

Hispanics Self-Medicate With Oral Antibiotics

BY DAMIAN McNAMARA
Miami Bureau

NEW ORLEANS — A substantial number of people in the U.S. Hispanic community self-medicate with oral antibiotics, according to a study presented at the annual conference of the Society of Teachers of Family Medicine.

Many countries in Latin America dispense antibiotics without a prescription, and individuals from these countries have cultural norms for self-medication, said Arch G. Mainous III, Ph.D.

The researchers interviewed 219 self-identified Hispanics, and 45% indicated they had purchased non-prescribed antibiotics outside the United States at some time; 16% had imported them. "Those results were striking," said Dr. Mainous, professor of family medicine at the Medical University of South Carolina, Charleston. "Another striking feature was that 19% had acquired antibiotics not prescribed for the person in the United States; 93% [of them] said they got them in stores."

Latin America has a high level of antibiotic resistance, Dr. Mainous said. U.S. interventions on resistance have decreased antibiotic use, but they focus on prescribing. To correct inappropriate acquisition and use, patient education

materials should not only be available in Spanish, but also should be culturally sensitive, he suggested.

The findings of the study, Dr. Mainous said, "point to a large unrecognized reservoir of nonprescribed antibiotics likely used for inappropriate self-medication. We know from other studies that people in countries where antibiotics are available tend to take subtherapeutic doses."

All participants were 18 years and older and were recruited from one of two clinics in Charleston. The majority (75%) were born in Mexico; 41% said they had been in the United States fewer than 4 years; and 90% did not have medical insurance. The common cold, ear infections, cough, and sore throat were the primary illnesses for which respondents took nonprescribed antibiotics.

Of interviewed individuals, 64% said they acquired antibiotics without a prescription because it was preferable to a physician visit. "Only 7% said there was a language barrier, so most did not want to spend the money or go to a doctor."

This phenomenon is not limited to Hispanics, Dr. Mainous pointed out. "People in the Philippines, Taiwan, and Bangladesh will also buy subtherapeutic doses for self-medication." ■

Resistant Gram-Negative Bacilli Pose Threat in ICU

LOS ANGELES — Forty percent of infectious disease specialists named multidrug-resistant gram-negative bacilli as the greatest threat to ICU patients, among all drug-resistant organisms.

Those physicians practicing in the mid-Atlantic region expressed the most concern in the survey.

Of particular note, specialists say they are having to resort to polymyxins to treat MDR-GNB infections despite the risk of nephrotoxicity and neurotoxicity associated with such drugs, said Rebecca H. Sunenshine, M.D., of the Centers for Disease Control and Prevention in Atlanta.

"People are starting to worry a lot about 'gram-negatives,'" she said in an interview at the annual meeting of the Society for Healthcare Epidemiology of America.

The Infectious Diseases Society of America's Emerging Infections Network surveyed its members in September 2004 regarding the emergence of nosocomial in-

fections involving MDR-GNB.

More than 60% of 440 members surveyed from throughout the United States, U.S. territories, and Canada said they had treated at least one MDR-GNB infection resistant to all antimicrobials tested except polymyxins in the previous 12 months. In the mid-Atlantic states, 76% reported seeing at least one such infection during the year.

Most reported were MDR *Pseudomonas* infections—2,581 reported by 197 infectious disease specialists. Next was MDR *Acinetobacter*—reported by 140 specialists who had seen 1,439 cases.

Just 60% of respondents said polymyxins were available in their hospitals, and only a quarter said they were on formulary. "These drugs are not universally available, and susceptibility testing for them is not routinely performed. Other antimicrobial agents should be developed to treat these resistant infections," the investigators said.

—Betsy Bates

MINDFUL PRACTICE

Are Delayed Antibiotics for Cough Helpful?

BY JON O. EBBERT, M.D., AND ERIC G. TANGALOS, M.D.

The Problem

A 45-year-old male presents with a 6-day history of productive cough and low-grade fevers. He has had no prior history of pneumonia. His temperature and exam are normal. You are not convinced that he needs antibiotics right now, but you have always believed that by prescribing them, you can increase patient satisfaction.

