

Indications for antimicrobial prescribing in European nursing homes: results from a point prevalence survey.

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Source

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Abstract

PURPOSE:

In light of the emerging problem with multiresistant microorganisms in nursing homes (NHs), the European Surveillance of Antimicrobial Consumption NH subproject was set up to measure and describe antimicrobial use across Europe. The aim of this paper was to investigate the indications for antimicrobial use and hence identify targets for quality improvement.

METHODS:

Data were obtained from a point prevalence survey conducted in 323 NHs across 21 European countries. A resident questionnaire had to be completed for each resident receiving an antimicrobial, collecting data such as compound name and indication for antimicrobial prescribing. Four main indications for antimicrobial use were recorded: nasal decolonisation of methicillin-resistant *Staphylococcus aureus* (MRSA) carriage with mupirocin, prophylactic, empirical, and microbiologically documented treatments. The latter three treatment types were further subdivided according to the targeted infections.

RESULTS:

In total, 1966 residents were treated with 2046 antimicrobials. Empirical treatments were most common (54.4% of all antimicrobial therapies; prevalence: 3.39 per 100 eligible residents), followed by prophylactic (28.8%; prevalence: 1.87%) and microbiologically documented (16.1%; prevalence: 1.01%) regimes. MRSA decolonisation with nasal mupirocin (0.7%; prevalence: 0.02%) was uncommon. Antimicrobials were most frequently prescribed for the prevention or treatment of urinary (49.5%; prevalence: 3.23%) and respiratory (31.8%; prevalence: 1.81%) tract infections. A very high proportion of uroprophylaxis was reported (25.6% of all prescribed antimicrobials; prevalence: 1.67%).

CONCLUSIONS:

The indications for antimicrobial prescribing varied markedly between countries. We identified uroprophylaxis as a possible target for quality improvement.