FRENCH HOME AND LEISURE INJURY PERMANENT SURVEY: WHAT CONTRIBUTION TO EPIDEMIOLOGICAL SURVEILLANCE?

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Gaelle Pédréno1, Jean-Pierre Darlot1, Marc Nectoux2, Linda Lasbeur1, Bertrand Thelot1
1/ Santé publique France, French National Public Health Agency, Injury Unit, Saint-Maurice, France
2/ Paris Descartes University, France

Background

The literature and knowledge regarding home and leisure injuries (HLI) are far wider than they used to be a couple of decades ago. Each year in France (65 millions of inhabitants), 14 millions of admissions are registered in the 730 emergency departments (ED), of which 5 million are HLI. Different types of epidemiological surveillance have been carried out: cross-sectional, population, cohort studies. Nevertheless, little is known about the detailed circumstances of those injuries. The French home and leisure injury permanent survey (Enquête permanente sur les accidents de la vie courante - EPAC) provides detailed circumstances of HLI.

Methods

The EPAC survey was launched in 1986 in a dozen hospital EDs and is fully standardized since 2004. The network is currently composed of eleven hospitals in Metropolitan France and one in the Réunion Island in the Indian Ocean (Figure 1). Each year, 120,000 HLI cases are registered in the database.

Example:

While checking for leaks during a storm, a 32 years old man slipped off his roof, he fell from the three meters high on gravel and fractured his left tibia.

- In each hospital, one or two trained staff are dedicated to data collection and coding according to EPAC guidelines.
- Anonymous data are securely transmitted on a monthly basis.
- Every year, after a random selection of days to review, a quality analysis is conducted in each hospital. This procedure allows an estimation of local and global exhaustiveness and guarantees the reliability of data.
- On a quarter basis, data are consolidated using automatic procedures correcting errors.
- Each year, a network meeting with EPAC staff is organized to standardize inclusion criteria and coding rules, and to present the results provided by the survey.
- EPAC is the only system able to provide solid and detailed information on specific injuries such as button battery ingestion, trampoline injuries, wrist stings, barbecue burns, traumatic sport injuries, elderly falls, etc. The only system able to provide solid answers in France is the EPAC survey.

Results

Several recent examples of results provided by the EPAC survey:

Numerous analyses are carried out from EPAC database [1,2].

Conclusion

The strength of EPAC survey is the robustness guaranteed by the annual data quality analyses and evaluations making the figures reliable and allowing time series analysis. It provides details regarding circumstances and products that can not be found anywhere else in France. Moreover, incidence rates can be estimated thanks to different methods, including modelling [3]. For prevention purposes, there is increasing demands about HLI from the Ministry of Health, organizations, and associations. The EPAC survey is a key tool to improve knowledge about the incidence, severity, preventability, and contributes to the diminution of those injuries through specific prevention initiatives and regulations.

Santé publique France, which is the government agency in charge of epidemiological surveillance and prevention, uses the EPAC survey in the field of HLI. Its missions are assumed in collaboration with the French Ministry of Health (DGS), the Directorate General for Competition Policy, Consumer Affairs and Fraud Control (DGCCRF), the Consumer Product Safety Commission (SCC), and other public institutions involved in HLI prevention.

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