The Question

Are delayed antibiotic prescriptions effective for decreasing antibiotic use, compared with immediate antibiotic prescriptions? And do delayed antibiotic prescriptions decrease patient satisfaction compared to immediate antibiotic prescriptions?

The Evidence

We went to PubMed (www.pubmed.gov) and entered "antibiotics" and "cough," limiting the search to randomized controlled trials.

Our Critique

This was a well-conducted, randomized clinical trial. Sealed envelopes containing leaflets providing structured advice were given to the subjects during the consultation. However, all subjects received general verbal counseling about the course of the disease, and so the effect of the leaflet may have been washed out. Most impressive is the observation that delayed antibiotics or no antibiotics resulted in little difference in the severity of symptoms, compared with immediate treatment, while reducing antibiotic use and belief in antibiotics. Now the biggest challenge for generalists is to get ourselves and our patients to believe it.

Patient Preferences and Clinical Decision

You counsel the patient on the anticipated course of the disease and tell him that his symptoms will last a total of 3 weeks. You offer to call in a prescription for him if he is not better in 2 weeks. He agrees to that, and to taking symptomatic measures.



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P. Little, et al.

Information leaflet and antibiotic prescribing strategies for acute lower respiratory tract infection: a randomized controlled trial. *JAMA* 2005;293:3029-35.

► **Design and Setting:** Randomized, controlled clinical trial in a primary care setting in Europe.

► **Subjects:** Patients were included if they were at least 3 years of age presenting to the primary care setting with an acute, uncomplicated illness lasting 21 days or less. To be eligible, patients had to have cough as the main symptom, with at least one symptom localizing to the lower respiratory tract (sputum, chest pain, dyspnea, or wheeze). Patients were excluded if they had pneumonia, defined as having focal chest findings (crepitus, bronchial wheezing) and systemic symptoms (high fever, vomiting, or severe diarrhea). Patients were also excluded if they had asthma, chronic or acute lung disease (e.g., cystic fibrosis), cardiovascular disease, major psychiatric diagnoses, mental subnormality, dementia, or complications from previous episodes of lower respiratory tract infection (such as hospital admission for pneumonia).

► **Intervention:** Patients were assigned to one of six groups in a factorial design (leaflet yes/no × immediate antibiotics/no offer of antibiotics/delayed antibiotics). The leaflet was a one-page handout that explained the natural history of the disease, addressed the patients' major worries, and gave advice on when to seek further assistance (i.e., for persistent fever or worsening shortness of breath). The delayed antibiotic prescription was written at the time of the initial consultation and left in a box at reception. The decision to use the antibiotic was left to the discretion of the patient if they had not improved in 14 days; no appointment was needed to obtain the prescription.

The prescribed antibiotics were 250-mg amoxicillin three times per day for 10 days or 250-mg erythromycin four times per day if allergic to penicillin. For patients in each group, the physician gave the patient verbal information on the natural history of the illness and advice supporting the proposed strategy, including guidance on use of analgesics.

► **Outcomes:** Primary outcomes included daily symptoms, as recorded in diaries. Patients were told to note cough, dyspnea, sputum production, well-being, sleep disturbance, and activity disturbance. They also rated satisfaction with different aspects of treatment, and their belief in antibiotics. Whether antibiotics were used, and the number of days used, were also recorded.

► **Results:** During a 5-year period, 807 subjects were randomized; 671 (83%) were older than 16 years. Seventy percent returned completed diaries after 3 weeks. Use of the leaflet was not associated with any differences in the use of antibiotics, belief in the usefulness of antibiotics, or satisfaction with treatment.

Compared with no antibiotics, immediate or delayed antibiotics did not change the duration of cough or severity of symptoms 2-4 days after the physician visit. Immediate antibiotics reduced the duration of "moderately bad symptoms" by 1 day overall, and decreased duration by less than 1 day for phlegm, sleep disturbance, activity disturbance, and feeling unwell. There were fewer return visits with cough with either delayed prescribing or immediate antibiotics, compared with no antibiotics ($P = .04$). One patient in the no-antibiotics group developed pneumonia, was hospitalized, and recovered fully.