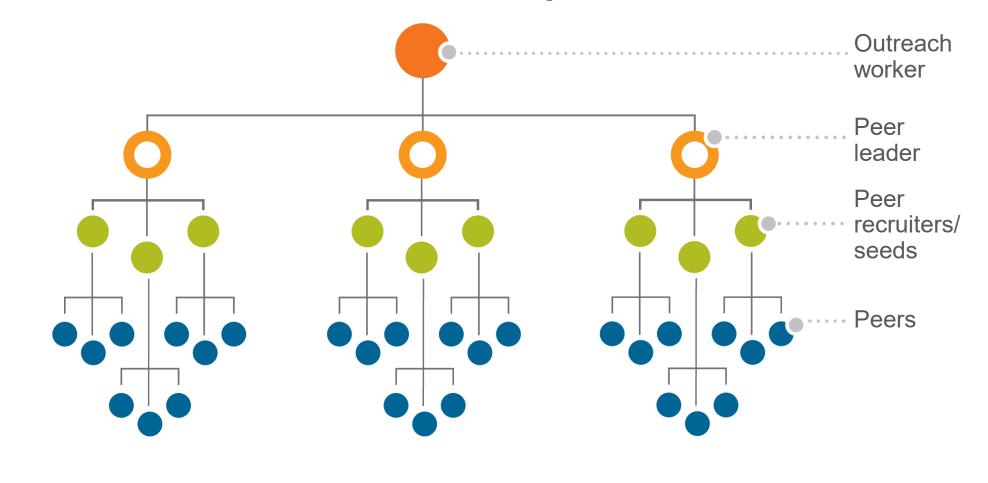
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DESCRIPTION

To implement SNS, ODP outreach workers identified 33 KP peer leaders who previously accessed services through the project, maintained a large KP social network, and could mobilize their peers. Peer leaders were trained to identify highrisk clients from their social networks who could act as "seeds" to distribute up to three referral coupons for HIV testing services to additional unreached clients. Seeds were categorized as high-risk based on an assessment tool gauging condom use, multiplicity of sexual partners, and sexually transmitted infection history among other risk factors. Each coupon included a unique identifier to track new incoming clients from the seed who distributed the coupon. Clients were able to redeem coupons individually at project wellness centers, mobile outreach sites, or in group settings at social network meetings. Peer leaders were asked to identify at least three new seeds to distribute coupons each month to consistently reach new networks. Figure 1 displays the snowball effect of reaching up to nine new clients each month through three seeds. Monetary incentives of K50 (\$3.50-\$5.00) were provided to seeds for every coupon returned to the wellness center. Again, the risk assessment tool was used to gauge clients' risk level and eligibility to receive a coupon for HIV testing.

FIGURE 1. Structure of implementation of SNS



CONCLUSIONS

The ODP implementation of SNS supports evidence that undiagnosed, hard-to-reach KP members can be identified through social networks. In this example, it was successful in increasing case finding among all KP groups, with yield doubling among FSWs, and more than tripling among MSM and transgender people. Leveraging trusted and knowledgeable social relationships to extend HIV services to hard-to-reach KP individuals is a strategy that should be adopted and scaled up to reach those hidden who may not otherwise seek HIV testing.

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