# CAUSES OF DRUG ADMINISTRATION ERRORS IN A UNIVERSITY HOSPITAL

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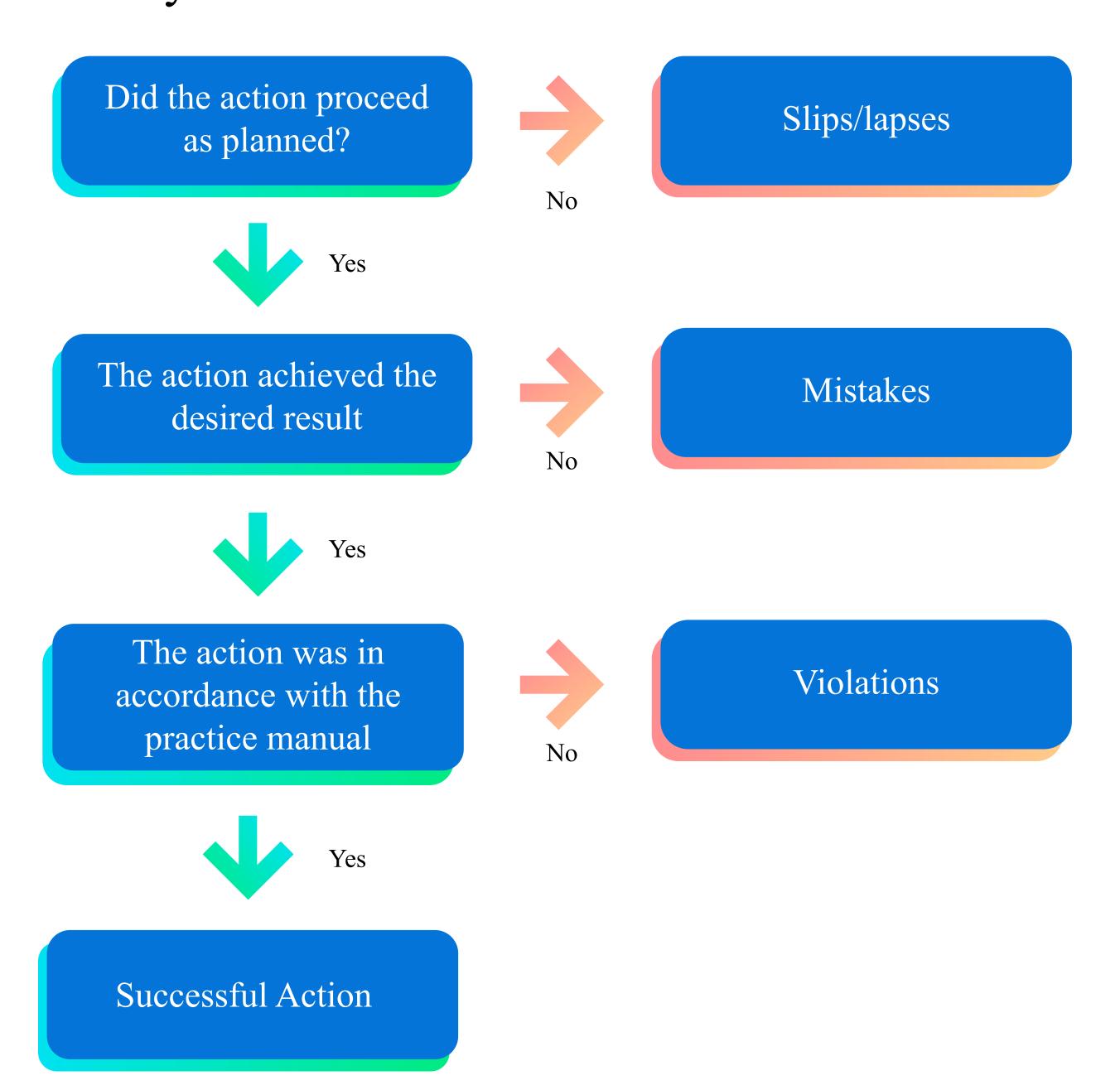
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#### **OBJECTIVES**

To identify the causes of medication administration errors (MAE) in a University Hospital in Brazil.

#### **METHODS**

Observational study carried out using the technique of direct observation of medication administration. Data were collected between January and February and the analysis and classification of causes between August and October, 2019. Each observed dose was compared with the dose prescribed. In case of discrepancy, the error was described and categorized. Prescribed and unadministered doses were categorized as omission errors. From the errors identified, the causes were detailed. For each error, the latent condition or active failure was classified into violations or slips, forgetfulness or mistakes. In addition to these categories, subclassifications for the occurrence of errors were defined, namely: overload, supervision, individual factor, patient-related factors, communication and other factors. The algorithm below was used to classify the causes of erros.

