

Management of upper respiratory tract infections by different medical practices, including homeopathy, and consumption of antibiotics in primary care: the EPI3 cohort study in France 2007-2008.

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Abstract

BACKGROUND:

Prescribing of antibiotics for upper respiratory tract infections (URTI) varies substantially in primary care.

OBJECTIVES:

To describe and compare antibiotic and antipyretic/anti-inflammatory drugs use, URTI symptoms' resolution and occurrence of potentially-associated infections in patients seeking care from general practitioners (GPs) who exclusively prescribe conventional medications (GP-CM), regularly prescribe homeopathy within a mixed practice (GP-Mx), or are certified homeopathic GPs (GP-Ho).

METHOD:

The EPI3 survey was a nationwide population-based study of a representative sample of 825 GPs and their patients in France (2007-2008). GP recruitment was stratified by self-declared homeopathic prescribing preferences. Adults and children with confirmed URTI were asked to participate in a standardized telephone interview at inclusion, one-, three- and twelve-month follow up. Study outcomes included medication consumption, URTI symptoms' resolution and potentially-associated infections (sinusitis or otitis media/externa) as reported by patients. Analyses included calibration to account for non-respondents and groups were compared using multivariate analyses adjusting for baseline differences with a propensity score.

RESULTS:

518 adults and children with URTI (79.3% rhinopharyngitis) were included (36.9% response rate comparable between groups). As opposed to GP-CM patients, patients in the GP-Ho group showed significantly lower consumption of antibiotics (Odds ratio (OR)=0.43, 95% confidence interval (CI): 0.27-0.68) and antipyretic/anti-inflammatory drugs (OR=0.54, 95% CI: 0.38-0.76) with similar evolution in related symptoms (OR=1.16, 95% CI: 0.64-2.10). An excess of potentially-associated infections (OR=1.70, 95% CI: 0.90-3.20) was observed in the GP-Ho group (not statistically significant). No difference was found between GP-CM and GP-Mx patients.

CONCLUSION:

Patients who chose to consult GPs certified in homeopathy used less antibiotics and antipyretic/anti-inflammatory drugs for URTI than those seen by GPs prescribing conventional medications. No difference was observed in patients consulting GPs within mixed-practice. A non-statistically significant excess was estimated through modelling for associated infections in the GP-Ho group and needs to be further studied.