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Presented at the 2020 Conference on Retroviruses and Opportunistic Infections
Boston, Massachusetts 8-11 March 2020

TRANSACTIONAL SEX WITH OLDER PARTNERS HEIGHTENS HIV RISKS AMONG ADOLESCENT GIRLS AND YOUNG WOMEN IN TANZANIA

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BACKGROUND

EVIDENCE BEFORE THIS STUDY

More than a third of all new annual HIV infections in Tanzania are among adolescent girls and young women (AGYW) aged 15-24. HIV risks are not evenly distributed among young women, however, and AGYW who are marginalized—such as those who exchange sex for money or goods—remain most vulnerable to infection.

One hypothesis to explain this disparity is that for AGYW, transactional sexual relationships occur predominately with older or intergenerational male partners who are among the most likely to be living with HIV.

OBJECTIVES

We aimed to assess the extent to which transactional sex and intergenerational sex operate both independently and together to increase the burden of HIV among AGYW in Tanzania.

METHODS

DATA SOURCE AND MEASURES

Data were collected through the Sauti Project, a PEPFAR/USAID funded project which provided combination HIV prevention services to AGYW and key and vulnerable populations across 14 regions of Tanzania (2014-2020) (**Figure 1**).

Out-of-school AGYW who were accessing HIV-prevention services through Sauti—including HIV testing—completed a questionnaire to assess their vulnerability to HIV. AGYW who tested positive were linked to treatment as per Tanzanian national guidelines.



FIGURE 1. Districts implementing Sauti Project programming, 2019

ANALYSIS

We estimated adjusted prevalence ratios (PR) and 95% confidence intervals (CI) for the associations of transactional sex (any sex in exchange for money, services or gifts) and intergenerational sex (reporting a sexual partner ≥10 years older) with prevalent HIV infection.

We assessed potential synergism between both exposures by comparing their observed and expected joint associations using additive and multiplicative criteria.

INTERGENERATIONAL SEX MODIFIES THE RELATIONSHIP BETWEEN TRANSACTIONAL SEX AND HIV AMONG ADOLESCENT GIRLS AND YOUNG WOMEN IN TANZANIA

CONCLUSIONS

Transactional sex was not strongly associated with HIV prevalence in the absence of intergenerational sex, and intergenerational sex was not associated with HIV prevalence in the absence of transactional sex, suggesting that AGYW who engage in transactional sex with intergenerational partners are among the most vulnerable to HIV infection.

Implementation of differentiated HIV prevention efforts for AGYW, including a focus on those with heightened risks for HIV acquisition such as young women who engage in transactional sex with intergenerational partners, may be most impactful in achieving population-level declines in HIV incidence and ultimately achieving an AIDS-free generation.

ACKNOWLEDGMENTS

We gratefully acknowledge the contributions of the women and girls in this study, as well as the dedicated study staff across Tanzania who worked tirelessly to implement the Sauti Project.

This poster was made possible with help from the Johns Hopkins University Center for AIDS Research, an NIH funded program (P30AI094189), which is supported by the following NIH Co-Funding and Participating Institutes and Centers: NIAID, NCI, NICHD, NHLBI, NIDA, NIMH, NIA, FIC, NIGMS, NIDDK, and OAR. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

RESULTS

CHARACTERISTICS

Biobehavioral records were assembled for 14,669 AGYW; 12,708 (87%) reported they were sexually active and were retained in further analysis.

Median age at program entry was 21 years (IQR 19, 23).

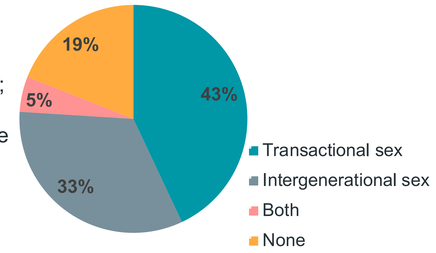


FIGURE 2. Prevalence of transactional sex and intergenerational sex among 12,708 sexually active AGYW in Tanzania, 2016-2018

Transactional sex and intergenerational sex were common (43% and 33%, respectively); 5% reported engaging in both behaviors (**Figure 2**).

A total of 258 (2%) tested positive for HIV.

TRANSACTIONAL SEX AND INTERGENERATIONAL SEX

The association of transactional sex with prevalent HIV was 1.27 (95% CI: 0.97-1.67) and the association of intergenerational sex with prevalent HIV was 0.97 (95% CI: 0.50-1.89) when setting AGYW who reported neither behavior as a reference category (**Table 1**).

TABLE 1. Unadjusted and adjusted joint associations of transactional sex and intergenerational sex among AGYW in Tanzania, 2016-2018[a]

Exposure strata defined by transactional sex and intergenerational sex status		Prevalent HIV n/N (%)	Unadjusted PR (95% CI)	Adjusted PR (95% CI)[b,c,d]
Transactional sex	Intergenerational sex			
–	–	120/6863 (1.7)	1 (REF.)	1 (REF.)
–	+	10/526 (1.9)	1.09 (0.57, 2.06)	0.97 (0.50, 1.89)
+	–	107/4606 (2.3)	1.33 (1.03, 1.72)	1.27 (0.97, 1.67)
+	+	16/547 (2.9)	1.67 (1.00, 2.80)	1.74 (1.03, 2.94)

Abbreviations. PR: prevalence ratio, CI: confidence interval

a 166 (1.31%) were missing measures of transactional sex and/or partner age and were excluded from analysis.
b Covariates included age, family support, marital status, prior pregnancy, food insecurity, early sexual debut, and survey version.
c p=0.04; p value for the term for interaction between the two joint exposures, transactional sex and intergenerational sex.
d ICR=0.5, suggesting a departure from perfect additivity.

AGYW who reported both transactional sex and intergenerational sex had nearly twice the HIV prevalence of AGYW who reported neither behavior (aPR 1.74; 95% CI 1.03-2.94).

Evidence of interaction suggests transactional sex and intergenerational sex operate synergistically to heighten HIV risks for AGYW.