

## INTRODUCTION

Medication errors are the most common type of medical error.<sup>(1)</sup> They can occur at any stage of drug provision and within various settings of the health system. Medication errors can have a significant impact not only on the patient through increased morbidity and mortality but also could result in an increased economic burden due to costs incurred due to re-hospitalization associated with medication errors.

## AIMS

- To evaluate frequency and nature of prescribing errors within a community pharmacy setting
- To assess the potential severity of intercepted prescribing errors.

## METHOD

A data collection tool entitled *“Prescribing problems and interventions”* was developed and validated. Medication errors identified were classified using the Modal classification. Upon interception of a prescribing error, the data collection sheet was duly filled by the pharmacist. Information within the data collection sheet included the type of error, details of medication error, pharmacological class involved and action taken by the pharmacist.

Potential severity of intercepted errors was assessed by an independent analysis team composed of two pharmacists and two physicians. Thirty intercepted errors were presented to each member of the analysis team in the form of short descriptive cases. Based on their knowledge and experience each member assigned a score of potential severity for each case presented. The ‘Safety Assessment Code Score’ was used as a method of scoring.

## RESULTS

Two thousand prescriptions were reviewed and 222 prescribing errors were intercepted by pharmacists.

Errors of omission (48%) were found to be the most common type of prescribing error followed by errors of commission (45%) and interactions (7%). Missing information in prescriptions, errors in dosing, and errors in strength or frequency made up 73% of the total errors intercepted. Figure 1 and 2 highlight distribution of errors of omission and commission respectively. Fifty four different medications were involved in the errors intercepted. Out of the total 222 errors intercepted, 70 involved cardiovascular drugs. These were followed by 29 musculoskeletal and 29 endocrine drugs.

Errors intercepted were assigned a medium-high potential severity, with an average mean score of 8.37 (range 0-12). Errors related to interactions were assigned the highest score of potential severity.

Figure 1: Distribution of errors of omission (n=107)

