OROPHARYNGEAL GONORRHOEA: IS THIS RESERVOIR THE KEY TO UNDERSTANDING RISING INFECTION RATES AMONG YOUNG HETEROSEXUALS? - INSIGHTS FROM USERS OF ONLINE SEXUAL HEALTH SERVICES ACROSS THE ISLAND OF IRELAND, NOVEMBER 2023 - FEBRUARY 2024

Authors:

<u>Harrison AJ^{1,2}</u>, Sykes A¹, Coyle R², Bradley D², Nugent C², McAleavy P², O'Donnell K³, Igoe D³, Campbell M³, Fiona Lyons F⁴, Perry M⁵, White J⁵, Harbottle J⁶, Barrister P⁶

¹UK Field Epidemiology Training Program, UK Health Security Agency,²Public Health Agency, Northern Ireland, ³Health Protection Surveillance Centre, Ireland ⁴Sexual Health and Crisis Pregnancy Programme (HSE), Ireland, ⁵Western & Northern Health Social Care Trust, Northern Ireland, ⁶SH:24

Background:

Gonorrhoea, an STI caused by Neisseria gonorrhoeae (NG), diagnoses increased by 59% across European Union/European Economic Area countries between 2018 and 2022. Young heterosexuals have emerged as a new risk group, with heterosexual transmission increasing by 50% according to ECDC. This trend is reflected across the island of Ireland (IOI: both Northern Ireland and the Republic of Ireland) where guidelines do not currently recommend routine oropharyngeal (OPNG) testing in young heterosexuals. We piloted online testing to estimate community prevalence of OPNG in young heterosexuals, across IOI.

Methods:

From 23/11/23–23/02/24, all heterosexuals across IOI under 25 years, accessing SH:24, an online STI testing service, were offered OPNG testing. Results were categorised into; Negative, Multi-site, OPNG only, Genital only. Overall weighted prevalence was estimated, considering the population sizes of both geographies, with 95% confidence intervals (95%CI) calculated through the binomial exact method.

Results:

12,695 tests were dispatched, 57% returned and valid (n=7297) with 3.4% (n=248) NG positivity. 89% of NG cases included OPNG (223/248) of these, 67% were OPNG only (151/223). The IOI prevalence of OPNG only was 2.1% (95%CI:1.7-2.4), 2.6% (52/2007) for males and 1.9% (99/5290) for females (OR=1.38; 95%CI:0.98-1.94; p-value 0.03). The prevalence of Genital only and Multi-site NG was 0.34% (95%CI:0.2-0.4) and 0.98% (95%CI:0.76-1.21) respectively.

Conclusion:

Our findings highlight the importance of the oropharynx reservoir in NG transmission among young heterosexuals. In this group, NG was most frequently detected in the oropharynx, with prevalence at this site higher than that of genital locations. Most OPNG cases did not coincide with genital infections and would therefore have been missed by current testing protocols. This evidence strongly suggests the need to evaluate modifications to testing strategies to reduce overall NG burden.

Disclosure of Interest Statement:

All work presented have been conducted independently, without any commercial or financial interests.