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Emergency care for children refugees from the Russian–Ukrainian armed conflict



Asistencia en urgencias de la población infantil refugiada procedente del conflicto bélico rusia-ucrania

Dear editor:

Since Russia launched the military offensive against Ukraine on February 24, 2022, more than 4.5 million Ukrainians have fled their country.¹ In Spain, more than 100 000 refugees have sought asylum since March 1,² and based on data from the centres of reception, welfare and referral of Madrid, Alicante, Barcelona and Malaga, 38% are children aged 0–17 years.³

We present the results of a retrospective observational study in 2 tertiary care hospitals of the Community of Madrid between March and July 2022. The primary objective was to describe the care received by refugee children from Ukraine in emergency departments 5 months after the war started. We performed a descriptive analysis of categorical variables by calculating absolute and relative frequencies and of quantitative variables calculating the median and interquartile range (IQR). The study was approved by the research ethics committees of the two participating hospitals (ref. PI-5281).

We analysed 156 emergency department visits made by refugee children from Ukraine in the period under study. The median age was 4.2 years (IQR, 2.1–8.9), and 52.6% of

the patients were female. The number of emergency visits peaked in the second half of March (49/156; 31.4%), followed by a gradual decrease (Fig. 1).

The most frequent presenting complaint was fever (46.7%), followed by gastrointestinal symptoms (23.1%). In 4 cases (2.5%) the visit was related to anxiety symptoms. Chronic diseases were present in 21.1% (33 patients), corresponding to haematological or oncological diseases in 7.7% of the total sample. In the subset of patients with chronic diseases, 21.2% sought care for complications of the underlying disease (Table 1).

In 40.3% of the visits, diagnostic tests were ordered in the emergency department, most frequently blood tests (26.9%). In the subset of children whose presenting com-

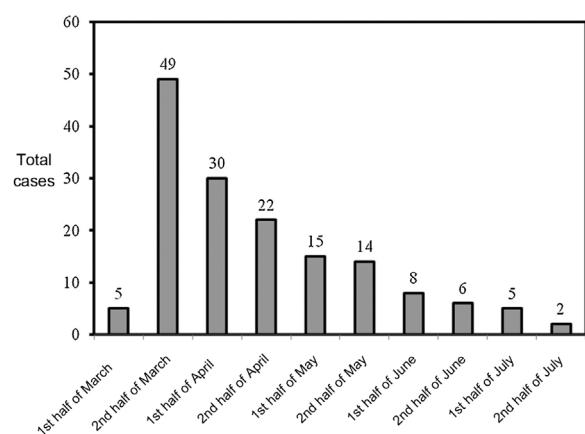


Figure 1 Monthly distribution of emergency department visits.

Table 1 Characteristics of the patients (N = 156).

	n (%)
Age distribution	
< 6 months	9 (5.8%)
6–12 months	8 (5.1%)
1–3 years	45 (28.8%)
3–6 years	39 (25%)
6–12 years	45 (28.8%)
12–16 years	10 (6.4%)
Sex distribution	
Female	82 (52.6%)
Male	74 (47.4%)
Personal history	
Unremarkable	123 (78.8%)
Chronic disease	33 (21.1%)
Haematological/oncological	12 (7.7%)
Neurologic	5 (3.2%)
Gastrointestinal	4 (2.6%)
Cardiological	2 (1.3%)
Rheumatological	2 (1.3%)
Renal/urological	1 (0.6%)
Other	7 (4.5%)
Reason for visit	
Fever	73 (46.7%)
Isolated	32 (20.5%)
Fever and respiratory symptoms	24 (15.4%)
Fever and gastrointestinal symptoms	17 (10.9%)
Gastrointestinal symptoms	36 (23.1%)
Cutaneous lesions	10 (6.4%)
Respiratory symptoms	8 (5.1%)
Complications of underlying chronic disease	7 (4.5%)
Head trauma	4 (2.6%)
Other	18 (11.5%)
Diagnostic tests ordered in emergency department	
None	93 (59.6%)
Blood tests	42 (26.9%)
Urine tests	17 (10.8%)
Imaging tests	24 (15.3%)
Plain radiograph	16 (10.2%)
Ultrasound	7 (4.4%)
CT	3 (1.9%)
Electrocardiogram	2 (1.3%)

plaint was with fever (73/156), 32.8% underwent blood tests; a percentage that rose to 75% (12/73) in the group with underlying chronic disease and fever. Ninety-one percent (142/156) were discharged from the emergency department, in one case by the patient's request. Thirteen (8.3%) were admitted to hospital, with a median length of stay of 4 days (IQR, 3–9). None required admission to the paediatric intensive care unit. One patient, who had congenital hydrocephalus, required urgent neurosurgery. Lastly, one patient was admitted to hospital at home services for a total of 15 days.

Refugee children are a particularly vulnerable collective, and the impact of both war and displacement can be devastating to their health. Exposure to traumatic and stressful events promotes the development of mental health problems, and it is estimated that 1 in 5 of those affected by

the war will develop a psychiatric disorder.⁴ In this case series, emergency visits related to mental health amounted to 2.5% of the total, perhaps because these type of disorders could be assessed directly in primary care and/or other care settings rather than emergency departments, which could account for the low proportion found in this series.

