PROVIDERS' VIEWS ON PREP FOR ADOLESCENT GIRLS AND YOUNG WOMEN IN TANZANIA

FINDINGS FROM IMPLEMENTATION SCIENCE RESEARCH

Adolescent girls and young women (AGYW) continue to have high rates of HIV in Tanzania, where HIV prevalence triples from 1.3 percent among adolescent girls aged 15-19 to 4.4 percent among young women aged 20-24.1 AGYW in Tanzania, as in many countries, are particularly vulnerable to HIV due to a host of reasons, including economic disadvantage and limited power to negotiate condom use or refuse sex with their male partners.2 Until recently, interventions to reduce HIV within this population focused only on addressing knowledge, attitudes, and behaviors, with limited success.2 Biomedical interventions that AGYW can access and use to protect themselves from HIV have been lacking.

Oral pre-exposure prophylaxis (PrEP), which are antiretroviral medications taken by HIV-uninfected persons to prevent HIV, has the potential to substantially reduce HIV acquisition among AGYW as part of a comprehensive HIV prevention package, if they are able to access, use, and adhere to it.3-6 The World Health Organization recommends⁷ that PrEP should be offered as an prevention choice for people at substantial risk for HIV infection; for AGYW, this includes being in sero-discordant or transactional sex relationships, experiencing gender-based violence, or STIs.2

Health care providers (HCPs) are critical for effective provision of quality PrEP services for AGYW.8 However, this requires substantial commitment on their part since HCPs are responsible for conducting a clinical assessment of the potential PrEP user, prescribing PrEP, and providing specialized counseling, routine HIV testing, and close, long term monitoring for side effects.9 As policymakers, programmers, and other stakeholders consider PrEP for AGYW in Tanzania, it is important to understand HCPs' perceptions of PrEP and gauge their willingness to prescribe it to AGYW in order to inform the PrEP implementation process and to make it a useful tool against HIV.

In collaboration with the National AIDS Control Programme (NACP) and CSK Research Solutions Ltd, the Population Council conducted an implementation science research study in Tanzania to identify key considerations among HCPs for PrEP introduction to AGYW in one urban and rural setting in Dar Es Salaam and Mbeya districts, respectively. In this brief, we present results from a survey conducted with HCPs in each setting, assessing their:

- Knowledge, attitudes and perceptions about PrEP;
- · Willingness to prescribe PrEP to AGYW; and
- Perceived barriers and facilitators to providing PrEP to AGYW.



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KEY FINDINGS

Although only 3 percent of HCPs had prior knowledge of PrEP, most HCPs were in favor of providing PrEP to AGYW at high risk of HIV once informed about the PrEP.

HCPs' biases toward AGYW sexuality may influence whether, and if so, how they prescribe PrEP to AGYW.

HCPs require support on working with AGYW as well as on values clarification to address potential biases toward AGYW sexuality.

Existing health facility procedures may influence PrEP prescribing behaviors of HCPs; training of HCPs to administer PrEP should include components on improving the facilities' quality of care.

HCPs support different cadres of HCPs administering PrEP to AGYW as well as PrEP integration into general sexual and reproductive health services.









METHODS

HCPs who provide sexual and reproductive health services in 74 clinics completed a detailed questionnaire from March to April 2017. Trained research assistants administered the survey questions on HCP characteristics and current PrEP knowledge. Following these questions, the research assistants used a standardized script to provide information on PrEP to all HCPs. Placebo PrEP pills were also shown to the HCPs. Thereafter, the HCPs completed the remaining sections of the survey on their own. The study was approved by the Population Council Institutional Review Board (New York, USA) and the National Institute of Medical Research (Dar es Salaam, Tanzania).

RESULTS

Who participated in the study?

A total of 316 HCPs completed the survey; 196 (62 percent) from 35 health facilities in Dar es Salaam and 120 (38 percent) from 39 health facilities in Mbeya. Surveyed HCPs were from dispensaries (58 percent), hospitals (21 percent) and health centers (21 percent). Most HCPs worked in public-managed facilities (61 percent). The mean age of the sample was 40 years, most were female and about half were nurses (Table 1). The Dar es Salaam sample was older, had more females, and more years working in their profession than the Mbeya sample.

