

MEDICATION ERRORS - A CAUSE FOR MAJOR CARDIOVASCULAR EVENTS IN AN EMERGENCY DEPARTMENT

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C01 - Cardiac therapy

M.A. Neag¹, D.M. Prunea¹, C. Bocsan¹, F. Neag², A. Catinean³, A.D. Buzoianu¹

¹ Department of Pharmacology, Toxicology and Clinical Pharmacology, Faculty of Medicine, „Iuliu Hațieganu” University of Medicine and Pharmacy, Cluj-Napoca, Romania

² Institute of Oncology "Prof. Dr. Ion Chiricuta", Pharmacy, Cluj-Napoca, Romania

³ Department of Internal Medicine, Faculty of Medicine, „Iuliu Hațieganu” University of Medicine and Pharmacy, Cluj-Napoca, Romania



Background

Cardiovascular diseases (CVD) represent the main cause of mortality worldwide. The drugs recommended for CVD are the most prescribed drugs and, as a consequence, the risk of medication errors is increased. Nowadays, medication errors are the most common type of medical errors.

Objectives

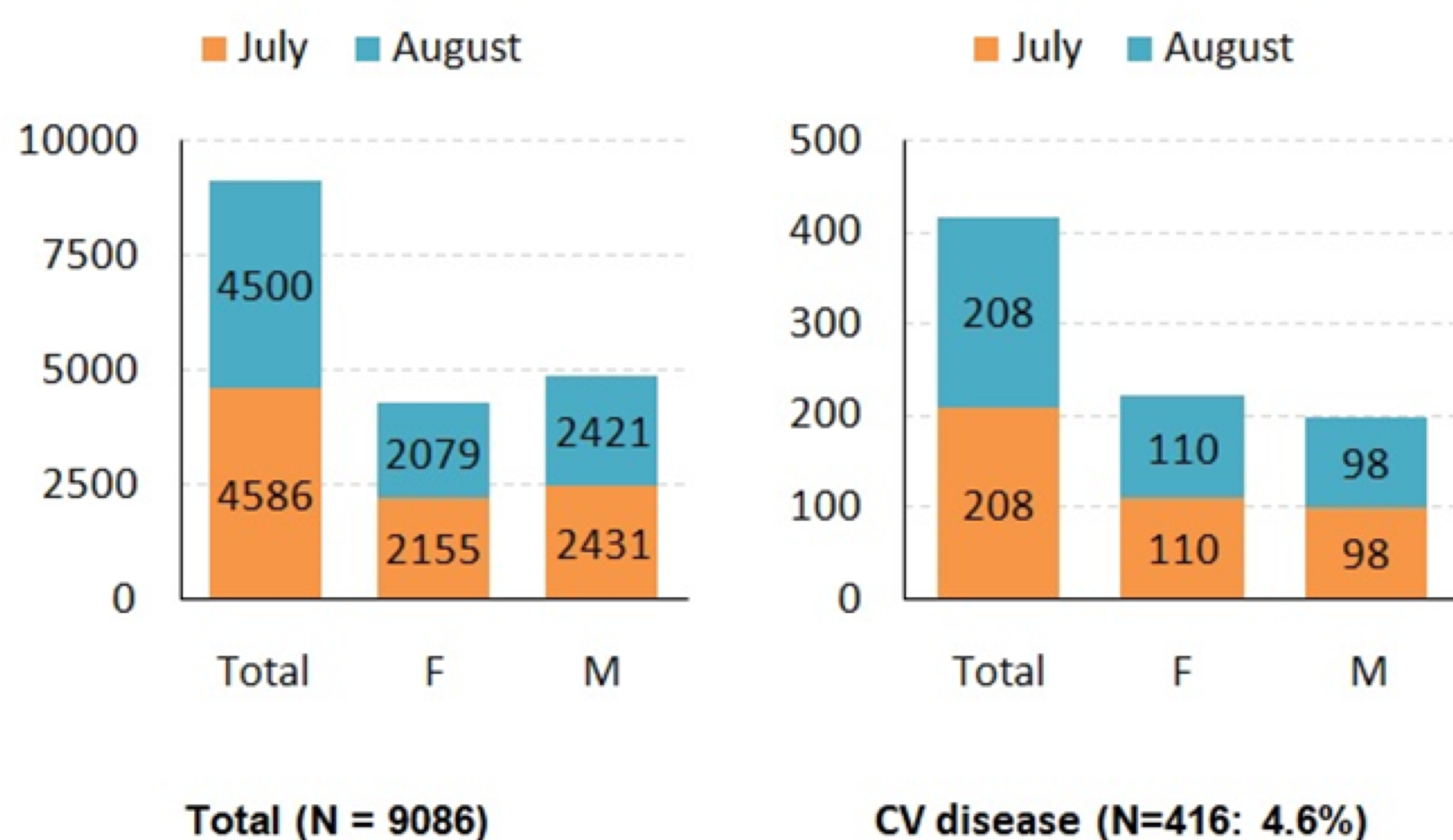
The objective of this study was to assess the major cardiovascular events due to medication errors in an Emergency Department (ED).