In the context of an armed conflict, crowding may cause disruptions in the continuity of care and difficulty adhering to treatment, resulting in decompensation in patients with chronic diseases.⁵ Approximately 1 in 4 of the refugee children managed in the emergency department had underlying chronic diseases, chiefly blood tumours. In this regard, both the Sociedad Española de Hematología y Oncología Pediátrica (Spanish Society of Paediatric Haematology and Oncology) and multiple private associations have joined efforts in Spain to collaborate in welcome and welfare projects that target Ukrainian children with cancer.

The assessment of febrile patients in the emergency care setting depends on several factors, such as age, associated symptoms, personal history and vaccination status. In the context under study, one of the main limitations in the assessment of immigrant children with fever was that in many cases the vaccination history was unknown. The current immunization schedule of Ukraine, last updated in 2018, does not cover vaccination against pneumococcal or meningococcal disease, varicella or human papillomavirus, unlike the immunization schedule in Spain. According to data from the European Centre for Disease Prevention and Control, vaccination coverage in Ukraine ranges from 50% to 80%, so that Ukrainian children constitute a risk group for infrequent but potentially severe viral and bacterial infectious diseases,⁶ such as tuberculosis, infection by human immunodeficiency virus, viral hepatitis, measles, mumps and rubella. These circumstances were taken into account in the approach taken in our emergency departments, with frequent performance of blood tests in children presenting with fever (1:3 cases), especially if they had a chronic disease (3:4 cases).

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Intentional self-poisoning increase in the emergency department in Spain during the COVID-19 pandemic[☆]



Incremento de las intoxicaciones con fin suicida en los servicios de urgencias en España durante la pandemia COVID-19

Dear Editor,

Self-harm and suicide are important public health problems in adolescence, and suicide is the second leading cause of death in youth worldwide.¹ The method used most commonly in suicide attempts is intentional poisoning with medicines available in the home. These youth frequently have psychiatric disorders.²

Most of the visits made to paediatric emergency departments (PEDs) due to poisoning correspond to young children who have ingested toxic substances unintentionally.³ Suicidal intent accounts for approximately 14% of poisonings managed in PEDs worldwide⁴ and 7% in Spain,³ chiefly from age 12 years.

An alarm was raised during the coronavirus disease 2019 (COVID-19) pandemic of an increase in mental health disorders in both adults and the paediatric age group.⁵ However, to our knowledge, the impact of the pandemic on the volume of PED visits due to self-poisoning with suicidal intent in Spain has not yet been analysed at the national level.

The aim of our study was to assess the impact of the pandemic on visits to PEDs in Spain due to self-poisoning with suicidal intent.

We conducted a study based on a prospective register of the poisonings documented in 43 Spanish PEDs that participate in the Toxicology Surveillance Observatory of the Sociedad Española de Urgencias de Pediatría (Spanish Society of Paediatric Emergency Medicine) between 2014 and 2021. We collected data on visits due to exposure to potentially toxic substances on the 13th, 14th and 15th of each month in the period under study. The methods of the regis-

ter have already been described in a previous issue of this journal.⁶ For the purpose of the study, the prepandemic period ranged from January 2014 to February 2020 and the pandemic period from March 2020 to December 2021. The participating hospitals are listed in Appendix A. We conducted the statistical analysis with the software IBM SPSS Statistics for Windows, version 23.0 (IBM Corp.; Armonk, NY, USA). We summarised quantitative data as mean and standard deviation, and categorical data as percentages. We compared quantitative variables with the Student *t* test and categorical variables with the χ^2 and Fisher exact tests. We considered *P* values of less than 0.05 statistically significant. The study was approved by the Clinical Research Ethics Committee of the Basque Country.

During the period under study, there were 836 188 care episodes in the 43 PEDs. Of this total, 1909 were for exposure to potentially toxic substances, in 199 (10.4%) intentional exposure with suicidal intent. In the prepandemic period, there were 114 documented cases of self-poisoning with suicidal intent (7.5% of visits due to toxic substance exposure) compared to 85 (22.2%) during the pandemic ($P < .01$). In the prepandemic period, participating PEDs documented 1 case of self-poisoning with suicidal intent every 2 days compared to every 0.8 days in the pandemic. In the 2 years of the pandemic, the proportion of intentional poisonings with suicidal intent rose from 12.4% in 2020 to 28.2% in 2021. We did not find significant changes in the characteristics of cases of self-poisoning with suicidal intent between the prepandemic and pandemic periods, save for more frequent contact with prehospital emergency care services. We also found no differences in how these cases were managed in the PED setting, save for a more frequent administration of antidotes during the pandemic, and N-acetylcysteine was the most frequently used antidote in both periods. The majority of the cases corresponded to female patients and ingestion of medicines, chiefly benzodiazepines and analgesics, with one third of cases being of combined drug intoxication and more than half resulting in hospital admission. None of the patients died (Table 1).

Our study found a significant increase in cases of paediatric self-poisoning with suicidal intent in Spanish PEDs during the COVID-19 pandemic, a finding that would be consistent with an increase in mental health disorders during the pandemic. Previous publications had already warned of a global mental health crisis in youth that started long before

[☆] Previous presentation: oral communication at the XXVI Meeting of the Sociedad Española de Urgencias de Pediatría; June 16–18, 2022, Pamplona, Spain.