

Analysis of the request for anti-bacterial agents in Spanish community pharmacies

Ana MOLINERO^{1,2*}, Fernando CANTALAPIEDRA-FERNÁNDEZ^{1,2}, Pedro GUTIÉRREZ-RÍOS^{1,2}, Alejandro EGUILLEOR-VILLENA^{1,2}, José A. CARBAJAL-DE LARA^{1,2}

1. SEFAC - Spanish Society of Family and Community Pharmacy. 2. Community Pharmacist. anamoliner@sefac.org

BACKGROUND

Anti-bacterial resistance is one of the main challenges facing medicine today.

In Spain, the type of private physician who prescribes antibiotics and for what purpose is unknown.

DESIGN AND METHOD

A prospective, cross-sectional, descriptive, observational multicenter study was carried out in Spanish community pharmacies during 4 weeks, one in each season of the year (2016-2017). Classified by the Spanish Medicines Agency (AEMPS) as an EPA-OD study with ethics committee approval.

Case report form (eCRF) variables: type of prescription/self-medication and reason for request, type of physician and antibiotic requested.

A platform <http://investigacionsefac.org/antibioticos/> was created for data compilation.

Statistical Analysis: STATA MP13.1.

OBJECTIVE

To quantify oral antibiotic J01 (Anatomical Therapeutic Chemical classification: antibacterials for systemic use) with private prescription (PP), irregular (IP) and self-medication (SM) in the community pharmacy (CP).

To analyze the prescribing physician profile, for what prescribes antibiotics and why people demand antibiotics without a prescription.

RESULTS

A total of 365 community pharmacists (71% women) in 247 community pharmacies of all 17 autonomous regions have participated in the research.

A total of 21254 oral antibiotic containers corresponding to therapeutic group J01 were dispensed during the period; of these, 16.8% (n=3575) corresponded to private prescriptions.

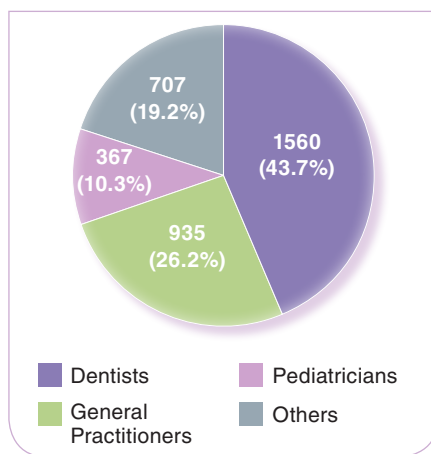
There were 5577 requests for antibiotics during the data collection period; of these, 64% corresponded to private prescription, 15% were demands with irregular prescription, and 21% corresponded to self-medication.

A total of 1.5% of the private prescriptions were finally not dispensed.

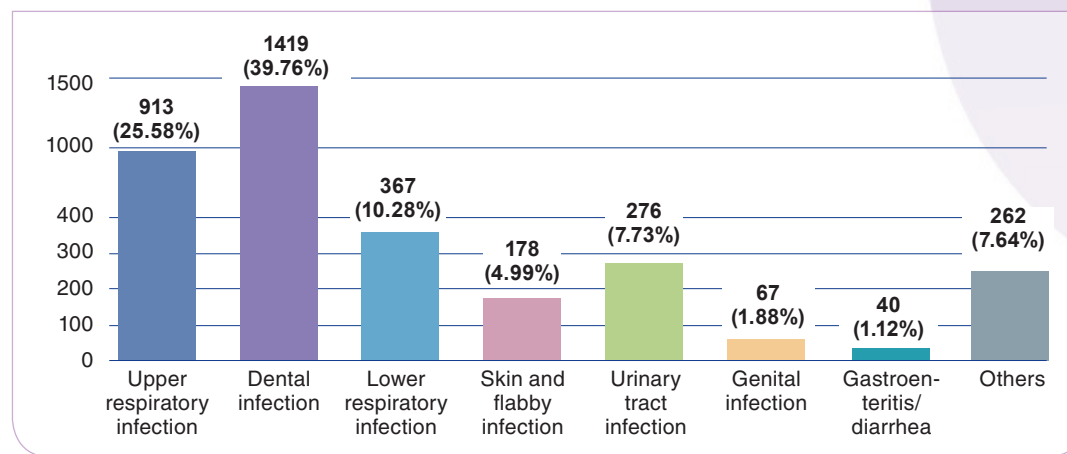
Requests for self-medication were not dispensed.