Material and methods

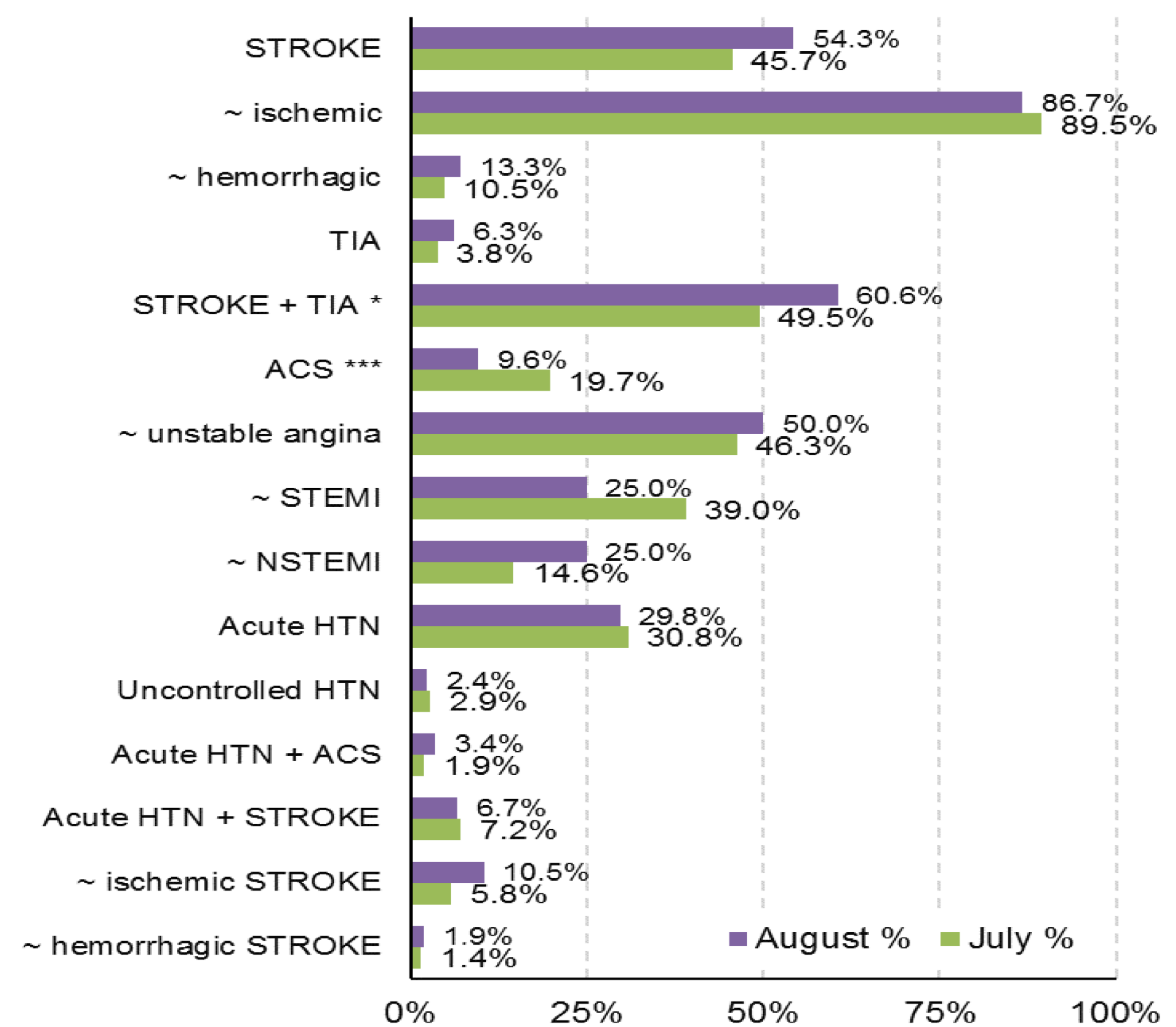
A retrospective observational study was conducted in 416 patients with major cardiovascular problems (acute coronary syndrome - SCA, ischemic/hemorrhagic stroke, hypertensive crisis) in an ED from 1 July 2017 to 31 August 2017.