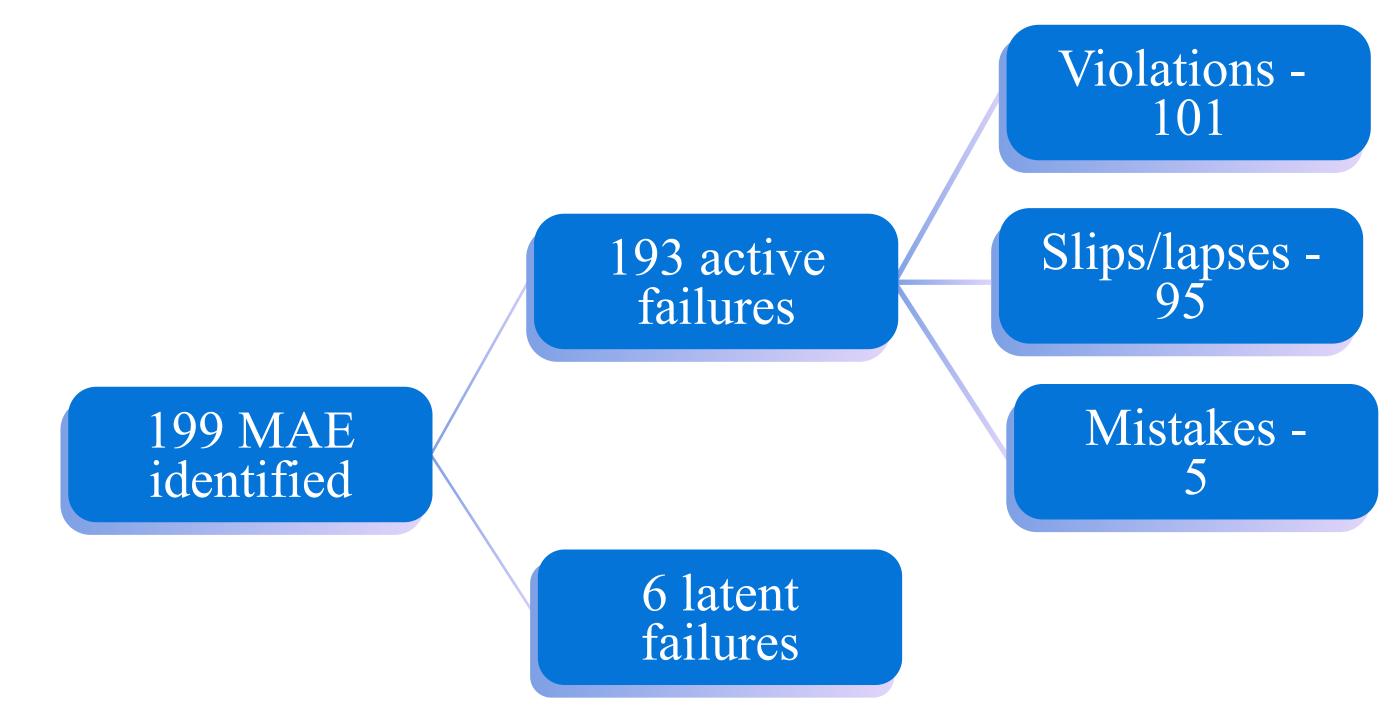


**Source:** Katja Taxis, 2001 (adapted from Reason (1990)

## RESULTS

Overall 564 doses were observed, and 199 (35.28%) MAE were identified. Of these, 193 (96.98%) were attributed to active failures that are divided into violations (101; 52.33%), slips/lapses (95; 49.22%) and mistakes (5; 2.59%). Six (3.02%) errors were classified as latent failures. More than one classification has been assigned to some MAE. Failure to follow the dilution manual was predominant in technical errors caused by violation. As for slips/lapses, the following subclassifications were attributed: 51 (53.68%) errors attributed to overload, 18 (18.95%) attributed to individual factors, 11 (11.58%) attributed to other factors (doses whose information collected was not sufficient to investigate the causes), 10 (10.53%) attributed to factors related to the patient, 5 (5.26%) attributed to inadequate supervision and 1 (1.05%) attributed to communication.

Among the errors classified as mistakes, 4 (80%) were attributed to individual factors and 1 (20%) to other factors. The flowchart below presents the classification of the causes identified for the medication administration errors observed.



\*More than one classification has been assigned to some MAE.

### CONCLUSION

The analysis of the causes that give rise to MAE may allow the design of actions aimed at their prevention and minimization of risks for patients and for the institution. As the failures are mostly active, and involved violations, there is a need to develop educational actions aimed at the institution's health professionals.

## REFERENCES