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Hospitalisations for physical abuse in infants and children less than 5 years, 2013–2021: a multinational cohort study using administrative data from five European countries

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Objectives

Child physical abuse (CPA) is a global public health problem associated with lifelong negative consequences, yet reliable epidemiologic data are lacking. We did a multinational cohort study to analyse trends in CPA hospitalisations between 2013 and 2021.

Method

We used medico-administrative databases to identify children aged one month to five years hospitalised in Denmark, England, France, Ireland, and Wales. Analysing data on more than 12 million hospitalisations, we identified CPA using a validated algorithm based on International Classification of Diseases-10 codes (ICD-10 codes). We calculated the number, proportion, and incidence rate of children hospitalised for CPA, and the number and proportion of total hospitalisations for CPA, by year and age group (<1 and <5). We assessed the distribution of ICD-10 codes used to identify CPA, in each country.

Results

The pooled incidence rate of infants <1 year hospitalised for CPA was stable over time (around 42/100,000 per year), ranging on average from 33 to 48/100,000 between countries. Average incidence rates for infants were highest in England and lowest in Wales. The pooled proportion of infant CPA hospitalisations was around 0.17% per year (range 0.15–0.21%),

increasing significantly during the COVID-19 pandemic in 2020 (0.21%). In children <5, the incidence rate (around 18/100,000 per year) and proportion of CPA hospitalisations (around 0.11% per year, range 0.10–0.14%) were lower than in infants but also increased in 2020 (0.14%). There were national differences in the distribution of ICD-10 codes used to record CPA and differences in year-on-year trends between countries.

Conclusion

This study is, to our knowledge, the first large-scale analysis examining trends in CPA hospitalisations in more than two European countries. We demonstrated that comparing temporal trends in CPA hospitalisations between countries is feasible, implying that hospital data are one of several valuable sources of information for surveillance of CPA.

