

O043

Oral Session

Monitoring antibiotic use

HEALTHCARE-ASSOCIATED INFECTIONS AND ANTIMICROBIAL USE IN EUROPEAN LONG-TERM CARE FACILITIES (HALT): RESULTS OF TWO POINT PREVALENCE SURVEYS

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Objectives

In 2008 and 2011, the European Centre for Disease Prevention and Control provided funding for the healthcare-associated infections (HAI) and antimicrobial use in European long-term care facilities (LTCF) project (HALT). The aims of the current study were to compare the results of the two point prevalence surveys (PPS) that were organised in light of this project.

Methods

A first PPS was conducted from May to September 2010, while a second PPS was organised from April to May 2013. All types of LTCFs could participate in the study. A questionnaire had to be completed for each resident under systemic antimicrobial treatment and/or presenting signs/symptoms of an active HAI on the day of the survey. Antivirals and local antibiotic use were excluded from the study. All new or acutely worse symptoms of an infection had to be reported. Infections already present or in incubation at the time of admission to the LTCF had to be excluded. In PPS-1, infection data were collected using a symptom-based approach and infection definitions developed by McGeer et al. (2009). During PPS-2, surveyors had to apply infection definitions themselves. This time, revised McGeer criteria (Stone et al, 2012) were used.

Results

A total of 722 LTCFs (25 countries) and 1181 LTCFs (17 countries) participated in the surveys, respectively. Data from general nursing homes, residential homes and mixed facilities were retained for further analysis (694 LTCFs in PPS-1 vs. 1051 in PPS-2).

The crude prevalence of antimicrobial use was 4.4% in 2010 and 4.3% in 2013. Antibacterials for systemic use (ATC class J01) represented the majority of all antimicrobials prescribed (97.0% vs. 96.2%). In both studies, following J01 subclasses were most frequently prescribed: J01C beta-lactams, penicillins (29.3% vs. 28.7%), J01X other antibacterials (19.8% vs. 19.4%) and J01M quinolones (16.0% vs. 15.5%).

The crude prevalence of residents with at least one HAI was 2.4% in 2010 and 3.4% in 2013. In both studies, the main infection groups were respiratory tract infections (33.6% vs. 31.2%), urinary tract infections (22.3% vs. 31.2%) and skin infections (21.4% vs. 22.8%).

Conclusions

This project collected valuable information on HAI and antimicrobial use in LTCFs, using a standardized and feasible methodology. Training was provided to improve the surveillance skills of participating LTCF staff. With regard to antimicrobial use, many comparable results were found between the 2010 and 2013 PPS. The prevalence of HAI was higher during the second PPS but might be the result of the different approach that was used to collect the infection data. A concordance study (still to be conducted) should explore this hypothesis.