Results

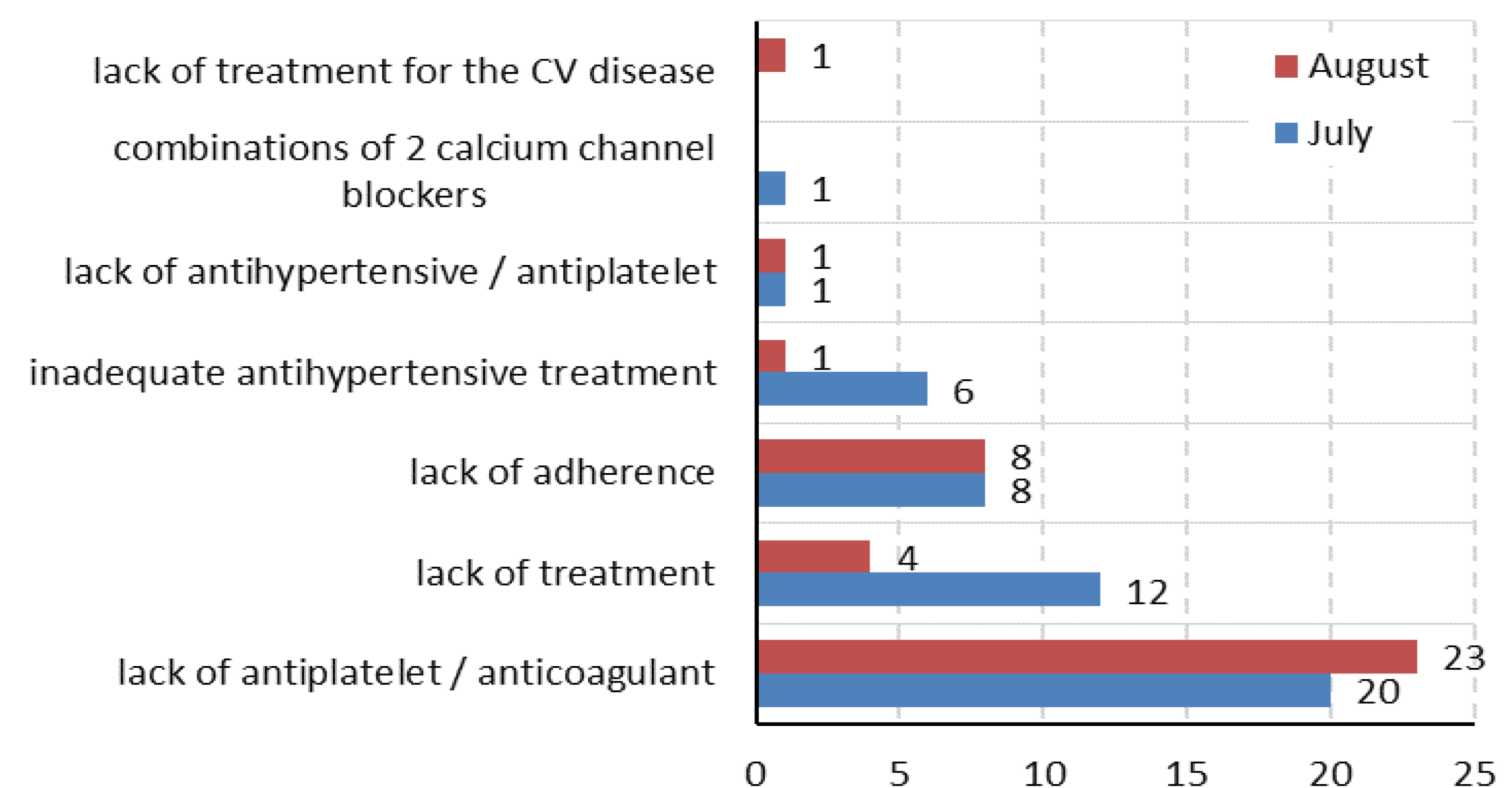
Number of patients with major cardiovascular events in ED



