

4CPS-199 : PHARMACO-ECONOMIC IMPACT OF DRUG INTOXICATIONS IN CHILDREN

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Background and importance

• Drug Intoxications in children, by its social-economic implications, represent a major problem of Public Health. They constitute the main cause of emergency admissions and also one of the principal causes of death in children and adolescents.

Aim and objectives

• The aim of this study is to evaluate the pharmacoeconomic impact of drug intoxications registered in the pediatric emergency department.

Materials and methods

• This is a retrospective study spread over a period of 12 months from January 1, to December 31, 2021, in the pediatric emergency department. It is based on the analysis of costs to manage all drug intoxications recorded in children for one day of hospitalization which include the cost of: drugs and antidotes administered, laboratory analysis, radiological examinations and hospitalization fees. The reference of the identify costs is given by the billing department of our hospital.

Results

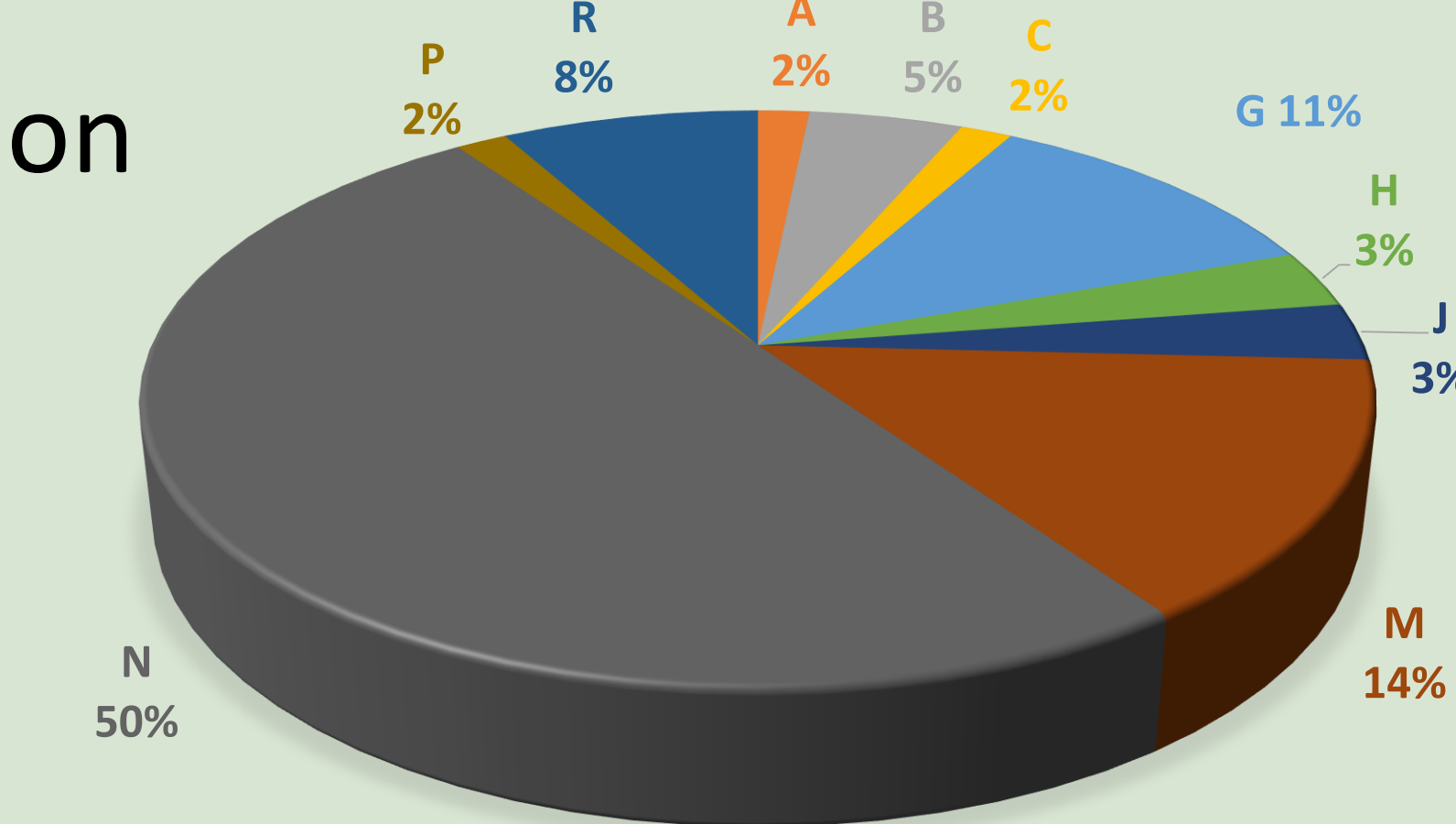
During the period 69 cases of drug intoxications were admitted in the pediatric emergency department.

• According to the Anatomical Therapeutic Chemical Classification System ATCCS of drugs used by children in the intoxications, the class N (Nervous System) was the most common class involved in drug intoxications (50%) followed by Musculo-Skeletal System (15%) then Genito-Urinary System and Sex Hormones (11%), Respiratory System (8%) and 16% for other classes.

• The distribution of the costs for one day of hospitalization related to each intervention and for all recorded drug intoxications is summarized in the table below:

	Drugs and antidotes administered	Laboratory analysis	Radiological examinations	Hospitalization fees	Total costs for one day of hospitalization
Costs	500 €	800 €	600 €	1100 €	3000€

ATCCS CLASSIFICATION OF DRUGS USED IN THE INTOXICATIONS



• To manage these drug intoxications, a symptomatic treatment and antidotes administration is registered in 32.5% of cases (500 €),

• In 35.5% of cases laboratory and radiology analysis were done (1400 €), for the remaining cases a supervision was required.

• on average, intoxicated children stay in the hospital for at least 48 hours under medical supervision, so the total cost of treatment for drug intoxication becomes 6000 € and this can increase depending on the hospital stay.

conclusion

• In our study we have included only the drug intoxications and we have found that their management represents a considerable pharmacoeconomic impact also the research has allowed us to conclude that half of the drugs used by children belong to the class of the nervous system which constitutes a significant danger.