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Timeline

2018-2022

Study Type

Randomized Evaluation

Sample Size

2,206 HIV-negative female sex workers

STUDY SUMMARY

Can Cash Incentives Motivate Safer Sex Practices Among Female Sex Workers in Tanzania?



Sexually transmitted infections (STIs) such as HIV and syphilis can pose significant health risks for people who contract them and also create public health concerns if they spread. Safer sex can help to mitigate these risks, particularly for female sex workers who have a higher exposure to STIs. In Tanzania, researchers are evaluating whether cash incentives motivated female sex workers to practice safer sex with their clients and reduce their likelihood of contracting STIs.

Policy Issue

HIV risk remains a challenge in low- and middle-income countries. Females engaging in sex work are at extra high risk, especially when they face difficult economic conditions and have limited access to adequate health services. One meta-analysis found that female sex workers in developing countries have 14 times higher odds of being infected with HIV compared to the rest of the population. Policymakers have introduced various interventions to reduce STI and HIV risk, namely providing condoms at cheap prices, which are generally considered as cost-effective methods to keep sex workers and their clients healthy and safe from STI transmission. However, usage of condoms in sex work settings can vary, which can in turn make it difficult to effectively reduce STI and HIV infection rates for female sex workers.

Evidence from across low- and middle-income countries has shown that conditional economic incentives can stimulate individuals' participation in beneficial activities at a low cost like school enrollment and health check-ups. However, research is limited about the impact of cash incentives in HIV prevention contexts specifically.

This team's prior work in Tanzania suggests that cash incentives can be effective at incentivizing safer sex practices among the general population, and potentially among female sex workers. A previous randomized evaluation in Ifakara, Tanzania evaluated the effectiveness of cash incentives to practice safer sex as an HIV/STI prevention strategy, focusing on males and females aged 18-30 in the general population. The findings revealed beneficial impacts of cash in reducing STI incidence, particularly among poorer and rural households. A follow-on pilot intervention among female sex workers was also promising, but further study is needed.

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COUNTRY

Tanzania

PARTNER

Partners Action and Services for
people with AIDS Dar es Salaam
Archdiocese (PASADA)

PROGRAM AREAS

Health, Social Protection

TOPICS

Cash Transfers, HIV/AIDS, Incentives

TIMELINE

2018-2022

Can Cash Incentives Motivate Safer Sex Practices Among Female Sex Workers in Tanzania?

Abstract

Sexually transmitted infections (STIs) such as HIV and syphilis can pose significant health risks for people who contract them and also create public health concerns if they spread. Safer sex can help to mitigate these risks, particularly for female sex workers who have a higher exposure to STIs. In Tanzania, researchers are evaluating whether cash incentives motivated female sex workers to practice safer sex with their clients and reduce their likelihood of contracting STIs.

Policy Issue

HIV risk remains a challenge in low- and middle-income countries. Females engaging in sex work are at extra high risk, especially when they face difficult economic conditions and have limited access to adequate health services.^[1] One meta-analysis found that female sex workers in developing countries have 14 times higher odds of being infected with HIV compared to the rest of the population.^[2] Policymakers have introduced various interventions to reduce STI and HIV risk, namely providing condoms at cheap prices, which are generally considered as cost-effective methods to keep sex workers and their clients healthy and safe from STI transmission.^[3] However, usage of condoms in sex work settings can vary,^[4] which can in turn make it difficult to effectively reduce STI and HIV infection rates for female sex workers.

Evidence from across low- and middle-income countries has shown that conditional economic incentives can stimulate individuals' participation in beneficial activities at a low cost like school enrollment and health check ups.^[5] However, research is limited about the impact of cash incentives in HIV prevention contexts specifically.

This team's prior work in Tanzania suggests that cash incentives can be effective at incentivizing safer sex practices among the general population, and potentially among female sex workers..^[6] A previous randomized evaluation in Ifakara, Tanzania evaluated the effectiveness of cash incentives to practice safer sex as an HIV/STI prevention strategy, focusing on males and females aged 18-30 in the general population. The findings revealed beneficial impacts of cash in reducing STI incidence, particularly among poorer and rural households. A follow-on pilot intervention among female sex workers was also promising, but further study is needed.

Context of the Evaluation

Female sex workers in Tanzania have higher rates of HIV infection than other adult females, with an estimated HIV prevalence at nearly 27 percent.^[7] Much of the sex work activity occurs in the largest city, Dar Es Salaam. The prevalence of HIV among female sex workers there is estimated at 31.4 percent.^[8] The Tanzanian government has intensified efforts recently to provide pre-care and treatment services for sex workers while encouraging them to practice safer sex with their clients to reduce HIV and other STI risk.^[9] However, female sex workers in Dar es Salaam do not always practice safer sex with their clients, reporting that in instances when a condom isn't used with a client, it was largely because the client objected to using one or paid more in order not to use one.^[10]

Details of the Intervention

In Tanzania, researchers partnered with *Pastoral Activities and Services for people with AIDS Dar es Salaam Archdiocese (PASADA)* to measure whether cash incentives can motivate female sex workers to practice safer sex with clients and reduce their likelihood of contracting STIs.

This intervention takes place in Dar Es Salaam and is a follow-up to the Ifakara intervention to determine whether the observed positive impacts of cash incentives on reducing STI incidence could be replicated in a location where HIV prevalence was higher. Furthermore, because female sex workers in Dar Es Salaam have higher than normal rates of contracting STIs than females in the city's general population, and because of the risk of further spreading HIV and STIs to clients, researchers tailored the program to focus on this population.

