



# Analysis and Improvement of Medication Incident Reporting to Enhance Patient Safety

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## Introduction/Purpose

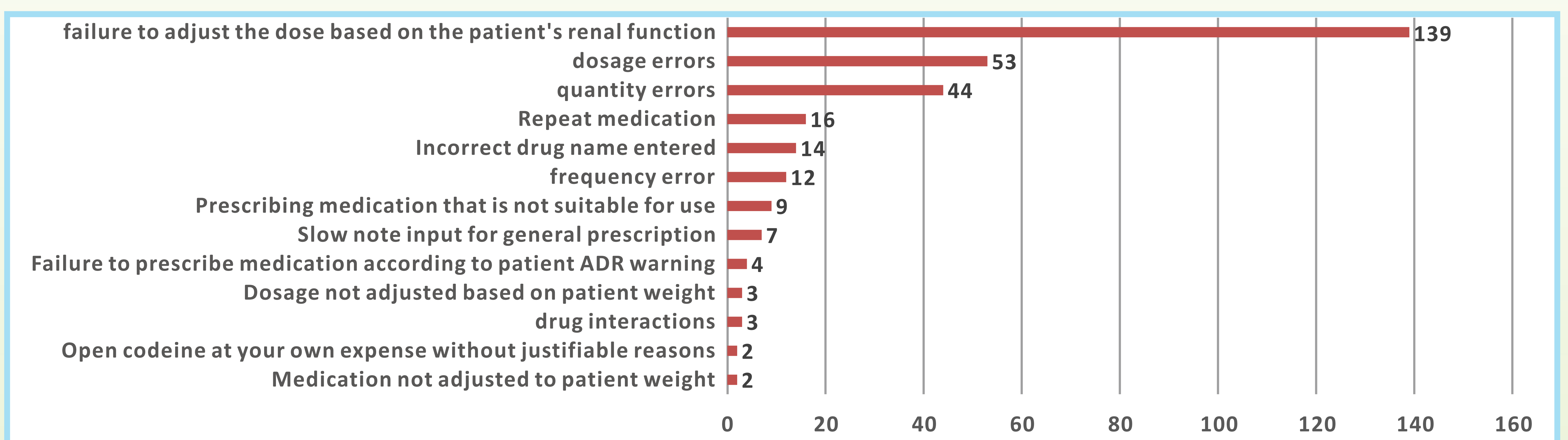
Establishing a voluntary, non-punitive, confidential, and collaborative learning-oriented reporting system is a fundamental and important management indicator for hospitals to enhance patient safety. This study aims to analyze the medication incident reporting system in 2023 and identify appropriate improvement measures.

## Current situation analysis/Countermeasure formulation

### A. Current situation analysis:

This is a retrospective study that collected and analyzed data from the hospital's incident reporting system in 2023. The analysis focused on the types and causes of medication incidents, with the goal of preventing and promptly identifying medication incidents, followed by review and improvement.

In 2023, there were 374 medication incidents, of which 308 were near-miss events. Analysis of the causes of physician prescribing errors revealed that 139 were due to "failure to adjust the dose based on the patient's renal function", 53 were "dosage errors", and 44 were "quantity errors". Interventions were implemented, such as setting up 11 error-preventing alerts in the computerized physician order entry system, providing error reminder cards to medical departments, conducting education and training, holding meetings, and promoting via email and social media.



### B. Medication Safety Countermeasures:

1. System Optimization: Implement error-proof settings in the order system, optimize for product name differences, and set dose and repeat medication alerts.
2. Departmental Reminders: Use reminder cards to address common prescription errors in each department.
3. Training and Education: Conduct workshops with experts to improve clinical pharmacy skills and drug management capabilities.
4. Regular Interventions: Use meetings, emails, and social media to reinforce medication safety awareness.
5. Cross-Team Collaboration: Facilitate interdisciplinary meetings to integrate feedback and enhance medical quality.

## Results/conclusions

- This study analyzed the types and causes of medication incidents related to physician prescribing errors in 2023. By understanding the error patterns and collecting issues identified by pharmacists during order verification, as well as common physician errors, immediate detection and timely improvement were achieved from the initial reporting to subsequent monitoring and optimization, thereby enhancing patient medication safety and preventing serious adverse drug events.
- The results showed that over 80% of medication incidents were related to human factors. Effective personnel training and optimization of information systems can be effective. Continuous monitoring is still needed to further reduce the near-miss rate and provide a safer medical environment for patients.
- The purpose of research is to identify systemic problems and prevent similar errors, not to seek out and punish individual employees. The goal is to improve patient safety and medical quality through timely investigation, analysis and improvement.