

Rational Antibiotic Prescribing

Antimicrobial resistance is a serious and imminent threat to global public health and is closely linked to the over-prescription of antibiotics. Australian GPs prescribe more than 30 million antibiotic prescriptions each year, and in 2015, nearly 45 per cent of the population received a prescription for at least one antibiotic. There is evidence that antibiotics are frequently prescribed in conditions for which there is very little benefit e.g. acute bronchitis. Over-prescription of antibiotics is a core theme of the Choosing Wisely Australia campaign. GP supervisors play a critical role in supporting registrars to prescribe antibiotics appropriately, by targeted teaching and feedback, as well as role-modelling best practice. See also_GPSA guide on Rational Prescribing

TEACHING AND LEARNING AREAS

- Classes of antimicrobials
- · Adverse effects of antibiotics
- Common areas of antibiotic use, and over-prescription
- Drivers to inappropriate antibiotic prescription, including those for registrars
- Strategies for reduced antibiotic prescribing

PRE- SESSION ACTIVITIES

Read the 2016 RACGP Good Practice article <u>Antimicrobials – Challenging Resistance</u>

ACTIVITIES

• Teaching about antibiotic prescribing can be done opportunistically as part of PCD or RCA, or in a targeted way as a topic tutorial or mini-audit. See over page for activities.

TEACHING TIPS AND TRAPS



- GPs generate 90% of antibiotic prescriptions in Australia
- · Antibiotics can lead to outpatient human-level bacterial resistance, not just community resistance
- Differentiating 'viral' from 'bacterial' RTIs is both difficult and unhelpful a syndromic aetiological approach is more useful i.e. treating the sore throat
- · The default approach to managing non-pneumonia RTIs is to not prescribe antibiotics
- The science of treating RTIs like URTI and acute bronchitis is straightforward (antibiotics are seldom indicated) but the art of managing patient perceptions and expectations can be complex
- Serious infective sequelae of not prescribing antibiotics to children with RTIs are extremely rare in developed countries
- <u>Delayed prescribing</u> is an effective strategy for reducing antibiotic use
- Supervisor prescribing practice influences registrar prescribing practice

RESOURCES



- Antibiotic Therapeutic Guidelines antibiotics chapter
- 2019 Aust Prescr. Optimal antimicrobial duration for common bacterial infections
- 2022 AJGP. How can general practitioners reduce antibiotic prescribing in collaboration with their patients?
- Antimicrobial stewardship in general practice

Listen

Read

- 2017 MJA podcast; Curbing antibiotic use in primary care, with Prof Chris Del Mar
- 2020 NPS Medicinewise podcast: eTG antibiotic guidelines

Watch

• 'The Pick Up' and other short films on antibiotic resistance

FOLLOW UP & EXTENSION ACTIVITIES

• Discuss a whole-of-practice approach to reducing antibiotic use, including practice meetings and audits



Activities

CHOOSING WISELY RECOMMENDATIONS

Discuss the Choosing Wisely Australia recommendations related to antibiotic prescription, as listed below:

- · Do not routinely prescribe antibiotics to children with fever without an identified bacterial infection
- Don't prescribe oral antibiotics for uncomplicated acute discharge from grommets
- Don't treat otitis media with antibiotics, in non-Indigenous children aged 2-12 years, where reassessment is a reasonable option
- Monotherapy for acne with either topical or systemic antibiotics should be avoided
- Don't prescribe oral antibiotics for uncomplicated acute otitis externa
- Avoid prescribing antibiotics for URTI
- · Do not routinely prescribe antibiotics for inflamed epidermoid cysts (sebaceous cysts) of the skin
- Do not use antibiotics in asymptomatic bacteriuria
- Do not use antibiotics for the management of a leg ulcer without clinical infection
- Don't initiate an antibiotic without an identified indication and a predetermined length of treatment or review date

AUDIT

Registrar to document the specific indication, justification and duration for each antibiotic prescription in the medical record (for a period of 2-4 weeks), and supervisor and registrar to then discuss