

ASSESSMENT OF CLINICAL & ECONOMIC IMPACT OF AMBULATORY CARE PHARMACISTS' INTERVENTIONS ON PRESCRIBING ERRORS AT A CANCER HOSPITAL PAKISTAN

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BACKGROUND

Prescribing errors (PEs) in oncology setting remain a major threat to patient safety, leading to adverse clinical outcomes, treatment delays, and increased healthcare costs, emphasizing the critical importance of ensuring medication safety in cancer care.

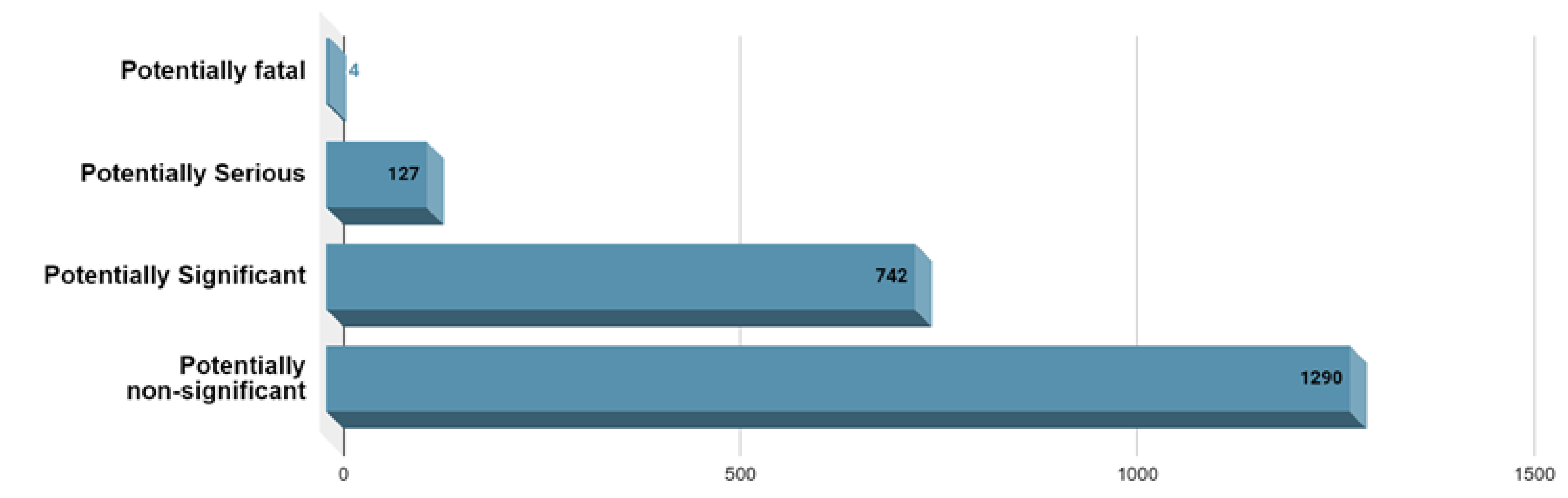
OBJECTIVE

The objective of the study was to evaluate the potential clinical consequences of prescribing errors and assess the clinical and economic impact of pharmacists’ interventions (PIs) in ambulatory care settings.

