Integrated clinical and public health management of antimicrobial resistant (AMR) gonorrhoea - experience from Victoria

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Background:
AMR gonorrhoea notifications have steadily increased in Victoria, reaching the highest recorded level in 2024. This paper presents Victoria's experience with integrated clinical and public health management of cases.

Methods:
Enhanced surveillance and active follow-up of all AMR gonorrhoea cases was undertaken for timely and effective clinical and public health management of cases and contacts. Case reviews, genomic analysis and epidemiological evidence enabled source identification, risk assessment, and monitoring of trends.

Results:
Between 1 January 2022 and 31 March 2025, 33,558 gonorrhoea cases were notified, of which only 8,532 (25%) were confirmed by culture. 54 cases were identified as AMR gonorrhoea: 20 with reduced susceptibility to ceftriaxone (MIC ≥ 0.125 – <0.50 mg/L), 16 with high-level resistance to azithromycin (MIC ≥ 256 mg/L), 11 with ceftriaxone resistance (MIC ≥ 0.5 mg/L), and 7 with ceftriaxone resistance and high-level resistance to azithromycin.

Of the 54 cases, 26% were female, 37% acquired infection through heterosexual contact, 57% presented with symptoms, and 31% were diagnosed in a low case load GP clinic. Genomic analysis identified 19 cases closely related to another case. Provider-assisted partner notification was undertaken for most cases. The source of infection was identified in 56% of cases, and 35% were locally acquired. 52% of cases had a test of cure, and all were negative.

The number of notified AMR cases underestimates the burden and transmission in the community due to multiple factors: diagnoses are made mostly by PCR; contacts often receive treatment before the AMR results for the case are available; and outcomes for anonymous and lost to follow-up contacts are unknown.

Conclusion:
The integrated approach facilitated AMR gonorrhora surveillance, and timely case management. Challenges remain with contact tracing and reliance on culture for identification of AMR cases and warrant exploration of novel approaches.

Disclosure of Interest Statement:

None