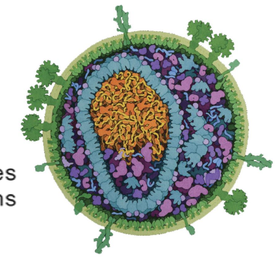
Asymptomatic Sexually Transmitted Infections in a Population of High-Risk Men Who Have Sex With Men

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Pierluigi F Salvo[1], Antonietta Vella[2], Valentina Iannone[1], Giuseppe Cucinotta[1], Rebecca J Steiner[1], Andrea Carbone[1], Francesca Lombardi[3], Simona Di Giambenedetto[1,3], Carlo Torti[1,3], Gianmaria Baldin[3]

1: Dipartimento di Sicurezza e Bioetica, Sezione Malattie Infettive, Università Cattolica del Sacro Cuore, Rome, Italy
2: Dipartimento di Scienze di Laboratorio e Infettivologiche, Fondazione Policlinico Universitario A.Gemelli IRCCS, Rome, Italy
3: Dipartimento di Scienze Mediche e Chirurgiche, UOC Malattie Infettive, Fondazione Policlinico Universitario A.Gemelli IRCCS, Rome, Italy

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BACKGROUND

Sexually transmitted infections (**STIs**) represent a major public health challenge, particularly as many cases are **asymptomatic**, complicating early detection, treatment, and partner notification, and contributing to ongoing transmission.
This study aims to examine the role of asymptomatic STIs in a high-risk population of men who have sex with men (**MSM**), who regularly undergo STI screening.

METHODS

This retrospective observational study evaluated STI diagnoses between **2020** and **2023**, in a cohort of at-risk individuals, specifically MSM on PrEP (**MSM-PrEP**) and MSM with HIV (**MSMWH**), with the aim of determining the rate of symptomatic and asymptomatic infections and comparing the 2 groups.
Participants underwent **regular screenings** every 3 to 6 months, including serological tests for **syphilis** and molecular assays for **gonorrhea** and **chlamydia** on urethral, pharyngeal and rectal swabs.
Proportions were compared using the chi-squared test.

- High prevalence of **asymptomatic** STIs in **MSM**, especially syphilis.

- Significant difference in **asymptomatic syphilis**: 98.8% in MSM-PrEP vs. 66.3% in MSMWH ($p < 0.001$)

- MSM-PrEP had more **multiple STI diagnoses per person** compared to MSMWH ($p < 0.001$)

- **Regular screening** is essential for early **detection** and **prevention**

		MSMWH (N=850)		MSM-PrEP (N = 287)		p*
STIs	**n**	**Asymptomatic**	**Symptomatic***	**Asymptomatic**	**Symptomatic***	
Syphilis (n, %)	986	543 (66.3)	276 (33.6)	165 (98.8)	2 (1.2)	< 0.001
Gonorrhea (n, %)	74	3 (25.0)	9 (75.0)	34 (54.0)	29 (46.0)	0.095
- **Rectal**	26	1 (20.0)	4 (80.0)	11 (52.4)	10 (47.6)	
- **Urethral**	27	1 (16.7)	5 (83.3)	9 (40.9)	13 (59.1)	
- **Pharyngeal**	21	1 (100.0)	0 (0.0)	14 (70.0)	6 (30.0)	
Chlamydia (n, %)	50	4 (40.0)	6 (60.0)	18 (45.0)	22 (55.0)	0.532
- **Rectal**	23	2 (40.0)	3 (60.0)	10 (55.6)	8 (44.4)	
- **Urethral**	19	1 (25.0)	3 (75.0)	7 (46.6)	8 (53.3)	
- **Pharyngeal**	8	1 (100.0)	0 (0.0)	1 (14.3)	6 (85.7)	

RESULTS

A total of **573** participants were enrolled (458 MSMWH and 115 MSM-PrEP), resulting in **1110** observed STI events (823 in MSMWH and 287 in MSM-PrEP). The frequencies of asymptomatic events in the two groups are detailed in **Table1**.
MSM-PrEP were more likely to have multiple STI diagnoses per person during the follow-up period compared to MSMWH (**$p < 0.001$**).
Among the STIs observed, **syphilis** was the most frequent, with **986** cases (819 in MSMWH and 167 in MSM-PrEP), resulting in an overall asymptomatic rate of **71.8%** (708/986). Among PLWH, 543/819 cases (**66.3%**) were asymptomatic, compared to 165/167 cases (**98.8%**) in the MSM-PrEP, with a statistically significant difference (**$p < 0.001$**).
We identified **75** cases of gonorrhea (12 in MSMWH and 63 in MSM-PrEP), with an overall asymptomatic rate of **49.3%** (37/75). For chlamydia, there were **50** cases (10 in MSMWH and 40 in MSM-PrEP), with **44.0%** asymptomatic (22/50). There were no statistically significant differences in the clinical presentation of these two STIs between the two groups.

CONCLUSIONS

Asymptomatic STIs are notably **common** in this population, with a significant frequence of syphilis observed. A significant difference in the rate of asymptomatic cases was found specifically for syphilis between the two groups.
MSM-PrEP had a higher frequency of multiple STI diagnoses per person during the follow-up period compared to MSMWH. These findings emphasize the need for effective prevention strategies to manage STIs in these populations and highlight the importance of regular screening to ensure timely detection and treatment.