



Prescriptive appropriateness of Antibiotic Therapies: crucial role of the Hospital Pharmacist



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Background and importance

In the context of the Single Dose, the pharmacist is involved in the validation of patients' personalized therapies with the attempt of minimizing errors in therapy.

Aim and objectives

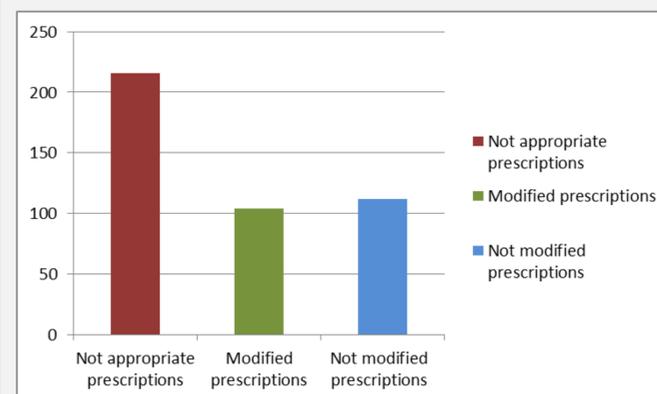
The aim of this study is to evaluate, through the computerized prescription, the increase in prescribing appropriateness of antibiotic therapy, following notification given by the pharmacist with the relative money savings.

Material and methods

The analysis was carried out by extrapolating, from the Unit Dose (UD) software you are using, the prescriptions of antibiotics subjected to a single request motivated (SRM) in the period from 01 January 2019 to 31 December 2019. We analyzed the inappropriate prescriptions where the hospital pharmacist affixed the "note", sent immediately to the prescriber. These prescriptions were divided into inappropriate for:

- posology,
- duration of therapy
- interaction /incompatibility.

Subsequently, the variation in prescriptions due to pharmacist intervention was evaluated; i.e., the number of inappropriate prescriptions which have been changed by the physician has been extrapolated. In the pharmaco-economic field, we evaluated the expenditure of inappropriate prescriptions without the notification of hospital pharmacist and the savings obtained following the change in therapy.



Results

In the observed period, total prescriptions of antibiotics with SRM were 2067, 216 of them (10.45%) were not appropriate. The number of prescriptions modified following the pharmacist's intervention was 104 (48%). Pharmaco-economic analysis shows that the expenditure incurred for the dispensation of antibiotics related to inappropriate prescriptions changed by notification from the pharmacist, amounts to € 77.537 for 12 months. If the physician had not modify the therapies, the expense would have amounted to € 162.762; therefor the money saving was € 85.225 in 12 months.

Conclusion and relevance

The control and validation of medical prescriptions by the pharmacist produces an important added value to the risk management process in that, in almost 50% of cases, his notes lead to an actual change in the medical prescription. The use of computerized prescriptions and single dose management contribute strongly to the objectives of verifying prescriptive appropriateness as a tool to govern effectiveness, efficiency and costs in healthcare.