Only 3 percent of providers had prior knowledge of PrEP. Most HCPs reported caring for adolescents younger than

TABLE 1 HCPS' DEMOGRAPHIC CHARACTERISTICS

	Dar es Salaam n=196 %	Mbeya n=120 %	Total n=316 %
Age (mean)***	42.1	37.3	40.3
Female sex**	77.0	61.7	71.2
Main profession*** Nurse Doctor Clinical officer Counselor Other	52.6 19.4 6.1 19.9 1.3	42.5 8.3 23.3 1.7 9.5	48.7 15.2 12.7 13.0 10.8
Year worked in profession* (mean)	14.7	11.0	13.3
Provide care to clients under age 18***	83.6	96.7	87.3
Prior knowledge of PrEP	4.6	1.7	3.5

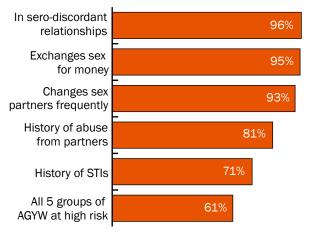
^{***&}lt;0.001; **<0.01; *<0.05

age 18, although the proportion was significantly higher for HCPs in Mbeya compared to Dar es Salaam.

How willing are HCPs to provide PrEP to subpopulations of AGYW at high risk of HIV?

Greater than 90 percent of HCPs were willing to provide PrEP to AGYW in sero-discordant relationships, AGYW who exchange sex for money, and AGYW who change partners frequently (Figure 1). Fewer HCPs were willing to provide PrEP to AGYW with a history of abuse from partners or STIs. Only 61 percent of providers were willing to prescribe PrEP to all AGYW at high risk for HIV.

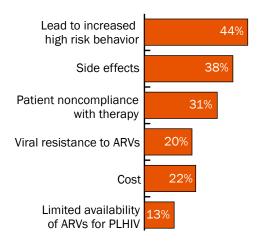
FIGURE 1 PERCENT OF HCPS' WILLING TO PRESCRIBE PREP BY SUB-POPULATION OF AGYW



What are HCPs' main concerns about prescribing PrEP?

Across the two settings, the three main concerns about PrEP, reported by over 30 percent of providers, were concerns about increased high risk behavior, side effects, and patient noncompliance with therapy (Figure 2).

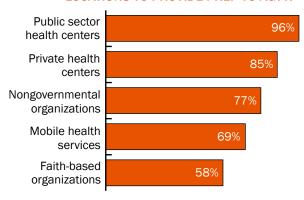
FIGURE 2 HCPS' MAIN CONCERNS ABOUT PREP



Where, how, and by whom should PrEP be provided for AGYW?

Across the two settings, HCPs were more supportive of PrEP being offered through public and private health facilities compared to nongovernmental organizations, mobile health services and faith-based organizations (Figure 3).

FIGURE 3 HCPS' VIEWS ON SERVICE LOCATIONS TO PROVIDE PREP TO AGYW



HCPs also suggested that PrEP services could be integrated into existing maternal and reproductive health (87 percent) and youth-friendly health services (92 percent), such as, family planning (91 percent), STI prevention and treatment (88 percent), and genderbased violence counseling (82 percent).

In addition to doctors, more than 85 percent of HCPs supported PrEP provision by nurses, counselors, and clinical officers. Pharmacists were the least endorsed HCP for prescribing PrEP (65 percent).

Are there urban and rural differences in factors associated with providers' willingness to prescribe PrEP to all AGYW at high risk of HIV?

There were significant differences by setting on the factors influencing providers' willingness to prescribe PrEP to AGYW at high risk for HIV (Table 2).

In Mbeya, HCPs with stronger concerns that PrEP would result in increased risk behavior reported being less willing to prescribe PrEP to AGYW in comparison to HCPs with fewer concerns.

In Dar es Salaam, HCPs with more negative attitudes toward AGYW's sexuality and with greater concerns about how PrEP will be integrated into existing services reported being less willing to prescribe PrEP to AGYW in comparison to HCPs with fewer negative attitudes and fewer concerns, respectively.

TABLE 2 FACTORS ASSOCIATED WITH HCPS' WILLINGNESS TO PRESCRIBE PREP TO AGYW AT HIGH RISK FOR HIV

	Dar es Salaam (n=196)		Mbeya (n=120)	
	% willing	p-value	% willing	p-value
Fear of increased risk behavior ^a		ns		<0.001
Few Many	60.0 57.3		82.5 49.2	
Concerns about PrEP integration into services b		<0.05		ns
Low High	70.0 53.1		72.9 54.0	
Negative attitudes toward AGYW sexuality ^c		<0.01		ns
Few Many	71.3 48.6		72.1 55.8	

^a5 items (e.g., PrEP will cause patients to engage in riskier behaviors)

Are there urban and rural differences in how current service facility procedures influence HCPs' readiness to prescribe PrEP to all AGYW at high risk of HIV?

In both districts, HCPs who reported that their facility had high quality patient-centered care practices were more willing to prescribe PrEP to AGYW that those who reported their facility had low quality patient-centered practices (Table 3).

