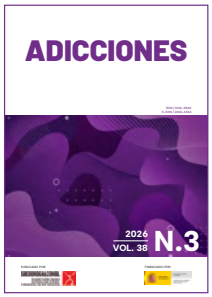
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LETTER TO THE EDITOR

Social and family factors associated with accidental exposure to illicit drugs in pediatric patients

Factores sociales y familiares asociados a la exposición accidental a drogas ilícitas en pacientes pediátricos

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Accidental poisoning due to illicit drug exposure in children represents an emerging public health concern whose social dimension has been insufficiently explored in Latin America. In Mexico, more than 70% of pediatric poisoning cases are attributed to medications; however, exposure to illicit drugs remains poorly characterized, particularly with regard to the associated family and social factors (Olguin et al., 2011).

Nevertheless, the prevalence of this problem can be inferred from a study conducted in the emergency department of a hospital in western Mexico between 2016 and 2020, in which 328 cases of poisoning due to various substances were documented among patients younger than 16 years. Of these, 4.8% involved illicit drugs, although the authors did not specify whether all exposures were accidental (Robledo-Aceves et al., 2024).

In this context, we considered it important to share our clinical experience to provide evidence that contributes to a better understanding of this phenomenon from a social perspective. We emphasize that this is an exploratory (pilot) study; nevertheless, the findings highlight the existence of this problem and provide a basis for future, larger-scale investigations.

We conducted a cross-sectional study including patients younger than 15 years who were hospitalized with a diagnosis of accidental poisoning due to illicit drug exposure between January 2021 and January 2025. The study was approved by the institutional Research Ethics Committee, and no information allowing individual patient identification was collected.

Demographic variables, the type of substance involved, and characteristics of the family environment were analyzed, including socioeconomic status, maternal educational level and age, family structure, and living conditions.

Continuous variables were summarized as mean and standard deviation (SD), whereas categorical variables were described as frequencies and percentages.

A total of 18 patients were included, with a mean age of 2.5 years (SD = 2.0). Most cases (88.8%) occurred in older

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A total of 18 patients were included, with a mean age of 2.5 years (SD = 2.0). Most cases (88.8%) occurred in older infants and preschool-aged children. Amphetamines were the most frequently involved substance (72.2%), followed by opioids (22.2%) and cannabis (5.6%).

From a social perspective, we identified a consistent profile of vulnerability. Overall, 77.8% of the patients belonged to low socioeconomic households, and 83.3% of mothers had only completed basic education. The mean maternal age was 25.3 years (SD = 5.7). In 33.3% of cases, the father was absent from the household. The mean number of household members was 5.3 (SD = 2.5), suggesting overcrowded living conditions. Of particular concern, illicit drug use within the household was documented in 72.2% of cases (Table 1).

Our findings depict an environment characterized by poverty, low maternal educational attainment, vulnerable family structures, and direct exposure to illicit drugs within the home.

Unlike international case series, in which cannabis and opioids are the substances most frequently involved, amphetamines predominated in our sample, possibly reflecting local patterns of drug availability and use (Azkunaga et al., 2017; Oral et al., 2011). This finding highlights the importance of understanding the phenomenon from a regional perspective rather than automatically extrapolating data from other settings.

The age distribution, with a predominance of preschool-aged children and older infants, is consistent with the developmental stage associated with increased exploratory behaviour, greater vulnerability, and a limited ability to recognize potential hazards (Schmertmann et al., 2013; Wood et al., 2018).

The mean maternal age of 25.3 years reflects a profile of young, socially vulnerable mothers, similar to that reported in Spain and the United States (Azkunaga et al., 2017). Lower maternal educational attainment has been inversely

Table 1
Characteristics of patients hospitalized for accidental poisoning due to illicit drug exposure

Characteristics	
Age (years), mean (SD)	2.5 (2.0)
Age group	
1 month to 1 year, n (%)	1 (5.6)
1–2 years, n (%)	6 (33.3)
3–5 years, n (%)	10 (55.6)
6–12 years, n (%)	1 (5.6)
13–15 years, n (%)	0 (0)
Female, n (%)	9 (50)
Type of illicit drug involved	
Amphetamines, n (%)	13 (72.2)
Opioids, n (%)	4 (22.2)
Cannabis, n (%)	1 (5.6)
Socioeconomic status	
Low, n (%)	14 (77.8)
Middle, n (%)	4 (22.2)
High, n (%)	0 (0)
Maternal age (years), mean (SD)	25.3 (5.7)
Maternal educational level	
Basic education, n (%)	15 (83.3)
Upper secondary education, n (%)	3 (16.7)
Father absent from the household, n (%)	6 (33.3)
Household size, mean (SD)	5.3 (2.5)
Illicit drug use within the household, n (%)	13 (72.2)

Note. N=18. SD: Standard deviation.

associated with poisoning risk, likely owing to reduced preventive knowledge and a more limited understanding of the hazards posed by these substances (Olguin et al., 2011).

