

Are we reaching the at-risk patient populations for HIV and other STI?

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Introduction

Background:

- Published clinical and epidemiological data on individuals undergoing anonymous testing for sexually transmitted diseases (STI) in Germany are sparse
- In Germany STD testing often relies on limited public and/or community services due to the lack of widespread availability of STI clinics

Study objective:

- To collect and statistically evaluate annual results of STI screenings and survey data from a large community based STI testing Checkpoint in Cologne, Germany

Methods



- 12.939 visitors attending the Checkpoint in Cologne from January 2017 – June 2020 were screened for HIV, syphilis, chlamydia, gonorrhoea and hepatitis C using point of care testing kits



- Data on STI screening, clinical and demographic characteristics as well as sexual history information was anonymously recorded for visitors attending the Checkpoint in Cologne



- Continuous (categorical) variables are summarised by median/range (counts/percentages), pairwise statistical group comparison was performed with two-sided Wilcoxon rank sum test (Pearson's χ^2 or Fisher's exact test*). The significant level was fixed at $\alpha=0.05$.

Results

Table 1. Visitor numbers per year

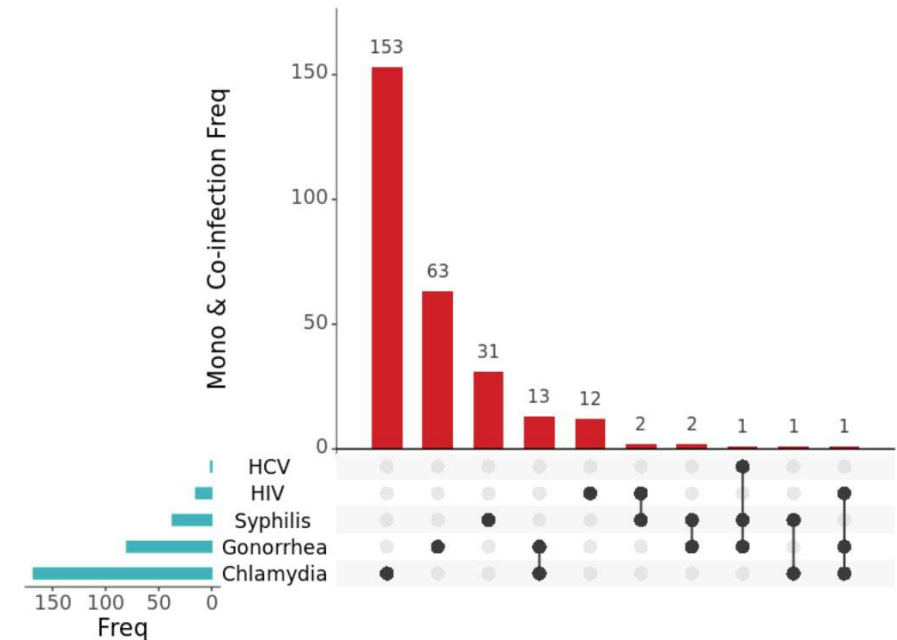
	2017	2018	2019	2020*
MSM	1,772 (46%)	1,672 (41%)	1,682 (38%)	411 (35%)
MSW	963 (25%)	1,129 (28%)	1,304 (29%)	353 (30%)
WSM	776 (20%)	847 (21%)	1,024 (23%)	293 (25%)
Unk. sex	215 (6%)	236 (6%)	183 (4%)	41 (4%)
WSW	126 (3%)	160 (4%)	254 (6%)	68 (6%)

Table 2. STI frequencies per visitor population and year

	MSM	MSW	WSM	WSW	Unkwn
Chlam +	155 (36%)	67 (85%)	60 (90%)	22 (88%)	44 (52%)
Gon +	130 (30%)	7 (9%)	2 (3%)	3 (12%)	13 (15%)
TP +	90 (21%)	4 (5%)	0	0	22 (26%)
HIV +	55 (13%)	1 (1%)	5 (7%)	0	5 (6%)
HCV +	1 (<1%)	0	0	0	0

	2017	2018	2019	2020*
Chlam +	71 (41%)	109 (52%)	168 (56%)	0
TP +	56 (32%)	22 (11%)	37 (12%)	1 (50%)
Gon +	27 (15%)	48 (23%)	80 (27%)	0
HIV +	21 (12%)	29 (14%)	15 (5%)	1 (50%)
HCV +	0	0	1 (<1%)	0

Figure 1. STI Mono- and Co-infection frequency in 2019



Main findings:

- Following increased PrEP prevalence in Germany since 2017 number of MSM visitors declining and subsequently decline in HIV infection rates with 21, 29 and 15 cases in 2017, 2018 and 2019
- 56% of newly HIV diagnosed individuals indicated that a significant risk situation had occurred in the recent past, followed by 27% indicating routine testing
- Continuous increase in MSW, WSM and WSW visitors in recent years with chlamydia being the most prevalent STI

Conclusion

- Checkpoint was able to detect relevant STIs in 5% of all visitors thereby emphasizing the importance of community-based testing centers for the prevention of STIs
- With more MSM entering regular medical care through PrEP prescription and care and with lacking STD clinics WSM more frequently seek STI testing, resulting in increases in chlamydia detections
- Despite increased HIV awareness and PrEP roll-out MSM remain at highest risk for contracting HIV (and HCV) highlighting the continuous need for educational activities including enhanced PrEP roll-out as well as low-threshold and cost-free STI screening capacities

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