

PHARMACEUTICAL INTERVENTIONS IN OUTPATIENT ONCOLOGY PHARMACY: CONTRIBUTING PATIENT SAFETY IN THE ANALYSIS OF MEDICAL PRESCRIPTIONS.

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Introduction: Oncology treatment is characterized by complex therapeutic regimens, often involving medications with a narrow therapeutic margin, high toxicity, and a high risk of drug interactions, which increases the likelihood of medication errors and adverse events and requires specialized attention throughout patient care. **Objectives:** To describe and analyze the pharmaceutical interventions performed in an outpatient oncology pharmacy during the technical analysis of medical prescriptions, highlighting their nature, frequency, acceptance by the medical team, and associated clinical impact. **Methods:** This observational, descriptive, and retrospective study analyzed data recorded in an institutional spreadsheet of the outpatient oncology pharmacy of a High-Complexity Oncology Unit (UNACON) between January 2024 and April 2025. All pharmaceutical interventions performed by oncology clinical pharmacists during the technical analysis of outpatient prescriptions were included. Variables assessed comprised the type of intervention, the reason for intervention, and the outcome regarding acceptance by the medical team. Data were organized in Microsoft Excel® spreadsheets and analyzed using descriptive statistics, with results presented as absolute and relative frequencies. **Results:** A total of 4,788 pharmaceutical interventions were recorded during the study period. The most frequent interventions included adjustment of drug concentration in large-volume parenteral solutions (37%), supplementation or correction of patient data in prescriptions (28%), and adjustment of prescribed infusion time (25%). All interventions were accepted by the medical teams, corresponding to an acceptance rate of 100%. Antineoplastic agents and antiemetics were the most commonly involved drug classes. Additionally, 37% of the interventions directly contributed to the prevention of medication errors with potential clinical impact. **Conclusion:** Pharmaceutical interventions in the outpatient oncology setting play a strategic role in improving patient safety, reducing therapy-related risks, and optimizing clinical outcomes, reinforcing the importance of clinical pharmacy practice and systematic documentation of these actions in oncology care.

Keywords: Pharmaceutical Interventions; Oncology outpatient pharmacy; Patient safety