

Sexual behaviour and age related incidence of sexually transmitted infections in PrEP's users



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Background

- Prevention of HIV transmission is fundamental to ending the HIV epidemic.
- Pre-exposure prophylaxis (PrEP) with oral tenofovir-emtricitabine (TDF-FTC) is an established HIV-prevention method.
- The reduced condom use and the diffusion of PrEP could lead to an increased risk of sexually transmitted infections (STI) acquisition. We report the characteristics and incidence of IST infection in PrEP's users followed at Department of Public Health and Infectious Diseases, Policlinic Umberto I, Sapienza University in Rome.

Results

- 410 PrEP's users including MSM (96,1%) and transgender (3,9%) were enrolled.
- The overall incidence of CT was 3,6% (15/410), NG 6,6% (27/410), syphilis 13,4% (55/410), HIV positive 0,5% (2/410), HAV 0%, HCV 0%, HSV2 0,7% (3/410) and HPV 1,5% (6/410).
- To better clarify the impact of the PrEP on the incidence of IST, we stratified the studied population in 4 range of age: <30, 30-45, 45-60 and >60 age)(Table1).
- We found an increased incidence of Syphilis in PrEP's users with >60 years (19%) and of NG in the 30-45 years group (15,6%).

Conclusion

- Our analysis emphasize the importance of the screening of STI in PrEP's users independently from age and sexual behavior.
- In a context of declining condom use related surveillance, counselling and intervention programs need to be further reinforced.

Material and Methods

- This is a retrospective single center analysis conducted on PrEP's users attending the Infectious Disease Department from January 2019 to March 2024.
- All subjects were tested C.trachomatis(CT), N. gonorrhoeae (NG) and T.pallidum (Syphilis) infection, HIV, hepatitis A (HAV) and C (HCV), Herpes 2 (HSV2), HPV by blood tests and multiplex PCR on urine specimen or rectal swabs.

Table 1: The impact of the PrEP on the incidence of IST

	<30 (n=112)	30-45 (n=198)	45-60 (n=84)	>60 (n=16)	Overall (n=410)
Sex worker	3 (2.7%)	7 (3.5%)	4 (4.7%)	2 (12.5%)	16 (3.9%)
Syphilis	13 (11.6%)	31 (15.6%)	8 (9.5%)	3 (19%)	55 (13.4%)
N. gonorrhoeae	7 (6.2%)	15 (7.5%)	4 (2%)	1 (6.2%)	27 (6.6%)
C. trachomatis	6 (5.3%)	6 (3%)	3 (3.5%)	0	15 (3.6%)
HSV2	0	3 (1.5%)	0	0	3 (0.7%)
HPV	0	5 (2.5%)	0	1 (6.2%)	6 (1.5%)
MONKEYPOX	0	0	1(1.2%)	0	1 (0.2%)

Table 1