Addressing outpatient antibiotic prescribing

“Just in case”: antibiotic prescribing behaviour among out-of-hours practitioners in England

Michael Edelstein¹, Thara Raj¹, Adeola Agbeiyi*¹, Anja Schreijer², Danilo Lo Fo Wong³

¹Public Health England, London, United Kingdom
²National Institute for Public Health and the Environment, Bilthoven, Netherlands
³World Health Organization-Regional Office for Europe, Copenhagen, Denmark

Background: Antimicrobial resistance is projected to cause up to 10,000,000 deaths annually by 2050. The World Health Organization (WHO) Tailoring Antimicrobial Programmes (TAP) initiative aims to support countries to promote appropriate antibiotic prescribing through targeted interventions. In England, Out-of-Hours (OOH) services provide primary healthcare outside business hours. These services proportionally prescribe more antibiotics than other primary healthcare services. As part of the England TAP pilot we aimed to understand factors influencing prescribing behaviour among OOH prescribers.

Material/methods: We recruited OOH practitioners across different providers and locations using convenience and snowball sampling, and interviewed them using a semi-structured questionnaire. The theoretical domains framework guided data collection and analysis. We identified and reported on recurrent and important themes using saliency analysis.

Results: We interviewed 34 prescribers (doctors and nurses) in 10 organisations across 19 locations in July-August 2015. Compared with in-hours, prescribers felt patients presenting OOH were more acutely ill and consequently required more antibiotics. The lack of knowledge about the patient, lack of access to medical records and inability to follow-up patients caused apprehension in prescribers. They also perceived greater pressure from patients to obtain antibiotics than in-hours, and higher risk of complaints. These resulted in risk avoidance behaviour where antibiotics are prescribed “just in case”, due to a fear of patient deterioration or litigation. This behaviour was exacerbated by the lack of auditing and feedback on individual prescribing practice.

Conclusions: Higher prescribing OOH compared with in-hours was partly attributable to a higher proportion of acute presentations. However, the absence of ongoing patient-prescriber relationship, the prescriber’s lack of patient knowledge, and the absence of prescriber performance auditing also contributed to higher prescribing. Systematic and behavioural interventions incorporating this evidence will enable to optimise prescribing practice in this setting.