



ECONOMIC RESULTS OF A MODEL FOR THE DETECTION OF PHARMACOLOGICAL INEFFICIENCIES IN PATIENTS WITH CHRONIC DISEASES



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Pharmacological inefficiencies in the treatment of chronic diseases can lead to higher healthcare costs and compromised patient outcomes. Leveraging deep learning and automation, this study developed a model to detect these inefficiencies in real time. By implementing a technological tool, the study aimed to improve patient care and optimize the use of healthcare resources, ensuring timely management of risks and avoiding interruptions in treatment.

Objective

To describe the results obtained from a model for pharmacological inefficiency detection in patients with chronic pathologies using deep learning and automation.

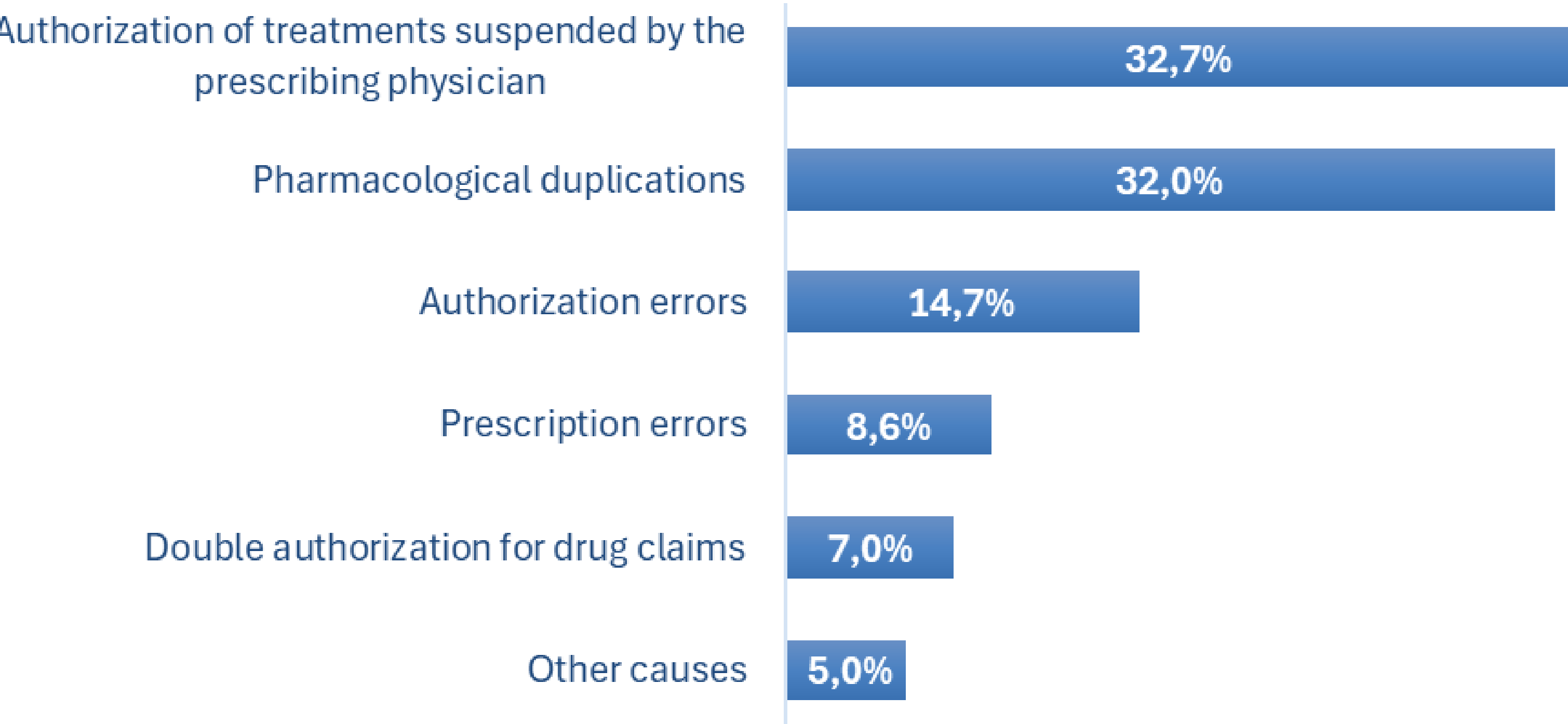
Method

Descriptive observational study carried out during 2023, in patients with chronic pathologies attended at Helpharma. The variables associated with pharmacological and administrative inefficiencies were identified and a technological tool was developed to detect these inefficiencies automatically in all patients. The patients who presented inefficiencies were evaluated by pharmacists, guaranteeing timely risk management and avoiding pharmacological interruptions. From the information obtained, a univariate analysis was performed, with summary measures of central tendency, and relative and cumulative frequencies. The statistical package R Core Team Version 4.2 (2022) was used.

Results

A total of 13677 pharmacological inefficiencies were detected in 11202 patients, mean age of the patients was 48 years (SD 25), 64.4% female.

The pharmacological inefficiencies identified and managed were:



The interventions carried out by the pharmacist represented savings equivalent to 6,888,373.29 USD (574,031.08 USD average per month).

The most savings in oncological drugs (4,465,584.68 USD), inhalers and biologics for respiratory diseases (1,560,608.87 USD), immunosuppressors (209,332.10 USD) and immunoglobulins (146,768.61 USD).

Conclusion

A technological tool was implemented in the detection process of pharmacological inefficiencies, which not only optimized the processes and care of patients at risk of pharmacological failure but also made a significant contribution to saving health resources.

Conflict of interest: none.