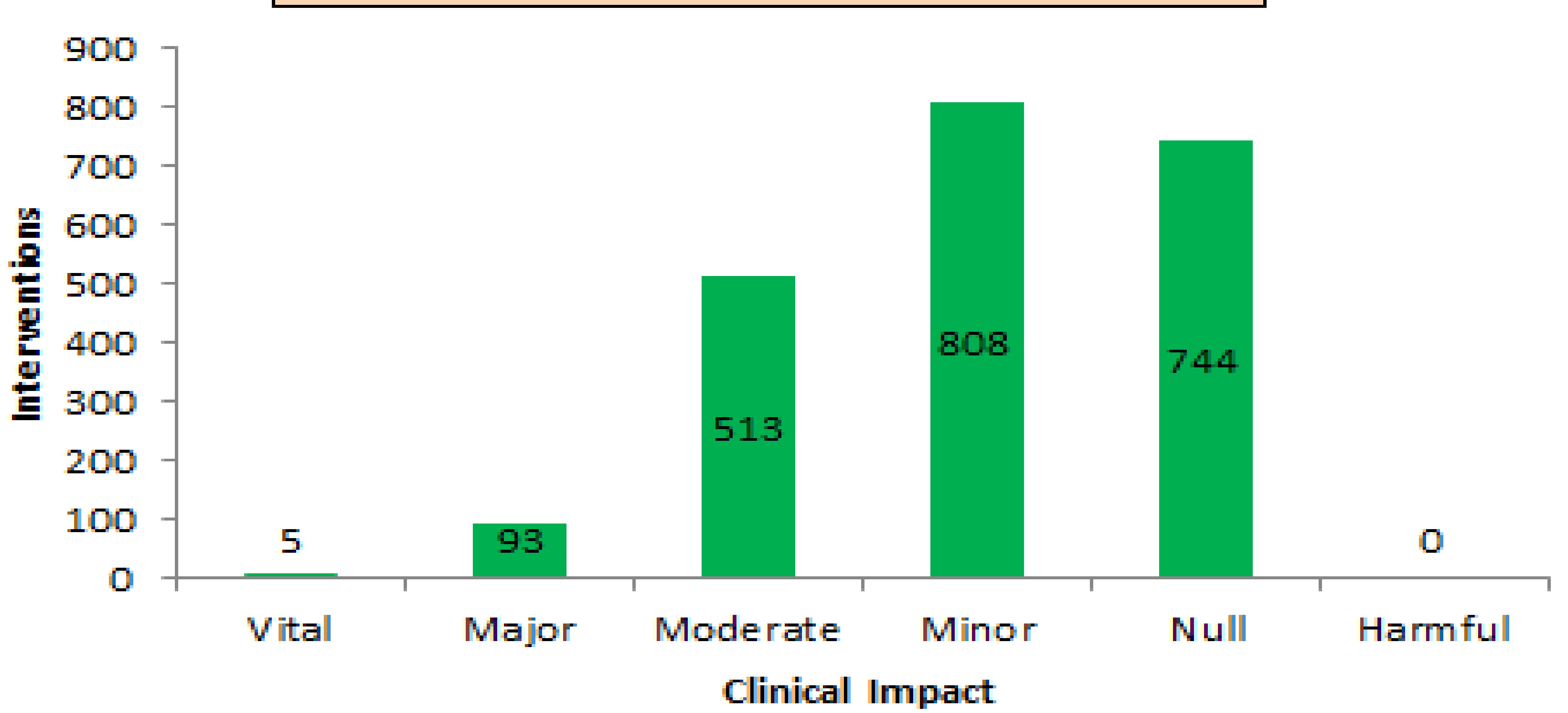
METHODS

A retrospective cross sectional study was conducted in which data between January 2019 and December 2019 was retrieved from hospital information system (HIS). Information of total outpatient prescriptions along with medications prescribed was gathered. PIs implemented during appropriateness review, and elements of interventions like suggested order, rationale and recommendations of PIs, were recorded. Descriptive statistics like frequencies and percentages were used to summarize and analyze the data.

