PESTICIDES EXPOSURE AMONG PROFESSIONAL USERS

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**Objective and Methods**

- to describe professional exposures to pesticides and herbicides and to evaluate the possible correlation between exposure and clinical manifestations
- type of study: observational retrospective
- setting: Pavia PCC and EDs - study period: 2010-2014
- inclusion criteria: professional acute exposure to herbicide and pesticides evaluated in EDs
- exclusion criteria: attempted suicides or voluntary exposure

**Results (1)**

439 cases (approx 89/y)

medium age ➔ 52,5 ± 16 years

M/F ➔ 95/5%

Geographical distribution

- > 20%
- 10 - 20%
- 5 - 10%
- < 5%
Results (2)

**TYPE OF EXPOSURE**
- During application: 67%
- Accidental: 5%
- During the preparation of the product: 3%
- Unknown: 26%
- 1 product: 74%
- 2 products: 18%
- 3 products: 6%
- 4 products: 1%

**MODALITY OF EXPOSURE**
- Inhalation: 72%
- Dermal: 17%
- Ocular: 5%
- Buccal mucosa: 1%

**Glyphosate**: 57%
**Paraquat**: 1.6%
**Organophosphates/carbamates**: 45%
  - chlorpyrifos: 46%
  - dimethoate: 20%
  - methomyl: 15.7%
**Pyrethroids**: 30%

**Pesticides involved**
- Insecticides
- Fungicides
- Other
- Herbicides
- Copper/sulfur
- Unknown
Conclusions

1. Main intoxication predisposing factors are the inappropriate use of pesticides, associated with the incorrect use of personal protective equipment (PPE).

2. PPC clinical toxicologists plays a key role in correlation between exposure and clinical manifestations.

3. To reduce potential risk of intoxication, especially in occupational setting, a correct preventive information program may be essential.