

# Drug-related hospital admissions identifying high-risk patients

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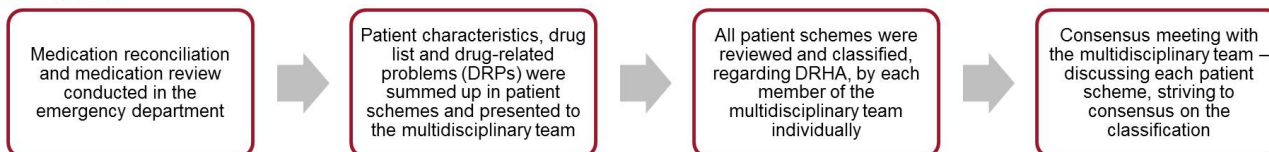
## Introduction

Drug-related hospital admissions (DRHAs) are a huge challenge affecting patient safety worldwide. Studies claim that many of these admissions could be prevented, however this requires knowledge about the admissions. The incidence and nature of DRHAs is scarcely investigated in Norway. Additionally, risk factors for these admissions are not well studied.

## Main outcome measures

Incidence of DRHAs at Diakonhjemmet Hospital, Oslo, Norway, characteristics of these admissions and risk factors correlated with the occurrence of these admissions.

## Method



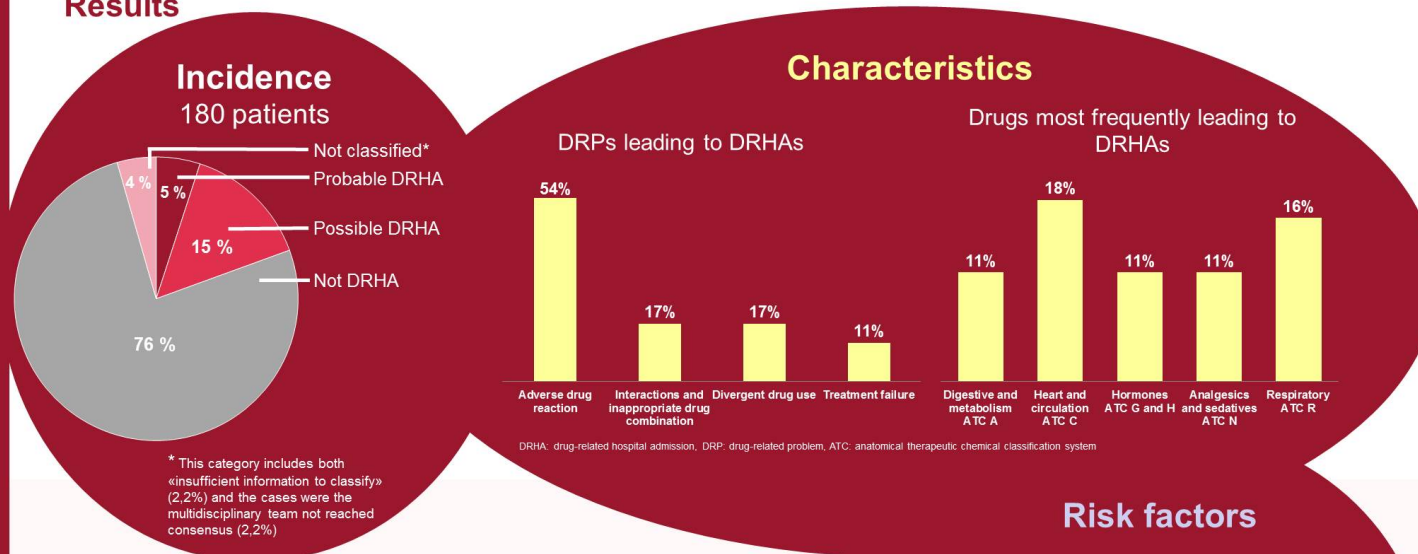
The multidisciplinary team (consisting of clinical pharmacists and senior physicians) reviewed all patient schemes and classified the admissions into one of the following categories:

- **Probable DRHA:** one or more drugs were directly causing or strongly contributing to the hospital admission
- **Possible DRHA:** one or more drugs were indirectly causing or contributing to the hospital admission
- **Not DRHA:** the hospital admission was not related to drugs
- **Insufficient information to classify:** there is lack of information essential to decide if the hospital admission were drug related or not

### Definition DRHA:

The hospital admission is directly or indirectly related to a drug-related problem and the relationship is assessed by a multidisciplinary team retrospectively

## Results



## Conclusion

In this study we revealed that one in five patients had a DRHA. Adverse drug reactions were the most common DRP leading to DRHAs, but also inappropriate drug combination and divergent drug use represented a significant proportion of the admissions. Drugs used in the treatment of heart disease and respiratory conditions were most frequently involved in DRHAs. Revealed risk factors (gender and age) can be used to identify high-risk patients and contribute to personalise the health care and hopefully prevent DRHAs.

## Risk factors

**Gender:** women had a 2.7 times higher odds ratio of a DRHA than men.

**Age:** the odds ratio of DRHA increased with 3.7% per year added to the age



Illustration: Colourbox

Disclosure of Interest: None Declared