

Analysis of antibiotic use in an intensive care unit of a county hospital

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Abstract

Introduction: National data on the consumption of antibiotics in hospital are relatively just a few, therefore a comparative analysis of this consumption is limited. In the conclusions of the Report on the use of antibiotics, bacterial resistance and infections associated with healthcare in Romania for the year 2016, the excessive consumption of antibiotics is specified and excessive. The probability that patients hospitalized to receive an antibiotic is very high. *Objectives:* Our study aim is to determine the antibiotics consumption in a ICU department of a county hospital for the first 4 months of the year 2019. *Materials and methods:* In order to attend our objective, our study design is retrospective and descriptive and we used observational statistical analysis, based on quantitative research, carried out at Emergency Clinical County Hospital of Oradea, during the first semester of the year 2019, using the hospital's IT system InfoWorld. *Results:* In the first quarter of 2019, a total antibiotic consumption has a value of 906770,27 RON (190,000 Euro). Most antibiotics are prescribed on the ICU department, representing approximately 46% of the total hospital consumption, followed by surgical departments (28.3%) and medical departments (25.7%). The evolution of antibiotic use is increasing in the first 4 months of the year on the ICU departments, while on the surgical and medical departments the consumption is fluctuating from one month to another. In the ICU departments antibiotic use in April increased by 40% compared to January 2019. Fluctuating consumption from one month to the next, on medical and surgical departments; a significant increase in April on the ICU departments. The implementation of antibiotic prophylaxis protocols in April led to a slight decrease in antibiotic use in surgical departments.

Keywords:

Antibiotic Consumption; Intensive Care Unit (ICU); Prophylaxis Protocols