There were also significant differences by setting on the health facility factors. In Mbeya, HCPs who report that their facility has appropriate guidelines for working with adolescents were more willing to prescribe PrEP to AGYW than those who reported their facilities did not have appropriate guidelines.

In Dar es Salaam, HCPs who report that providers in their facility were sufficiently trained to provide HIV prevention, care, and treatment services to adolescents and young adults were more willing to prescribe PrEP to AGYW than HCPs who reported that providers were insufficiently trained.

b4 items (e.g., I do not have time to provide clinical monitoring for PrEP)

^{°11} items (e.g., Unmarried AGYW should not be provided contraceptives because Tanzanian culture does not support premarital sex)

TABLE 3 ASSOCIATIONS BETWEEN HCPS' PERCEPTIONS
OF HEALTH FACILITY SERVICES AND
WILLINGNESS TO PRESCRIBE PREP TO AGYW
AT HIGH RISK FOR HIV

	Dar es Salaam (n=196)		Mbeya (n=120)	
	% willing	p-value	% willing	p-value
Patient-centered care practices ^a		<0.05		<0.01
High	67.8		85.0	
Low	54.7		55.0	
Has guidelines for working with adolescents Yes	59.0	ns	71.2	<0.05
No	57.6		52.3	
HCPs trained to provide HIV services to adolescents		<0.05		ns
Yes No	73.5 55.6		81.3 62.5	

^a4 items (e.g., Providers take time to understand clients' needs)

RECOMMENDATIONS

Our findings highlight key considerations that should be addressed as part of PrEP introduction to AGYW in Tanzania. We recommend the following:

- Address HCPs' views on adolescent sexuality by implementing comprehensive and continuous training on caring and working with adolescents and young people that includes, values clarification exercises (see box for example HCP curriculum).
- Address differences in willingness to prescribe PrEP by assessing HCPs' perspectives periodically, and providing guidelines and training in HIV service delivery.
- When implementing PrEP in urban and rural locations, pay careful attention to geographical differences in quality of care provided by facilities, provider attitudes, and training needs.
- Reach larger segments of AGYW who are at-risk of HIV by integrating PrEP into general sexual and reproductive health services and by developing guidelines and tools to facilitate integration.
- 5. Engage HCPs at all stages of PrEP roll-out, from planning to introduction to evaluation.

HCP CURRICULUM THAT WORKS

The Council developed a training curriculum for health care settings that has been shown to reduce provider stigma and bias toward young people at risk of HIV and increase the quality of services provided to young people. The curriculum includes sessions on values clarification, talking about sex, understanding gender, and providers being the change to remove stigma and biases. Curriculums like this one can be adapted as part of the PrEP implementation strategy for AGYW in Tanzania.

REFERENCES

 1 Tanzania Commission for AIDS (TACAIDS) et al. 2013 Tanzania HIV/ AIDS and Malaria Indicator Survey 2011–12. Dar es Salaam, Tanzania: TACAIDS, ZAC, NBS, OCGS, and ICF International.

²Celum, C. L.. et al. 2015. "Rethinking HIV prevention to prepare for oral PrEP implementation for young African women," *Journal of the International AIDS Society* 18(Suppl 3): 20227.

³WHO. 2015. Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV. Geneva, Switzerland: WHO.

⁴Fonner, V. A., et al. 2016. "Effectiveness and safety of oral HIV preexposure prophylaxis for all populations," *AIDS* 30(12): 1973.

⁵Van Damme, L. et al. 2012. "Preexposure prophylaxis for HIV infection among African women," *New England Journal of Medicine* 367(5): 411–422.

⁶Corneli, A. L. et al. 2014. "FEM-PrEP: adherence patterns and factors associated with adherence to a daily oral study product for pre-exposure prophylaxis." *Journal of Acquired Immune Deficiency Syndromes* 66(3): 324–331.

⁷World Health Organization. 2015. "Guideline on when to start antiretroviral therapy and on pre-exposure prophylaxis for HIV." Switzerland: World Health Organization.

⁸Mathur, S., N. Pilgrim, and J. Pulerwitz. 2016. "PrEP introduction for adolescent girls and young women," *The Lancet HIV* 3(9): e406–408.

⁹Castel, A. D. et al. 2015. "Understanding HIV care provider attitudes regarding intentions to prescribe PrEP," *Journal of Acquired Immune Deficiency Syndromes* 70(5): 520–528.

¹⁰Pilgrim, N. et al. 2016. "Building evidence to guide PrEP introduction for adolescent girls and young women." Washington, D.C.: Population Council

¹¹Geibel, S. et al. 2017. "Stigma reduction training improves healthcare provider attitudes toward, and experiences of young marginalized people in Bangladesh," *Journal of Adolescent Health* 60(2): S35–44.

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