Paternal absence may be indicative of single-parent family structures, which have been associated with greater social vulnerability and reduced supervision. Likewise, household overcrowding represents a critical risk factor because it limits safe storage spaces and makes continuous supervision of multiple children more difficult (Gallagher et al., 2025).

The high prevalence of illicit drug use within the household is particularly concerning, as it reflects not only the physical availability of these substances but also the normalization of drug use in the presence of children.

From this perspective, accidental poisoning may represent the most visible manifestation of a broader high-risk social environment.

To the best of our knowledge, this is one of the first studies conducted in Mexico to systematically integrate family and social variables in cases of pediatric poisoning due to illicit drug exposure beyond the acute clinical event. Our findings suggest that these poisonings may represent a sentinel marker of social vulnerability and intrafamilial risk.

Although our study has limitations—primarily its small sample size and cross-sectional design—we believe it provides relevant information for both clinical practice and public health.

Conducting studies of this nature is particularly important given the substantial underreporting of these accidental exposures. Such research contributes to documenting their epidemiology, highlighting an important yet preventable cause of morbidity, and providing evidence to support the development of detection and prevention protocols.

Non-stigmatizing screening for parental drug use during pediatric consultations, education on the safe storage of illicit substances, and interventions targeting socially vulnerable families may constitute key preventive strategies.

Accidental poisoning due to illicit drug exposure in children should not be viewed merely as an isolated domestic accident but rather as a phenomenon reflecting social inequalities, adverse housing conditions, and complex family dynamics. Recognizing these events as indicators of social risk may facilitate early, multisectoral interventions aimed at protecting children.

We believe that bringing greater visibility to this issue is essential for the development of context-specific, evidence-based prevention policies.

Conflict of Interest

The authors declare that they have no conflicts of interest.

Author Contributions

According to the CRediT (Contributor Roles Taxonomy), the authors' contributions were as follows:

Tania Esperanza Hernández Tobías: Conceptualization, Methodology, Formal analysis, Investigation, Writing – Original Draft.

Víctor García Olmos: Conceptualization, Validation, Data curation, Software, Supervision, Writing – Review & Editing.

Carlos Sánchez García: Conceptualization, Methodology, Data curation, Formal analysis, Validation, Visualization, Writing – Review & Editing.

Use of Artificial Intelligence

ChatGPT was used solely for grammatical and language editing of the manuscript and was not involved in any other aspect of the study or manuscript preparation.

References

Azkunaga, B., Crespo, E., Oliva, S., Humayor, J. & Mangione, L. (2017). Intoxicaciones por droga ilegal en niños de corta edad en los servicios de urgencias pediátricos españoles. *Anales de Pediatria, 86*(1), 47-49. https://doi.org/10.1016/j.anpedi.2016.03.018

Gallagher, L., Curran, E., Rosato, M. & Leavey, G. (2025). Socioeconomic circumstances, ethnicity, migration and unintentional early childhood injuries: an analysis of the UK millennium cohort study. *Injury Epidemiology*, *12*(1), Article 54. https://doi.org/10.1186/s40621-025-00603-y

Olguin, H. J., Garduño, L. B., Pérez, J. F. & Pérez, C. F. (2011). Unintentional poisoning with drugs in a Mexican pediatric population. *Journal of Population Therapeutics and Clinical Pharmacology*, *18*(1), e156-e160.

Oral, R., Bayman, L., Assad, A., Wibbenmeyer, L., Buhrow, J., Austin, A. & Bayman, E. O. (2011). Ilicit drug exposure in patients evaluated for alleged child abuse and neglect. *Pediatric Emergency Care*, *27*(6),490-495. https://doi.org/10.1097/PEC.0b013e31821d860f

Robledo-Aceves, M., Corona-Gutiérrez A. A., Camarena-Pulido, E. E., Barrón-Balderas, A., Meza-López, C., Ramos-Gutierrez, R. Y. & Gutierrez-Rojas, J. (2024). Epidemiología de la intoxicación aguda infantile en urgencias de pediatria del occidente de México. *Boletin del Hospital Infantil de México, 81*(5), 287-293. https://doi.org/10.24875/bmhim.23000183

Schmertmann, M., Williamson, A., Black, D. & Wilson, L. (2013). Risk factors for unintentional poisoning in children aged 1-3 years in NSW Australia: a case-control study. *BMC Pediatrics*, *13*, Article 88. https://doi.org/10.1186/1471/2431-13-88

Wood, K. E., McCarthy, P. J. & Krasowski, M. D. (2018). A case series involving young children presenting with accidental ingestion of amphetamine based stimulants. *Toxicology Reports*, *5*,1129-1133. https://doi.org/10.1016/j.toxrep.2018.11.001