Potential clinical consequence of error in prescribed orders



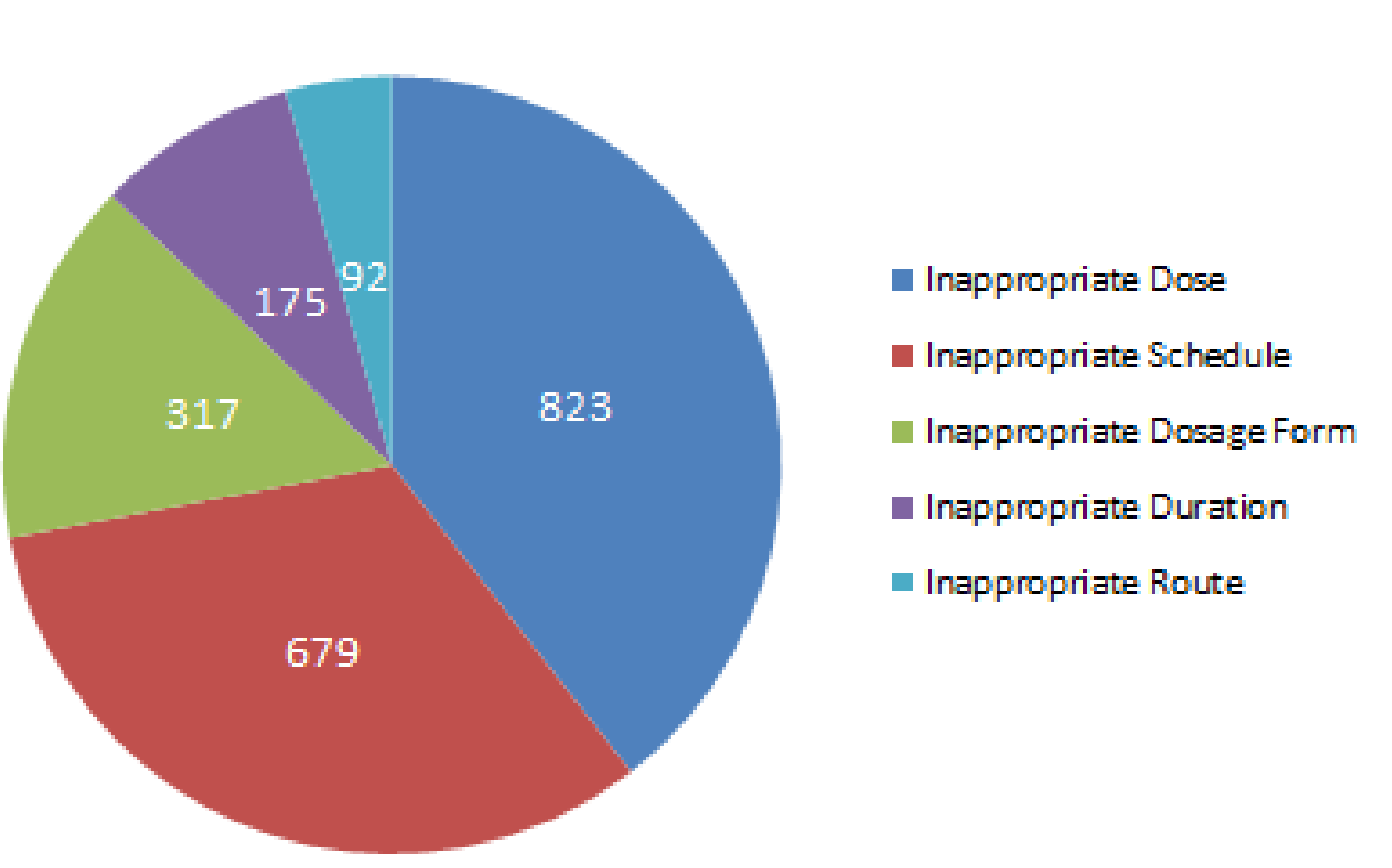
Clinical Impact of Pharmacist Interventions



