

IMPROVED ANTIBIOTIC PRESCRIBING PRACTICES FOR RESPIRATORY INFECTION IN ISRAEL, AFTER AN EDUCATIONAL INTERVENTION.

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Background: The global emergence of antibiotic resistance has been associated with increased and non judicious use of antibiotic. The objectives of this study were to assess the antibiotic prescribing practices among pediatricians in Israel and determine the impact of an educational intervention on these practices.

Methods: This study was conducted in five child health centers in Israel. The data was retrieved from the patients computerized medical records and was compared between pre and post interventional periods. The intervention included short course on the current guidelines for diagnosis and therapy of upper and lower respiratory infection. The main outcome measures included: 1. Compliance with the current recommendations for antibiotic therapy of acute otitis media (AOM), pharyngitis and sinusitis. 2. The rate of overall antibiotic use for AOM, pharyngitis, sinusitis, upper respiratory tract infection (URTI) and viral infection unspecified (VI).

Results: The compliance with the recommendations for the therapy of AOM (amoxicillin or observation) and pharyngitis (penicillin or observation) increased 1.8 fold (O.R=1.8; 95% CI 1.52-2.11) and 1.35 fold (O.R=1.35; 95% CI 1.13-1.61) respectively, between pre and post interventional periods. Overall antibiotic treatment for AOM decreased from 93% to 87.4% (P<0.05), for URTI from 13.8% to 11.5% (P<0.05) and for VI from 8% to 5.3% (P<0.05).

Conclusions: A significant improvement in the therapy of AOM and pharyngitis was seen after an educational intervention. Antibiotic prescribing overall was decreased for these diagnoses and for URTI and VI. We conclude that an educational intervention can improve antibiotic prescribing practices and decrease unnecessary antibiotic prescriptions.

