

# **Antibiotic Usage in Community-Acquired Infections in Hospitals in Taiwan**

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摘要

## **Abstract**

Background and Purpose: Using an epidemiologically meaningful in-hospital population with community-acquired infections, we evaluated antibiotic therapy in terms of indication and choice of antibiotic and microbiologic work-up. Methods: Infectious disease specialists evaluated charts of 436 patients from 9 hospitals and selected those who received antibiotics within 3 days of admission. Each antibiotic prescribed was marked for appropriateness, of indication and choice. Microbiologic isolates were evaluated for their clinical significance. Results: The most common infections were in the lower respiratory tract (46.1%). Each patient received a mean of 2.25 antibiotics for 8.1 +/- 6.4 days. Of the 975 courses of antibiotics given in the study period, indication and choice were correct in 37.4% and unsatisfactory in 14.5%. The vast majority of antibiotics used (79.2%) were first-line antibiotics - usually first-generation cephalosporins, aminoglycosides, and aminopenicillins. Most patients (66%) had a microbiology, laboratory work-up, but only 37.4% were judged by evaluators to have a meaningful microbiologic diagnosis. Among the 201 patients with lower respiratory tract infections, 105 (52.2%) had a diagnosis of pneumonia. A positive isolate was recovered in 30 (28.6%) patients, and most of these isolates (20.68.7%) were aerobic gram-negative rods. There were three positive blood cultures but none grew *Streptococcus pneumoniae*. Conclusions: Antibiotics were used excessively in number and duration. The microbiologic work-up had little effect on the indication and choice of antibiotics. Community-acquired pneumoniae differed markedly, from that in Western countries in that only 3.3% were caused by *S. pneumoniae*.