CHARACTERISATION OF MEDICATION ERRORS IN A PUBLIC HOSPITAL

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Background

Health care is associated with risk management, in which we include medication errors. These remain a major cause of morbidity and mortality. In 2017, The World Health Organization launched the Global Patient Safety Challenge-Medication Without Harm, which goal is to globally reduce the level of severe, avoidable harm related to medications by 50% over 5 years.

Objective

Characterization of Medication Errors according to the National Coordinating Council for Medication Error Reporting and Prevention (NCCMERP) Index.

Materials and Methods

An observational, descriptive and retrospective study was conducted over two years. This study included all prescriptions with at least one pharmaceutical intervention conducted to inpatients admitted from January 1, 2019 to December 31, 2020 and it was based on pharmaceutical records and clinical files.

The identified medication errors were categorized according to the NCCMERP Index:

- Category A - no error;
- Category B,C,D - error, no harm;
- Category E,F,G,H - error, harm;
- Category I - error, death.

The medication errors that could not be categorized according to NCCMERP Index due to omission of information were excluded.

KEYWORDS: Medication Errors; Pharmaceutical Intervention; Patient Safety.

Results

From a total of 8076 pharmaceutical interventions, it was possible to categorize 1831 medication errors.

NCCMERP categories distribution

These results include:

- 57.67% No Error
- 39.48% Error, No Harm
- 2.72% Error, Harm
- 0.11% Error, Death

The medication errors from Categories E to I involved 16 medications. Acenocoumarol and enoxaparin were the drugs involved in the errors that led to death.

Conclusion

Characterizing Medication errors is essential to identify system failures and its severity. Evidence suggests that knowledge can improve perception of safety culture and potentially reduce patient harm. Pharmacist is a core element on the health care system, improving patient safety and care quality, by raising awareness of medication management among other health care providers. The major limitation of the study is the fact that we were only able to classify 18% of our sample, the overall challenge is to identify the weaknesses at each stage of the medication process and find strategies to avoid them and/or minimize their frequency and impact.