Drug-related problems, severity, acceptance, and impact of pharmacist interventions in surgical wards: A systematic review

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ABSTRACT

Introduction: Drug-related problems (DRPs) represent a significant health concern. Despite surgical patients being highly exposed to DRPs, studies on these issues and the impact of pharmacist interventions are limited. Objective: This study aims to systematically review published studies on the types and severities of DRPs, the acceptance rate, and the impact of pharmacist intervention in surgical wards. Materials and Methods: An extensive search strategy was conducted to identify all articles published from January 1980 to March 2022. Three databases were utilised: PubMed, Scopus, and Medline via EBSCO. Only English-language publications describing drug-related problems were reviewed and selected. Data on study characteristics and outcomes were extracted and tabulated using Microsoft Word. The structured data were then analysed descriptively. Results: A total of 16 studies on DRPs were systematically reviewed. The findings of this review identified 14,880 DRPs in surgical wards, with inappropriate dosage being the most common type. The majority (80.0%) of the DRPs were not harmful. Physicians' acceptance rate of pharmacist intervention was deemed acceptable (76.5%). Pharmacists' interventions impacted therapeutic and organisational outcomes, leading to cost savings due to avoiding DRPs (4 out of 9 studies). Conclusion: This study highlights the risk of DRPs among surgical patients, although most DRPs were not detrimental. The findings of this review can contribute to establishing and improving clinical pharmacist services in surgical wards.