



ON-LINE EDUCATION FOR PHARMACIST ABOUT ONE PILL KILLERS

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What was done?

A **virtual and interactive course for pharmacists** was designed to improve knowledge about **highly toxic drugs (HTDs) in infants** and potentially fatal intoxications.

Platform integrates **microlearning** and **gamification** methodologies. Course could be followed via web/smartphone



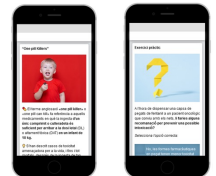
Why was it done?

HTDs in infants are defined as those that might **cause severe or lethal poisoning in children**. Some HTDs are considered **“one pill killers”**: those in which the ingestion of one unit, a single tablet or tablespoon, in an infant with a body weight of 10 kg, could be fatal. In Spain, there are **29 active principles** (from seven therapeutic groups) considered “one pill killers”. **Counseling and information are crucial activities developed by pharmacists** that could help to avoid fatal intoxications.

How was it done?

Literature review by group experts (toxicologists and clinical pharmacists). They determined the **toxic dose for HTDs** and the number of units (considering the most concentrated presentation) needed to achieve the potentially fatal dose in a 10 kg infant.

A **virtual microlearning platform** (Snackson®) was chosen, and **specific training content** was designed. It will be offered to community pharmacists by our Catalan Department of Health.



What has been achieved?

- Collaboration between the **group of experts** and the **Catalan Department of Health**.
- **Educational activity** has been offered (autumn 2023) to 250 community pharmacists.
- A **list of HTDs has been published** (DOI: 10.1016/j.anpede.2020.02.007).
- A **video** was recorded, addressed to the general population to inform them about the existence of HTDs. This video is a divulgation tool with recommendations to prevent drug poisoning and is periodically broadcast in the waiting rooms of health centers.



<https://www.youtube.com/watch?v=uSHDRte7Nr8&t=14s>

What next?

To **evaluate the impact of the training activity** on community pharmacists and the usability of the virtual microlearning platform. Future plans also include the **expansion of this educational tool to other regions in Spain**, and to **explore the application of microlearning methodology to other areas of knowledge**.