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Indications and prescriptions of penicillins in a population of Colombia: A cross-sectional study

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Jorge Machado Alba¹

¹Universidad Tecnologica de Pereira - Audifarma SA

UTP-Audifarma



Jorge Machado Alba

Universidad Tecnologica de Pereira - Audifarma SA

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We use this protocol and it's working

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Disclaimer

Not conflict of interest

Abstract

Introduction: Inappropriate

use of antibiotics plays a key role in increasing bacterial resistance, which is a global problem that has increased over time.

Objective: To

determine the prescription patterns and indications for the use of penicillins in a group of patients from Colombia.

Methods: This study was a

cross-sectional study on the use of penicillins in outpatients. Approved and unapproved indications were determined from records of the Food and Drug Administration (FDA) of the United States and the National Institute of Food and Drug Surveillance (INVIMA) of Colombia. Descriptive and multivariate analyses were performed.

Results: A total of 137,070

patients were identified; the average age was 35.8 ± 23.5 years, and 56.2% were women. Amoxicillin (73.4%), dicloxacillin (11.7%) and sultamicillin (6.0%) were the most commonly prescribed penicillins, mainly for upper respiratory tract infections (43.0%). In 68.9% of cases, penicillins were used for approved indications, especially to treat *Helicobacter pylori* (17.3%). In 31.1% of cases, penicillin prescriptions were used for unapproved indications (e.g., acute rhinopharyngitis [8.1%]). Patients under 18 years of age (OR: 1.87; 95% CI: 1.78-1.96), those from municipalities (OR: 1.51; 95% CI: 1.44-1.57), those with previous antibiotic use (OR: 2.49; 95% CI: 2.26-2.74), those with skin and soft tissue infections (OR: 2.82; 95% CI: 2.57-3.09), those with lower respiratory tract infections (OR: 2.02; 95% CI: 1.89-2.16), those managed with general medicine (OR: 1.37; 95% CI: 1.25-1.51), and those treated with dicloxacillin (OR: 2, 84; 95% CI: 2.07-3.89) were more likely to be prescribed penicillins for unapproved indications.

Conclusions:

Amoxicillin was the most widely used penicillin in outpatients. Penicillins were frequently used for unapproved indications not recommended by clinical practice guidelines.

Attachments



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76.3MB

