Antibiotic prescribing for patients with upper respiratory tract infections by emergency physicians in a Singapore tertiary hospital

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Objective: Despite the paucity of supporting evidence, the use of antibiotics in the management of upper respiratory tract infections (URTI) remains a persistent and worrying trend worldwide. This survey study set out to examine the antibiotic prescribing profile of emergency physicians for patients diagnosed with URTI at a local tertiary hospital. Methods: Patients seeking treatment for URTI at the emergency department in the year 2001 were identified by their ICD-9 code. The electronic medical records of a random sample of these patients were reviewed. Patients with the following documented findings were excluded: (a) a duration of more than 7 days between disease onset and date of consultation, (b) prior antibiotic usage or medical consultation, (c) presentation of purulent sputum and/or purulent nasal discharge, and (d) existing medical conditions requiring antibiotic treatment/prophylaxis. Chi-square and multivariate analyses were performed to assess the association of patient-related factors with antibiotic prescribing. Results: Of a random sample of 488 cases of URTI, inappropriate antibiotic prescribing was observed in 24% of cases (95% CI 20%, 28%). Significant associations were observed between antibiotic prescribing and month of consultation, patients' temperature and symptom of rhinorrhea. Conclusion: A substantial proportion of emergency department patients with URTI received antibiotics despite the lack of evidence supporting the drugs' effectiveness. Appropriate interventions to promote evidence-based prescribing amongst emergency physicians are required to reduce the extent of inappropriate antibiotic prescribing as well as to ensure the longevity of antibiotic effectiveness. (Hong Kong j.emerg.med. 2005;12:70-76)

Keywords: Anti-bacterial agents, drug prescriptions, hospital emergency service, upper respiratory tract infections