PRIVATE PRESCRIPTION (n=3569)

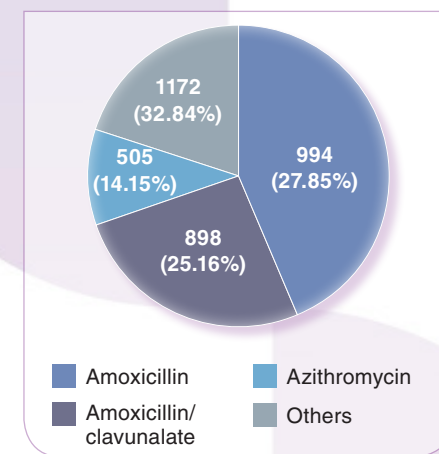
Prescribing Physician profile



Therapeutic indication



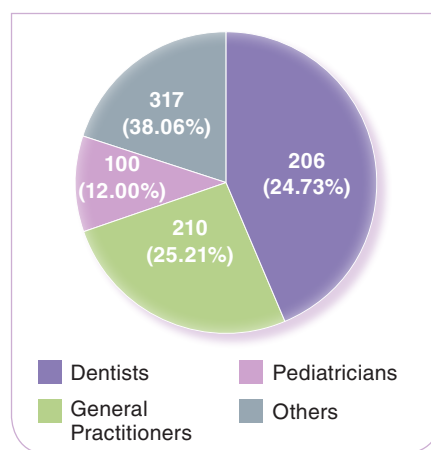
Prescribed antibiotic



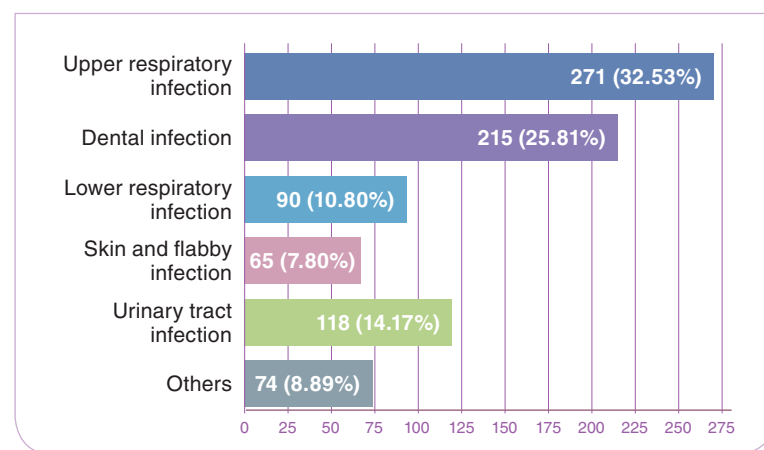
IRREGULAR PRESCRIPTION* (n=833)

* A prescription made by a physician in a format different from that defined in the Spanish Royal Decree (RD) 1718/2010.

