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Acute poisoning in children: an old global problem

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Resumo

Introduction: Acute poisoning is a leading cause of accidental death in European infant-juvenile population [1] and ran avertable cause of morbidity and mortality worldwide. Also, according to the 2020 Annual Report of American Association of Poison Control, 886 thousand exposures accounted for children <5 years, while numbers as high as 130 thousand and 170 thousand were reported for children aging 6–12 and teenagers aging 13–19 years old, respectively [2]. Methods: We summarized the state of the art on paediatric intoxications. For such purpose, a systematic literature search and review was conducted using PubMed and Web of Science databases, until March 2022. Results: Intoxication patterns heavily depend on the region and country considered, being also affected by socioeconomic status, agricultural practices, and industrial development. Overall, childhood poisoning is more prevalent in males at all ages, but a higher gender discrepancy is observed in older children, mainly attributed to differences in socialization and ease to engage in risky behaviours. Fatalities mainly occur in low-income and middle-income countries, but substantial differences might also be observed within countries, between urban

and rural areas. Pharmaceuticals, household products, and pesticides are listed among the most common substances involved in exploratory ingestions in toddlers, which mainly occur at home. On the other hand, acute intoxication with alcohol, misuse drugs and pharmaceuticals is a public health concern in adolescents. In Portugal, the epidemiology of intoxications in children aged 0-17 years has not been comprehensively studied. Most data on children intoxications provided by the Poison Information Centre (CIAV) indicate that these peak at 1-4 years old, with a predominance of males. In 2020, the CIAV carried out 6,432 medical consultations concerning accidental poisoning in children. The main toxic agent involved were pharmaceuticals. The total number of calls was slightly lower than in previous years due to the COVID-19 pandemic. Conclusions: The characteristics and trends of poisoning among paediatric population is of undeniable relevance as the development of targeted preventive and educational strategies, either through legislation or community awareness to eliminate risks in the household environment, demands throughout knowledge on the prevalence and type of intoxications in a particular region.

Keywords: poisoning; children; paediatric; pharmaceuticals.

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