

Drug Utilization Review in Maharashtra Region

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Abstract: *The irrational use of fixed-dose drug combinations (FDCs) is a growing concern in India's healthcare landscape. This study aimed to evaluate the utilization pattern of PAN-D, a commonly prescribed FDC comprising Pantoprazole (a proton pump inhibitor) and Domperidone (a prokinetic agent), in various healthcare settings across Maharashtra. Despite its therapeutic efficacy in managing gastroesophageal reflux disease (GERD), dyspepsia, and other upper gastrointestinal disorders, PAN-D is often prescribed without proper clinical justification, leading to potential misuse and suboptimal therapeutic outcomes. A cross-sectional observational study was conducted to assess prescription patterns, indications, completeness of documentation, and adherence to rational drug use guidelines. The findings revealed a significant gap in prescribing practices, with many prescriptions lacking critical information such as diagnosis, duration of therapy, and follow-up plans. The overuse of PAN-D, especially in cases without documented gastrointestinal indications, raises concerns about long-term adverse effects such as nutrient malabsorption, QT prolongation, and antimicrobial resistance. The study emphasizes the importance of reinforcing rational drug use through professional training, prescription audits, and the implementation of standardized prescription formats. Systemic interventions like electronic prescribing and continuous medical education (CME) can ensure safer and more effective use of PAN-D and other FDCs. Promoting collaborative efforts among healthcare professionals, policymakers, and patients is essential to improving prescription quality, minimizing adverse drug reactions, and optimizing healthcare resource allocation. These efforts will set a benchmark for the appropriate use of FDCs not only in Maharashtra but across India.*

Keywords: PAN-D, Pantoprazole, Domperidone, fixed-dose combination, rational drug use, prescription audit, Maharashtra, gastrointestinal disorders, prescription evaluation, healthcare policy