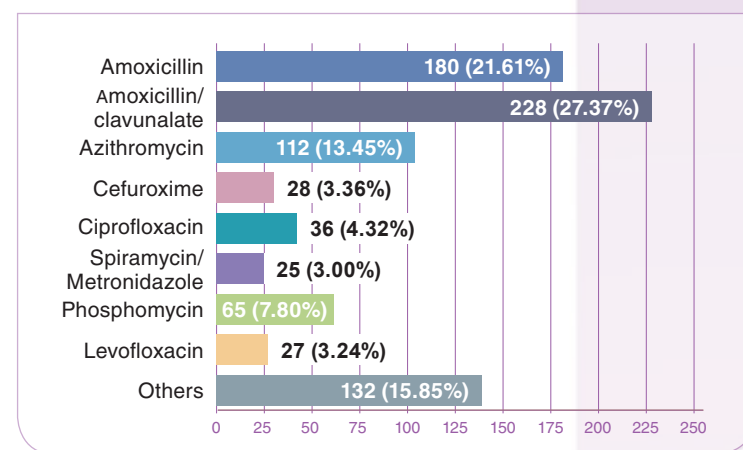
Prescribing Physician profile



Therapeutic indication

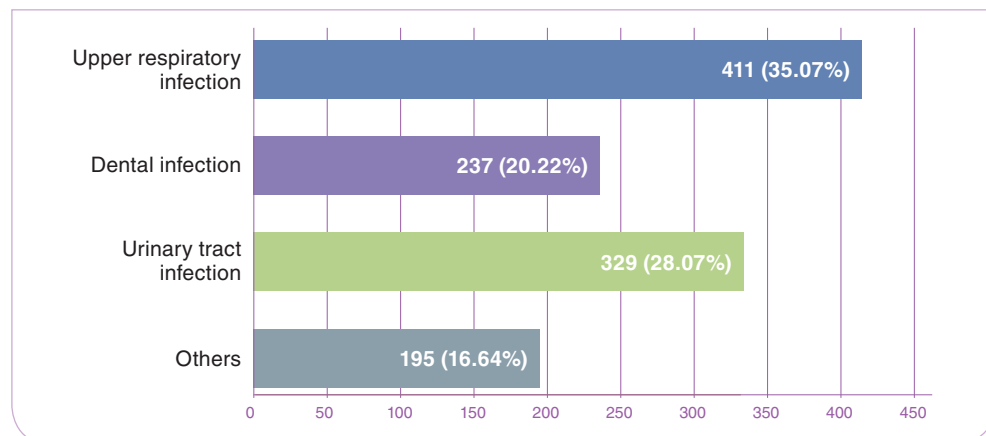


Prescribed antibiotic

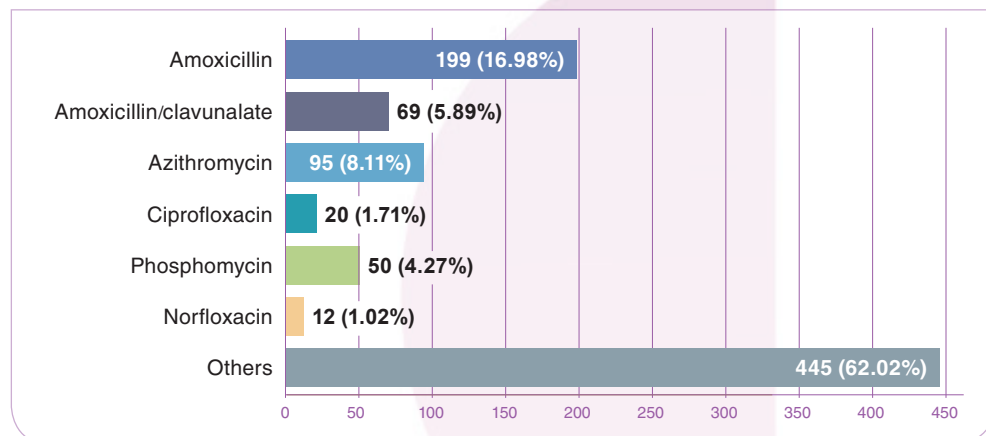


SELF-MEDICATION (n=1172)

What is the cause of the request?



Antibiotic in demand



CONCLUSIONS

- Dentists make half of all private prescriptions for dental infections.
- A quarter of irregular prescriptions are made by General Practitioners and a quarter by dentists for the treatment of upper tract and dental infections.
- Self-medication is requested for upper tract infections, urinary tract infections, and dental infections.
- The most requested antibiotics are amoxicillin (on private prescription and self-medication) and amoxicillin/clavunate (on irregular prescription).

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ACKNOWLEDGMENTS

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