

Robert Taylor

Warwick Medical School, UK

Title: Review of the epidemiology of drug-resistant shigella associated with men who have sex with men

#### Abstract:

**Background:** MSM-associated transmission of shigella has been established as an STI since the 1980s and is recognised as endemic in the UK. Multiple outbreaks and clusters of infection associated with MSM occur globally. The World Health Organisation has warned of increasingly extensively drug-resistant strains circulating amongst a global MSM population. Accumulating data on resistance and accompanying determinants of these MSM-associated outbreaks may provide insight for future public health approaches to this issue.

**Methods:** A systematic review was conducted which identified manuscripts that were subject to a screening process to retrieve sources of epidemiological data. A search across four databases found 74 sources which had a full-text review to identify manuscripts that included MSM-associated cases, their resistance rates and underpinning risk factors.

**Results:** Data was extracted from 13 studies and separated into country-wide and city-wide studies. Studies included demonstrate a higher rate of resistance in MSM cases when compared non-MSM groups. Studies from Australia demonstrate an increase in MDR from 35% to 78% in MSM. Four of the city-based studies demonstrate isolates which are MDR (>2), up to 27% of isolates found in Barcelona. The most recent UK study shows resistance to 5 antibiotics of 100% of isolates. Associations between resistant shigella and MSM infection were mainly attributed to by PLWH. Risk factors for increased transmission of shigella identified by this review include a previous STI, visiting sex venues and recreational drug use.

**Conclusion:** This review highlights significant differences in resistant rates of MSM-associated shigella. Concurring that MSM are disproportionately affected by highly-resistant strains of shigella. These findings dictate the need for further public health intervention globally. Recommendations made here could be used to minimise the health inequities for gay and bisexual men.

#### Biography

Rob Taylor is a final year Graduate-Entry MBBS Medical student at Warwick Medical School in the UK. Passionate about healthcare, he's dedicated to academic excellence and making a positive impact in his community.