~~1. Introduce a monitoring sheet at the front of each patient's file to record BP, weight, and the date of the next blood investigation.~~

~~2. Conduct staff training and schedule periodic re-audits to reinforce awareness and sustain compliance.~~

7C - Emergency Medicine - The Art and Science of Emergency Decision-Making

56 - Enhancing Patient Safety: A Review on the Effectiveness of Initiatives to Reduce Errors from Look-Alike and Sound-Alike Medication

Denise Sammut Alessi[1], Julian Sammut Alessi[1], Jessica Spiteri[1], Patricia Vella Bonanno[1]

[1]University of Malta

Introduction

Look-alike and sound-alike (LASA) medication errors, arising from orthographic and phonetic similarities between drug names, increase the risk of errors in prescribing, dispensing, or administration of medicines and remain a persistent threat to patient safety. As healthcare systems continue to expand formularies, adopt generic preparations, and diversify supply chains, the risk of LASA-related incidents grows. A structured literature search was conducted to examine whether labelling interventions effectively reduce LASA medication errors in hospital and in simulation-based settings, and thus inform practice.

Method

A Critically Appraised Topic was conducted across PubMed, Scopus, and the Cochrane Database of Systematic Reviews from inception up to May 2025. Quantitative studies were included if they evaluated labelling interventions for LASA medications in inpatient or simulation environments and reported measurable outcomes. Following title and abstract screening, full text review, and backwards and forward citation tracking. Included studies were appraised and categorised using guiding principles from the Centre for Evidence-Based Management.

Results

Eight studies met the inclusion criteria. The interventions identified included tall man lettering, boldface, colour coding, red lettering, contrast, larger lowercase, and symbol use. Most studies were conducted in simulation or laboratory settings, with limited representation from real world clinical environments. Labelling interventions, particularly tall man lettering and boldface, consistently improved drug name recognition accuracy and reduced selection errors under controlled conditions. Some studies reported notable reductions in error rates when these enhancements were applied in high-risk settings such as intensive care units. However, evidence from large-scale clinical implementation was mixed, with some studies reporting no statistically significant improvement in actual prescribing error rates. Many studies assessed

proxy indicators such as throughput time or patient satisfaction rather than direct measures of safety or clinical effectiveness. Variability in study design, intervention types, and outcome metrics limited the comparability of findings.

Discussion

The discrepancies from the studies highlight a gap between experimental success and clinical applicability. While labelling strategies show promise, they are not standalone solutions and should be embedded within broader medication safety frameworks. Their impact is likely to be maximised when supported by staff training, clinical decision support systems, pharmacist involvement, and systems-level policies. While current evidence is primarily drawn from simulated settings, the reviewed interventions appear to enhance the visual differentiation of LASA drug names and reduce the likelihood of selection errors, contributing to the reduction of preventable medication-related harm.

Conclusions and Recommendations

These findings provide cautious support for incorporating labelling interventions into wider clinical risk management strategies in practice. Further research in hospital environments is warranted to confirm effectiveness and guide standardised, real-world implementation aimed at strengthening patient safety.

77 - Echocardiography in Patients with Hip Fractures: A Prospective study of Newly Proposed Anaesthetic Criteria

Jordan Calleja[1], Alex Esposito[1], Nathan Zammit[1], Gerald Sammut[1], Julian Zammit Maempel[1]

[1]Mater Dei Hospital

Background:

Hip fractures are common in elderly patients and are associated with significant cardiovascular comorbidity. Timely surgical intervention is critical to reducing morbidity and mortality, but cardiac risk stratification is essential. The Anaesthesia Department has proposed new criteria to guide preoperative echocardiography in this cohort. This audit evaluates the proportion of patients meeting these criteria and whether echocardiography was performed accordingly.

Methods:

A 30-day prospective audit (06/02-08/03) was conducted, including 50 operatively managed hip fracture patients. Data collected included demographics, clinical findings, BNP levels, ECG and echocardiographic data, surgical details, and one-month outcomes. Patients were assessed against the proposed echocardiography criteria. Descriptive statistics were used to analyse guideline adherence, echo utilisation, and clinical outcomes.

Results:

64% of patients met the proposed criteria for preoperative echocardiography, but only 3% received an echocardiogram during admission. This increased to 9% when including prior echocardiograms. Despite 46 patients proceeding to surgery without echocardiography, there