

Study hints at antibiotic overuse in home-care patients

June 15 2011

A study of Canadian home-care patients suggests doctors may be overprescribing antibiotics for patients receiving ongoing medical care at home. The study, published in the June issue of *Infection Control and Hospital Epidemiology*, the journal of the Society for Healthcare Epidemiology of America, suggests that more should be done to monitor antibiotic use in home-care patients to avoid misuse that could decrease the efficacy of the drugs over time.

According to the study, led by researchers from McMaster University in Ontario, [antibiotic prescriptions](#) for home-care [patients](#) are quite common, with more than 6,800 patients receiving the drugs. Additionally, medical data on the patients reveal disturbing prescribing patterns, says Dr. Mark Loeb, one of the study's authors.

For instance, patients under the age of 65 were substantially more likely to receive [antibiotics](#). That finding suggests that "physicians may be overly cautious with younger patients," Loeb said. In contrast, patients with longer life expectancies were less likely to receive antibiotics, despite the fact they would likely benefit more from the drugs compared to patients with poorer [life expectancies](#).

"Taken together, our results reveal tremendous variability in how and why antibiotics are prescribed, and that overuse in the home-care population is likely," Loeb said. "Younger and sicker patients seem to be at added risk for misuse and should be the focus of further study to assess the appropriateness of [antibiotic use](#) at home."

Adding concern was the fact that the most common class of antibiotics prescribed in the study was fluoroquinolones, a class of drugs often associated with increased rates of resistance. Overuse of these drugs could weaken their efficacy, threatening their effectiveness against these and other emerging infections.

The researchers used data on more than 125,000 patients receiving home care for more than 60 days from 2006 to 2007. [Medical data](#) were collected by nurses through observation, client and family self-reports, and other medical records.

As the threat of drug resistant infections has increased in recent years, much work has been done to identify settings in which antibiotics may be overprescribed. However, before this study very little was known about antibiotics in the home care population, the researchers say.

"Our results illustrate the importance of continuing to monitor antibiotic use in home-care patients, and the need for more effective methods of diagnosis that allow for appropriate antibiotic use," Loeb said. Antibiotic use studies are critical to understanding the basic science of how and why resistance is on the rise.

More information: Dominik Mertz, Erin Y. Tjam, Jeff Poss, John P. Hirdes, Bruce Arai, Jennie Johnstone, Micaela Jantzi, and Mark Loeb, "Prevalence and predictors of antibiotic use in community-based elderly in Ontario, Canada." *Infection Control and Hospital Epidemiology* 32:6.

Provided by Society for Healthcare Epidemiology of America

Citation: Study hints at antibiotic overuse in home-care patients (2011, June 15) retrieved 30 April 2024 from

<https://medicalxpress.com/news/2011-06-hints-antibiotic-overuse-home-care-patients.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.