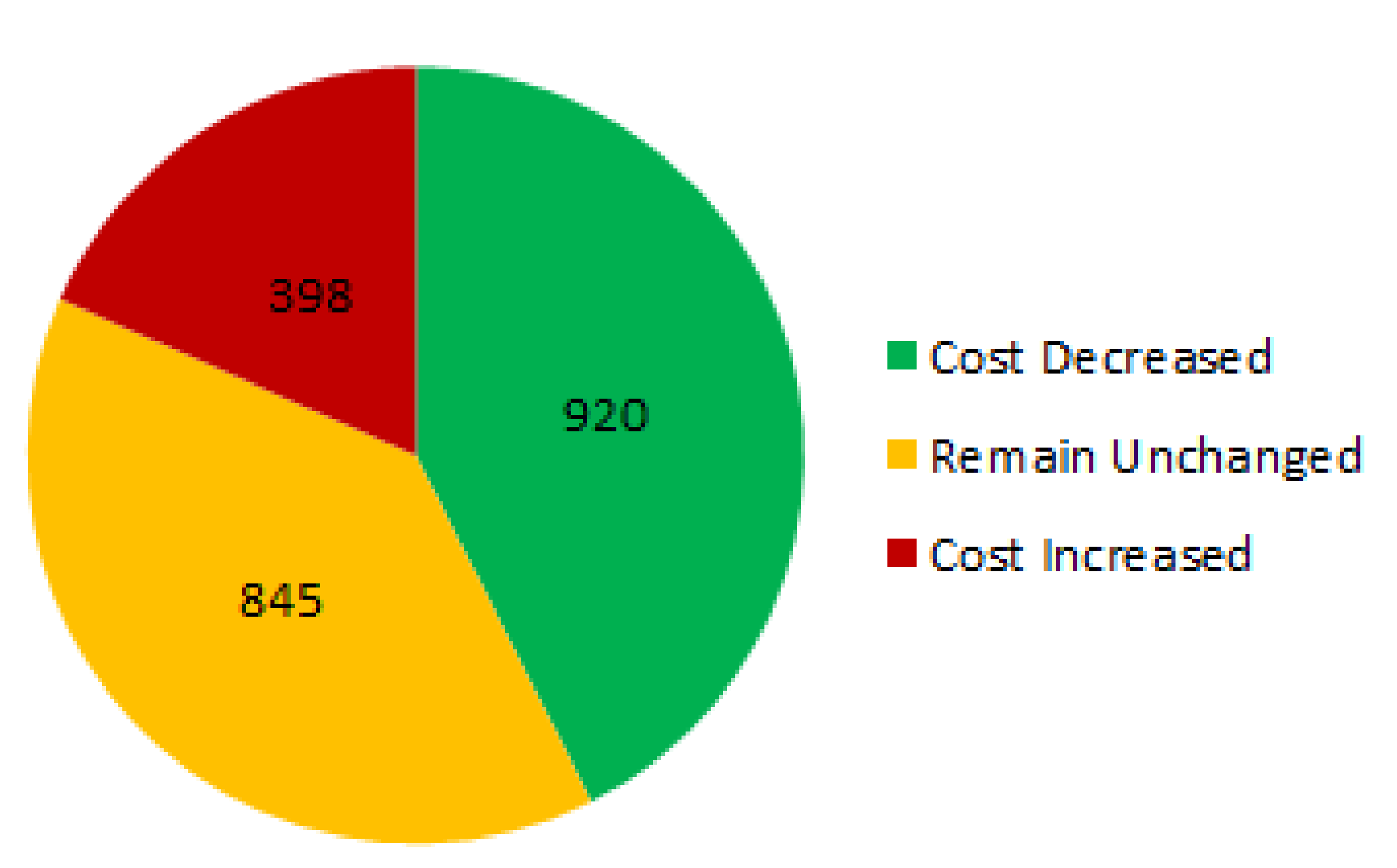
RESULTS

A total of 2,166 PIs were identified in 194,764 prescriptions with 366,712 medicines, out of which accepted PIs were 2,163 (99.86%). 3 (0.13%) and 28 (1.29%) orders have 3&2 types of rationales for PIs, respectively. Of 131 (6.06%) of PEs, 4 (0.18%) were of fatal and 127 (5.87%) of serious consequences. More than 95% of rationales of PIs were of inappropriate dose 823 (38.04%), schedule 679 (31.39%), dosage form 317 (14.65%), duration 175 (8.09%) and route 92 (4.25%). 1,419 (65.60%) PIs with clinical impact were identified, of which 5 (0.23%) were vital, 93 (4.30%) major, 513 (23.72%) moderate and 808 (37.35%) minor, 744 (34.39%) null with no PIs of harmful impact. Economically PIs showed cost decreased in 920 (42.53%), remained unchanged in 845 (39.06%), and increased in 398 (18.40%)

Five Top Most Frequent Rationale of Pharmacist Interventions (95%)



Economic Impact of Pharmacist Interventions



CONCLUSION

Ambulatory care pharmacists significantly reduced clinically relevant prescribing errors, and delivering notable clinical & economic benefits, improving medication review in oncology.

