

PATTERNS AND QUALITY OF ANTIBIOTIC PRESCRIBING: RESULTS FROM A MULTICENTRE POINT PREVALENCE SURVEY IN GOVERNMENT HOSPITALS IN PERAK, MALAYSIA

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ABSTRACT

A point prevalence survey (PPS) is used to collect data on antimicrobial prescribing and assess a set of quality indicators associated with antimicrobial use. This study aimed to describe patterns and quality indicators of antibiotic prescribing among government hospitals in Perak, Malaysia. Data was retrospectively reviewed data from a PPS conducted from 1st to 14th December 2021 in 5 specialist and 10 non-specialist hospitals. All hospitalised patients on the day of the survey formed the study population. Those who had received at least one active systemic antibiotic by 8.00 a.m. or surgical prophylaxis within 24 h of the survey day were eligible for PPS. Data on pattern and quality indicators of prescribing (documentation of indication, guideline compliance and appropriateness of surgical prophylaxis) were analysed with descriptive evaluation. Of 2,386 hospitalised patients, 40% were prescribed antibiotics, mainly from the 'Access' category (52.3%). Antibiotic prevalence was highest in the intensive care unit (ICU) (90.8%). The predominant antibiotic class was beta-lactam/beta-lactamase inhibitor (32.6%), corresponding to community-acquired pneumonia (CAP) (19.8%) being the most common diagnosis. Intravenous administration was ordered in 79.4%, while empirical therapy constituted 84.5%. Documentation of indication within 24 h and guideline compliance were 88.2% and 69.8%, respectively. Inappropriate choice of antibiotics and improper dose/frequency were identified as important non-compliance issues. Of the surgical prophylaxis prescriptions, 35.6% were administered for more

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than 24 h. The findings have helped identify critical areas for antimicrobial stewardship interventions. Efforts are needed to reinforce compliance, documentation and improve surgical prophylaxis prescribing practices.

Keywords: Antibiotic prescribing, Point prevalence survey, Antimicrobial stewardship, Government hospitals