**Title**

Antibiotic prescribing by general practice registrars for acute respiratory tract infections: intended clinical behaviour versus actual prescribing.

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**Background**

Antibiotics are overused in Australia for most non-pneumonia acute respiratory tract infections (ARTIs) despite evidence-based guidelines recommending strongly against their overuse. Two strategies shown to reduce antibiotic consumption in the community are ‘no prescribing’ and ‘delayed prescribing’.

**Aims**

For GP registrar consultations involving ARTIs, determine intended antibiotic prescribing strategies and compare with actual prescribing behaviour.

**Method**

A cross-sectional analysis of the Registrar Clinical Encounters in Training (ReCEnT) cohort study;

GP registrars from three states each collected data relating to 60 consecutive patient encounters during each of three 6-monthly training terms from 2016 to 2017. This included recording the antibiotic prescribing strategy used during consultations. In a linked questionnaire, registrars’ intended prescribing strategy for clinical vignettes involving acute bronchitis and otitis media were elicited. We compared the frequency of the intended prescribing strategies for acute bronchitis and otitis media in response to the vignettes with the actual prescribing behaviour from the consultation data.

**Results**

1,131 registrars completed the vignettes. During consultations there were 800 new presentations of acute bronchitis and 629 new presentations of otitis media. For acute bronchitis, the intended prescribing was 0.6% ‘immediate’, 74% ‘no prescribing and 25.4% ‘delayed’. The actual prescribing for acute bronchitis was 57% for ‘immediate’, 32% ‘no prescribing’, and 11% ‘delayed’. For otitis media, the intended prescribing was 8% for ‘immediate’, 65% ‘no prescribing, and 27% ‘delayed’. The actual prescribing for otitis media was 52% for ‘immediate’, 26% ‘no prescribing’, and 22% ‘delayed’.

**Conclusion**

The intended prescribing strategies for acute bronchitis and otitis media approximate international benchmarks but vary significantly from the actual prescribing strategies used in consultations. This data highlights the challenge facing the GP registrar in undertaking appropriate stewardship of antibiotics for ARTIs. Further research into how to overcome barriers to good antibiotic stewardship is indicated.