

Gender differences and factors associated with Pre-exposure prophylaxis (PrEP) knowledge, attitudes and uptake interest among adolescents in two high HIV burden districts in South Africa

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INTRODUCTION

While pre-exposure prophylaxis (PrEP) effectively prevents HIV infection and is WHO-recommended to people at substantial risk, South Africa requires more information before roll-out to high-risk adolescents. A study was conducted to understand adolescents' PrEP knowledge, attitudes and roll-out preferences.

METHODS

A cross-sectional household survey was conducted. Adolescents (18-24y) were interviewed about their PrEP knowledge, attitudes and HIV-risk practices. Descriptive analyses were conducted by gender. Two multivariate regression models assessed factors associated with PrEP knowledge and uptake interest.

RESULTS

Participants' most cited factors influencing decision to use PrEP were side effects (51%), place to get pills (31.0%), pill taking duration (30.8%) and pill effectiveness (29.5%). Gender differences were observed on side effects (males=47% vs females=55%; p=0.001) and pill effectiveness (males=26.4% vs females=32.6%; p=0.003) and pill taking duration (males=14.7% vs females=18.3%; p=0.032). The most preferred medium of knowing PrEP was television (58.6%, males=60.8% vs females=56.3%, p=0.046), school (50.4%) and social media (47%).

A total of 1917 participants were interviewed. **Table 1** shows the differences in PrEP knowledge, attitudes and practises by gender. Nearly 1 in five (17.2%) participants (males=15.3% vs females=18.8, p=0.048) had PrEP knowledge and 49.0% had an interest in using PrEP (males=48% vs females=50.0%; p=0.418). The most commonly preferred channels of PrEP roll-out were clinic (51.2%), hospital (23.8%) and private doctor (23.0%). More males than females preferred PrEP roll-out through schools (11.9% vs7.8%; p=0.002) and NGOs (8.5% vs 5.4%; p=0.008). Non-PrEP interest participants' biggest barrier was inadequate PrEP knowledge (10.0%): they differed on daily pill dislike (males=4.1% vs females=2.0%; p-value=0.007).

Table 1: PrEP knowledge, attitudes and practices by gender (N=1955)

	TOTAL		MALE	FEMALE		
	n/N	%	%	%	p value	
PrEP knowledge	314/1836	17.1	15.3	18.8	0.048	
PrEP interest	899/1834	49.0	48.1	50.0	0.418	
PrEP distribution channels						
Private doctor	1476/1917	23.0	21.9	24.1	0.246	
Hospital	457/1917	23.8	22.1	25.6	0.074	
Clinic	936/1917	51.2	49.4	52.9	0.127	
School	189/1917	9.9	11.9	7.8	0.002	
Community health workers	228/1917	11.9	12.2	11.6	0.733	
NGO	133/1917	6.9	8.5	5.4	0.008	
Traditional healer	20/1917	1.0	1.1	1.0	0.987	
Mobile clinic	137/1917	7.2	8.0	6.3	0.169	
Family member	38/1917	2.0	2.5	1.5	0.097	
Other	16/1917	0.8	1.1	0.6	0.308	
Reasons for not using PrEP						
Possible side effects	133/1917	6.9	7.9	6.0	0.116	
No adequate knowledge	191/1917	10.0	10.2	9.8	0.778	
Does not want family to know it	50/1917	2.6	3.3	2.0	0.081	
Fear to be more sexually active	48/1917	2.5	2.6	2.4	0.750	
Does not want a pill every day	58/1917	3.0	4.1	2.0	0.007	
Possibility of riskier life like not using a condom	36/1917	1.9	2.2	1.6	0.302	
Things to know to decide to use PrEP						
Side effects	980/1917	51.1	47.2	55.0	0.001	
Place to get the pill	594/1917	31.0	30.4	31.6	0.559	
Person who gives the medicine	323/1917	16.9	17.3	16.4	0.618	
Duration of taking the pill	590/1917	30.8	29.2	32.3	0.140	
How well the pill works	566/1917	29.5	26.4	32.6	0.003	
How often the pill is to be taken	316/1917	16.5	14.7	18.3	0.032	
Cost of the pill	461/1917	24.1	23.8	24.3	0.776	
How the pill is taken	360/1917	18.8	17.7	19.9	0.226	
Young people's preferred information channels about PrEP						
Newspapers	658/1917	34.3	33.1	35.6	0.256	
Billboard adverts	449/1917	23.4	24.6	22.3	0.222	
School visits	967/1917	50.4	49.7	51.1	0.538	
TV adverts	1123/1917	58.6	60.8	56.3	0.046	
Brochures at health facilities	525/1917	27.4	26.4	28.4	0.328	
Social media eg facebook, whatssapp	909/1917	47.4	45.5	49.4	0.085	

Table 2a shows factors associated with PrEP knowledge. Sexual risk factors (transactional sex aOR1.51; 95%CI1.08-2.12) and social media influence factors (club membership aOR1.39;1.06-1.83; social media use (aOR3.40;1.95-5.94)) were associated with PrEP knowledge while radio/TV use protected against knowing PrEP (0.32; 0.16-0.61).

Table 2A: Factors associated with having PrEP knowledge

	aOR	95% CI
Knowledge of TB	1.39	0.98-1.97
Age 21-24y (vs 18-20y)	1.27	0.97-1.67
Province: OR Tambo	0.74	0.56-0.98
Gender: Female	1.12	0.85-1.47
Being a club member	1.39	1.06-1.83
Transactional sex	1.51	1.08-2.12
Watching radio and TV	0.32	0.16-0.61
Using social networking platforms	3.4	1.95-5.94

Table 2b shows that TB knowledge, HIV knowledge, being female and 21 years or older were associated with PrEP interest.

Table 2B: Factors ssociated with having interest in PrEP use

	aOR	95% CI
Knowledge of TB	1.5	1.11-2.03
Age 21-24y (vs 18-20y)	1.27	1.02-1.57

Gender: Female	0.6	0.48-0.76
Having HIV knowledge	1.53	1.23-1.89



Low levels of PrEP knowledge, relatively high interest in PrEP use and gender differences were observed. Social media and HIV risk were associated with PrEP knowledge. To increase PrEP use, social network platforms may be useful.



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