To evaluate the impact of cash incentives on motivating safer sex practices and reducing STI incidence among female sex workers, researchers selected 2,206 HIV-negative female sex workers in Dar Es Salaam to participate in the intervention. All were screened for HIV and STIs at the outset and were offered free treatment if they tested positive for curable STIs. They also received pre- and post-HIV and STI counseling and counseling on safer sex practices and received bi-weekly text messages with reminders about the intervention. Half of the enrollees were randomly allocated to an intervention arm in which they were randomly invited to a random testing drawing. Each week over two years, ten sex workers were randomly invited to test for STIs. If they tested negative for all STIs, they received a cash award of 100,000 Tanzanian Shillings (USD \$45). If a test was positive, they did not receive an award but received free STI treatment. All continued to be eligible for future drawings.

The intervention was paused during the COVID-19 pandemic, and endline interviews were completed between June 2021 and January 2022.

Results and Policy Lessons

Research ongoing; results forthcoming.

Sources

[1] Moret, Whitney, *Economic Strengthening for Female Sex Workers: A Review of the Literature* (Durham: FHI 360), 29, date accessed 31 August 2022 https://www.fhi360.org/sites/default/files/media/documents/Economic_Strengthening_for_Female_Sex_Workers.pdf

[2] Baral S, Beyrer C, Muessig K, Poteat T, Wirtz AL, Decker MR, Sherman SG, Kerrigan D. Burden of HIV among female sex workers in low-income and middle-income countries: a systematic review and meta-analysis. *Lancet Infect Dis*. 2012 Jul;12(7):538-49. doi: 10.1016/S1473-3099(12)70066-X. Epub 2012 Mar 15. PMID: 22424777. <https://publichealth.jhu.edu/2012/baral-sex-workers>

[3] USAID. "Addressing Condom Supply and Demand in PEPFAR Countries." USAID. Accessed 16 August 2022. <https://www.usaid.gov/global-health/health-areas/hiv-and-aids/technical-areas/addressing-condom-supply-and-demand-pepfar>

[4] Andrews, Carin Hillerdal, Elisabeth Faxelid, Vanphanom Sychaerun, and Ketkesone Phrasisombath. "Determinants of consistent condom use among female sex workers in Savannakhet, Lao PDR." *BMC women's health* 15, no. 1 (2015): 1-8.

Gharehghani, Mohammad Ali Mohammadi, Seyed Fahim Irandoost, and Goli Soofizad. "Barriers to condom use among female sex workers in Tehran, Iran: a qualitative study." *International Journal of Women's Health* 12 (2020): 681.

Szwarcwald, Célia Landmann, Giseli Nogueira Damacena, Paulo Roberto Borges de Souza-Júnior, Mark Drew Crosland Guimarães, Wanessa da Silva de Almeida, Arthur Pate de Souza Ferreira, Orlando da Costa Ferreira-Júnior, and Inês Dourado. "Factors associated with HIV infection among female sex workers in Brazil." *Medicine* 97, no. 1 Suppl (2018).

[5] Andrade, Mônica Viegas, Flávia Chein, Laécia Rodrigues de Souza, and Jaume Puig-Junoy. "Income transfer policies and the impacts on the immunization of children: the Bolsa Família Program." *Cadernos de saude publica* 28 (2012): 1347-1358.

Van de Gaer, Dirk, Joost Vandenbossche, and José Luis Figueroa. "Children's health opportunities and project evaluation: Mexico's Oportunidades program." *the world bank economic review* 28, no. 2 (2014): 282-310.

[6] de Walque, Damien, William Dow, Rose Nathan et al.. "Incentivizing safe sex: a

randomized trial of conditional cash transfers for HIV and sexually transmitted infection prevention in rural Tanzania." *BMJ Open* 2(1): 1-10. 2012.

Cooper, Jan E., William H. Dow, Damien de Walque, Ann C. Keller, Sandra I. McCoy, Lia CH Fernald, Marianna P. Balampama et al. "Female sex workers use power over their day-to-day lives to meet the condition of a conditional cash transfer intervention to incentivize safe sex." *Social Science & Medicine* 181 (2017): 148-157.

Packel, Laura, Damien de Walque, Kevin Feeney, Marianna P. Balampama, Jan E. Cooper, Admirabilis Kalolella, Wendee Wechsberg, and William H Dow. "A Randomized Trial of Cash Incentives for Sexual Behavior Change among Female Sex Workers in Dar es Salaam." *Social Science & Medicine* 272 (2021): 111655.

[7] Mbita, Gaspar, Amasha Mwanamsangu, Marya Plotkin, Caterina Casalini, Amani Shao, Gissenge Lija, Dorica Boyee et al. "Consistent condom use and dual protection among female sex workers: surveillance findings from a large-scale, community-based combination HIV prevention program in Tanzania." *AIDS and Behavior* 24, no. 3 (2020): 802-811.

[8,10] Tanzania Ministry of Health and Social Welfare. HIV Behavioral and Biological Surveillance Survey Among Female Sex Workers in Dar-es-Salaam, 2010. National AIDS Control Programme, 2011.

[9] Faini, Diana, Patricia Munseri, Eric Sandstrom, Claudia Hanson, and Muhammad Bakari. "Awareness, Willingness and Use of HIV Pre-Exposure Prophylaxis Among Female Sex Workers Living in Dar-es-Salaam, Tanzania." *AIDS and Behavior* (2022): 1-9.

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