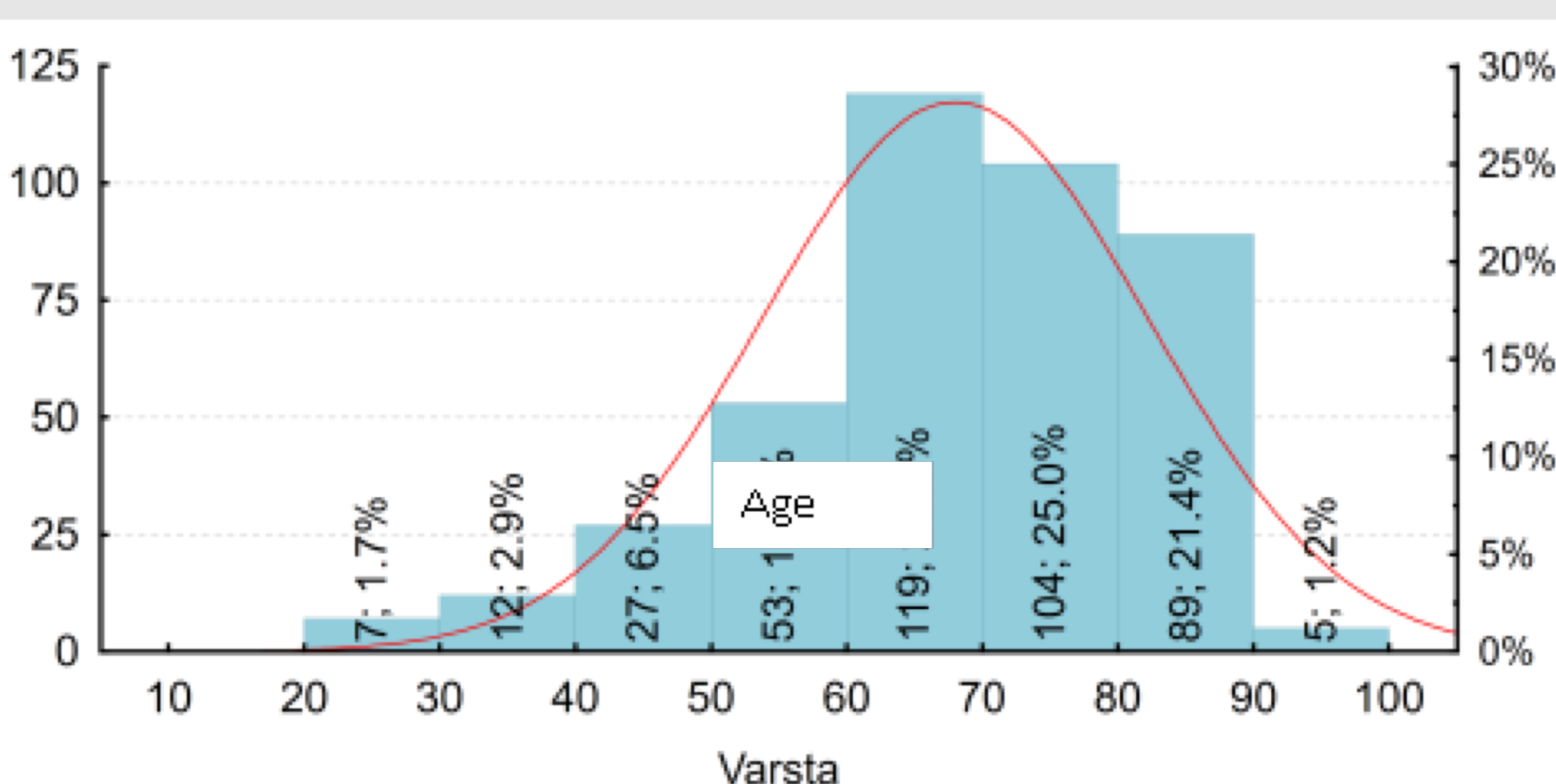
Main CV events



Main causes of errors



The mean age of patients with cv events



Discussions

- ✓ Medication errors have been identified as the cause of major cardiovascular events for 99 out of 416 patients who were admitted to the ED.
- ✓ The most commonly reported types of medication errors - inappropriate drug therapy and non compliance to treatment.
- ✓ In our study, we did not observe any spontaneous reporting of drug error; all medication errors were identified only by the systematic review of records.
- ✓ more resources for continuing education and training of medical personnel to reduce the medication errors could be allocated.

Conclusions

Medication errors are one of the major causes of major cardiovascular events. Many of the medication errors leading to visit in ED could be prevented. It is necessary to develop prevention strategies. Clinical pharmacologist/pharmacist can play an important role in this strategy.