First Author: Santiago Mintegi, MD, PhD  
Presenting Author: Santiago Mintegi MD, PhD  
Contact Author: Santiago Mintegi, MD, PhD  
Email: santiago.mintegi@osakidetza.net

2014 PAS/ASPR Joint Meeting

Subspecialty: Emergency Medicine  
Theme: Global Pediatric Research

Presenting Author: Santiago Mintegi MD, PhD  
Department/Institution/Address: Plaza de Cruces s/n, Barakaldo, Spain  
Phone: 0034 946006463  
Fax:  
Presenting Author E-mail: santiago.mintegi@osakidetza.net  
Is Presenting Author a Trainee? No, Not a Trainee  
The presenting author is member of these Alliance Societies:  
Presenter Copyright Declaration:  
I certify that any material I will use, display, distribute, reproduce or have reproduced or distributed in connection with my above noted presentation for which I do not have permission to use, is my original work and/or is public information or another type of material which does not require securing permission from another party to use, display, distribute, reproduce or have reproduced or distributed.

Study Group associated with your submission (if applicable):  
Pediatric Emergency Research Networks (PERN) Toxicologic working group

QUESTIONNAIRE INFORMATION  
Eastern Society for Pediatric Research: No, Do not consider this abstract for the Eastern SPR  
Pediatric Hospital Medicine: No, Do not consider this abstract for presentation at the Pediatric Hospital Medicine, July 24-27, 2014  
Research Type: Clinical  
Presentation Sabbath Conflict on: N/A  
APA Special Interest Groups, Committees or Regions: None

AWARDS APPLIED FOR:  
No awards selected

Title: International epidemiological and management differences in the acute pediatric poisonings. A PERN (Pediatric Emergency Research Networks) prospective multicenter study

Santiago Mintegi, MD, PhD1,4, Beatriz Azkunaga, MD, PhD1, Javier Prego7, Nadeem Qureshi3,4, Nathan Kuppermann, MD, MPH2,8, Stuart Dalziel, MBChB, PhD5,6, Eunate Arana, MD, PhD1, Yordana Acedo, MD1, Lorea Martinez1, Nerea Salmon, MD1 and Javier Benito, MD, PhD1,4.  
1Pediatric Emergency Department, Cruces University Hospital. University of the Basque Country, Bilbao, Basque Country, Spain; 2Department of Emergency Medicine, University of California, Davis School of Medicine, Davis, California, United States; 3Children's Emergency Department, Starship Children's Hospital, Auckland, New Zealand; 4Research in European Paediatric Emergency Medicine (REPEM), London, United Kingdom; 5Children’s Emergency Department, Starship Children's Hospital, Auckland, New Zealand; 6Paediatric Research in Emergency Departments International Collaborative (PRE DI CT), Melbourne, Victoria, Australia; 7Departamento de Emergencia Pediátrica, Centro Hospitalario Pereira Rossell, Montevideo, Uruguay and 8Pediatric Emergency Care Applied Research Network (PECARN), Davis, California, United States.

Background: Identifying worldwide epidemiological and management differences may be helpful to improve the prevention and management of acute pediatric poisonings.
**Objective:** To determine the epidemiology and management differences of acute poisonings in children evaluated in emergency departments (EDs) from 8 different regions of the world.

**Design/Methods:** This was a registry-based international multicenter prospective study of children treated for acute intoxication on the 4th, 14th and 24th days of each month in 110 EDs from 20 countries between 01/13 and 01/14.

**Results:** During the first 9 months, we registered 227301 ED visits (in the 3 days per month evaluated), and 1,123 acute poisonings (0.49%; 95% CI 0.47-0.52), with the highest rate in Eastern Europe (2.47%) and lowest in South America (0.32%, p<0.001).

The most common poisonings involved therapeutic drugs (45.9%), household products (17.9%) and ethanol/illicit drugs (9.7%). Pesticides were a leading cause in the Middle East-Asia (28.6%) and South America (11.2%).

The main mechanisms were non-intentional exposure (784, 69.8%; mainly in South America and the Middle East-Asia), suicide attempts (132, 11.8%; more common in Oceania and North America) and recreational exposure (126, 11.2%; mainly in Oceania and Europe).

Before going to the ED, 33.1% of the patients sought medical attention (mainly pre-hospital emergency services in Oceania and Eastern Europe) and 14.7% received some treatment (lowest rate in Oceania, Middle East-Asia and Northern Europe). Over 40% of the patients in North America, Oceania and Eastern Europe arrived to the ED in ambulances.

Overall, 527 (46.9%) received some treatment in the ED (18.9% gastrointestinal decontamination and 5.8 % antidote), more commonly in the Middle East-Asia and South America and 3.8% were admitted to ICU (highest rates in North America and Western Europe). No patient died.

**Conclusions:** There are substantial epidemiological and treatment differences related to acute poisonings in children in different countries and regions of the globe. These differences appeared in both the pre-hospital and ED settings. International best practices need to be identified for prevention and management of acute pediatric poisonings.

**Other Previews:**

Abstract Disclosure Info:  

[Disclosures]

[Close Window]