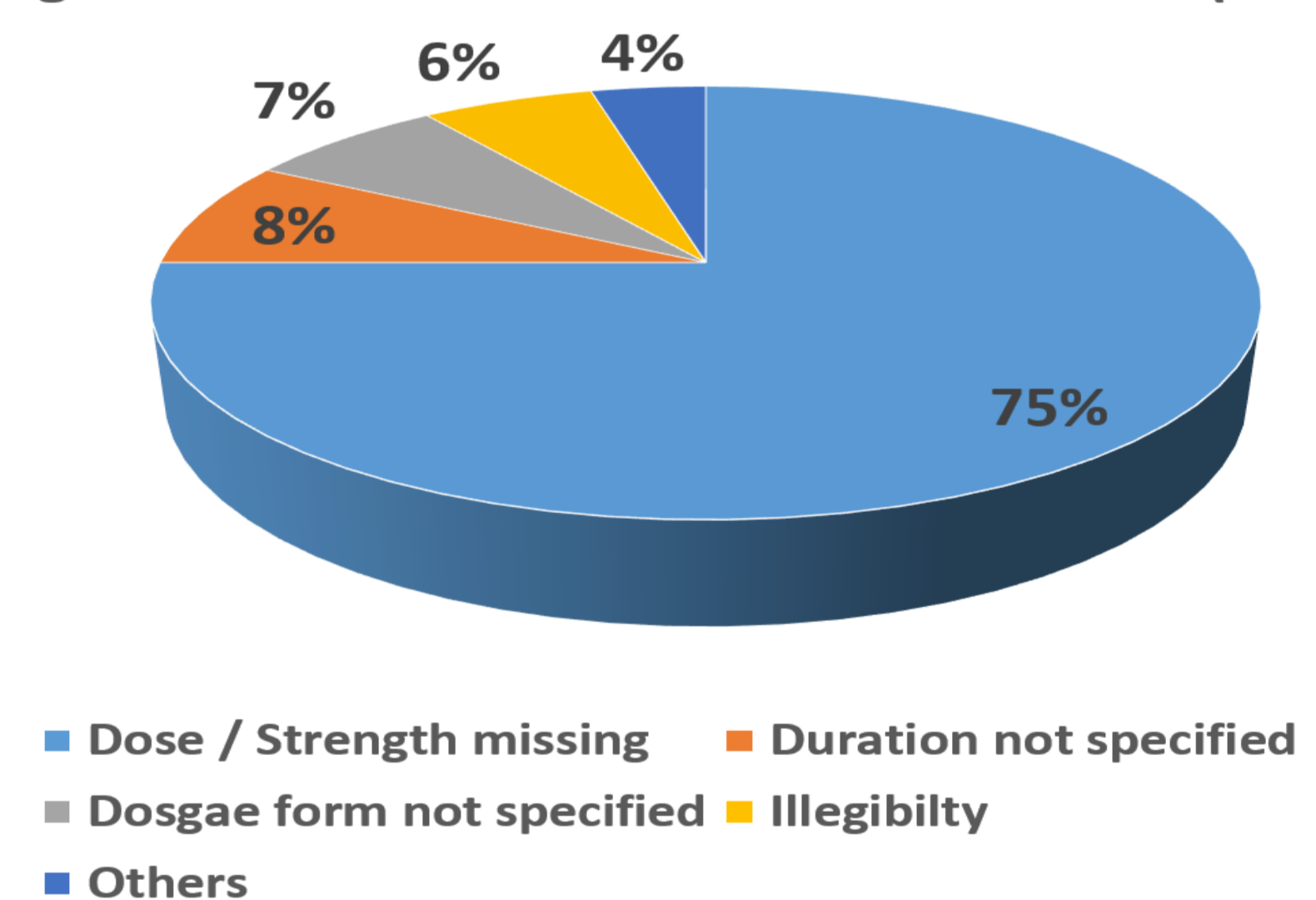
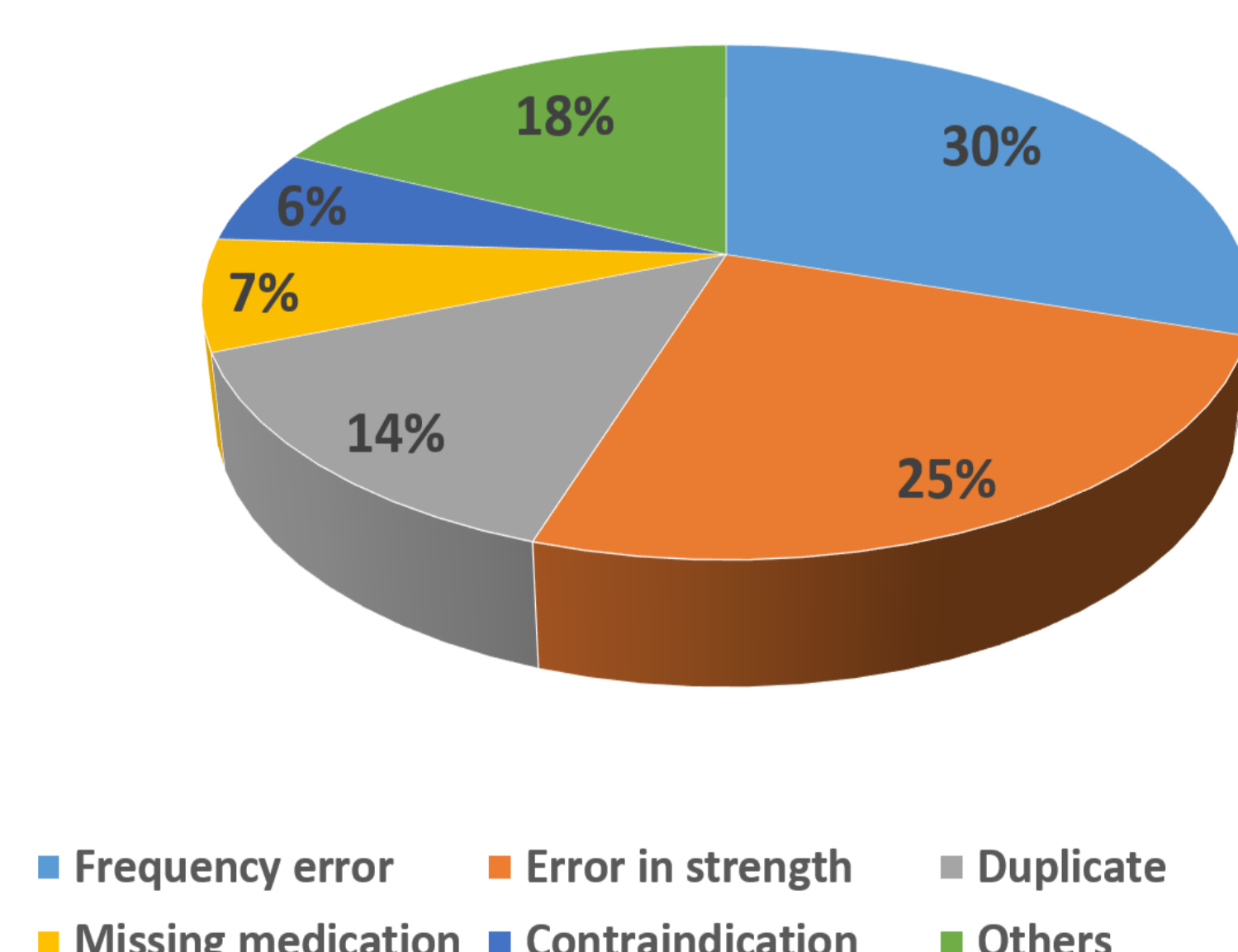


Figure 2: Distribution of errors on commission (n=100)



## CONCLUSION

Classification of medication errors is important in order to understand why and how medication errors occur.

Understanding the causes of medication errors is also useful so to improve patient safety and healthcare quality through implementation of strategies such as e-prescribing framework.