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# An Observational Study on The Causes of Medication Reconciliation Errors in a Tertiary Care Teaching Hospital of Kolkata

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**Abstract**

Medication reconciliation ensures that the medications prescribed by the physician match the medications that the patient is actually taking and is done to avoid and reduce medication errors such as omissions of medication, therapeutic duplication, dosing errors, or drug interactions. This study was conducted in a tertiary care teaching hospital to evaluate the present status of medication reconciliation, with a view to recommending improvement measures. A total number of 206 patients were included in this study and the subjects were taken in a randomized manner from admitted patients, except for DAMA, LAMA, and OPD patients. The documented data were analysed by SPSS statistical software. Based on the final outcome of the audit, the most common types of errors were identified. In 42% of the cases, documentation of previous medications in the patient's file or no information regarding the same was provided. Furthermore, in 40% of the cases, previous medication was not documented on the medication card. Nonadherence was found to be a major controller in medication-related morbidity. Adverse drug events can mostly occur due to communication gap during the handover process between various wards or departments, lack of knowledge of the patient regarding past medications, lack of post-discharge patient counselling, and non-reconciliation of the prescriptions. Pharmacist-based reconciliation has been shown to improve medication adherence and reduce drug-related morbidity, thereby minimizing adverse drug events, as compared to standard care. Investments should be done in deploying pharmacists to provide patient education on discharge preferably at the bedside. Future research should include randomized controlled trials whenever possible using rigorous clinical and process outcome assessment.

**Keywords:** Medication Reconciliation, Adverse Drug Events, Medication Errors, Patient Counselling, Patient Education

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