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PE010: Antibiotic consumption in Portugal: 2010 and 2011

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Background and objective:
The use of antibiotics has contributed to a marked decrease in morbidity caused by communicable and infectious diseases over the past few years.
The aim of our study is to evaluate the use of antibiotics in clinic in 2010 and 2011, considering two different methodologies: the defined daily dose per 1000 inhabitants per day (DHD) and the number of packages per 1000 inhabitants per day (PHD).
Setting and method:
Two databases were used: a dispensing antibiotics database with prescription in ambulatory, provided by the National Drug Authority and Health Products (INFARMED), and a sales database of wholesalers, provided by the International Medical Statistics (IMS) Health. The classification and grouping of the molecules are made according to the criteria of the ATC system (Anatomical Therapeutic Chemical), and its consumption is expressed in defined daily dose per 1000 inhabitants per day (DHD) and the number of packages per 1000 inhabitants and per day (PHD).
Main outcome measures:
1. Defined daily dose per 1000 inhabitants per day (DHD).
2. Number of packages per 1000 inhabitants per day (PHD).
3. Percentage of consumed antibiotics.

Results:
The analysis of the consumption of antibiotics in clinic in Portugal between 2010 and 2011, shows that while the total sales of antibiotics from wholesalers to pharmacies have decreased, 4.69 % DHD and 3.02 % PHD, the consumption per prescription has increased 2.23 % DHD and 0.65 % PHD.
Regarding the group of antibiotics, the group of penicillines showed the highest consumption both at the level of prescription and at the level of sales from wholesalers to pharmacies, according to the two methods of analysis. The cephalosporins and quinolones were two groups of antibiotics that showed a decrease in consumption in both databases, confirming the trend observed in other studies.
The comparative analysis of antibiotic consumption in different health regions has shown that there are significant differences. The North region presented a greater reduction (10.26 DHD) consumption with prescription while the Alentejo region was the one that presented a greater decrease (8.41 and 5.01 % DHD PHD) of total sales from wholesalers to pharmacies.
Conclusion:
The present study has shown differences in the results by different methods and data sources, concluding that it was necessary to use several analysis methods, in order to improve the interpretation of changes in the consumption of antibiotics.
Disclosure of interest
: None declared