

**Conclusion**

Structured, group-based exercise interventions offered by community organisations (e.g., senior centres and community health clinics) in natural milieus can successfully increase balance among community-dwelling older adults concerned about falls.

**Rocha, Elsa**

APSI (Portuguese Association for Child and Adolescent Injury Control), Portugal

**Safe road to school in Faro**

Co-authors: Carmo, António; Mateus, Luisa; Menezes, Helena

**Problem**

Road accidents are the largest cause of child injury death in Portugal. Although passengers account for 50% of death, 80% of children in cars in their way to school in Faro, travel unrestrained. Despite existing legislation, enforcement is not practiced.

**Objectives**

Educational and enforcement programme to promote a road safety awareness in the population of Faro, and raise the use rate of children car restraint systems among a primary school population.

**Method or Approach**

Joint programme with Portuguese Association for Child and Adolescent Injury Control (APSI), Police (PSP), National Institute of Medical Emergency (INEM), General Directorate for Transports (DGV), in primary schools of Faro, from September to May 2002: 1- Seminar on road safety, open to public where children invited their family, teachers and policy to attend. 2- Training local police on child road safety, pushing them to practice enforcement, using the convention on rights of the child as the "umbrella" for all its actions. 3- Workshop at school with children, using interactive games, debates and showing videos with crash tests, raising the awareness and knowledge on road safety. 4- Meeting with parents, presenting the programme, informing about the legislation and the beginning of enforcement activities. 5- Enforcement by the police. 6- Survey of seat belt and child restraint systems use in the car.

7- Exhibition in an open and public space, with real pictures of road accidents - Road Safety Weekend.

**Results**

This programme was carried out in 7 primary schools, involving a total of 1800 students. The enforcement actions by the police ended up with 243 reports due to inadequate protection of children in the car with a minimum fine of 120€ each. In the school population involved, the use rate of child restraint systems raised from 20 to 89%. The final exhibition was visited by 1800 students and their teachers in the first day, and by a total of 100 000 persons during the weekend. Apparently, watching the real picture of a road accident had a great positive impact on the population. Enforcement kept being practiced and one year later the rate of children restraints system use in the same population was 90%. In 2003 the programme was extended to secondary school with an increase from 15% to 85% on rate of seat belt use at the back seat and from 91% to 100% at front seat.

**Conclusion**

Adopting a combined approach to road safety, with an effective education and enforcement, this programme led to immediate improvement of protection rate of children in cars. It's been extended to other cities and we are working on promoting citizenship and political involvement to reach a national level.

**Rocha, Julio**

Ministerio de Salud/CDC/OPS, Nicaragua

**Transport related injuries captured in two Emergency Departments in Nicaragua - 2001- 2002**

Co-authors: Clavel, Carme; Noe, Rebeca

**Problem**

In Nicaragua the magnitude of the transport related injuries during the last decade has remained 8.27 to 10.89 per 100,000 inhabitants and represent between 15% - 25% of the external cause of deaths. This problem is aggravated due to the noncompliance with transportation regulations and the ingestion of alcohol by drivers. As soon as the development in epidemiology of injuries and public health programs then prevention can be promoted.

**Objectives**

To obtain information on who, circumstances, time, and place of occurrence of transport-related injuries. This information will permit the promotion of prevention at the local level with the participation of the authorities and civil society

**Method or Approach**

Surveillance has been developed in two hospital emergency departments, in a national hospital (hospital A) and in a departmental hospital (hospital B) during August 2001- July 2002 with the technical and financial assistance from the Center of Disease Control, Atlanta, Georgia, USA. ICECI (International Classification of External Cause of Injury) coding was utilized and data were analyzed using EPI-Info 2000.

**Results**

During the study period, August 1, 2001- July, 31 2002 there were 3,748 transport related injuries registered, of which 2,788 corresponded to hospital A and 960 corresponded to hospital B and in both hospitals the ratio of male to female was 3:1. The age distribution of the sample was those younger than 15 years old, 20%, 15-49 years old, 69%, and those older than 50 years old, 10.7%. The type of transport were motor vehicle; 2,329 (62.1%), bicycles 861 (23%); and cart drawn by an animal 210 (5.6%). Use of alcohol was suspected in 515 (14%) of the injuries. There were a total of 839 (23%) injured that required hospital admission. Of the injured pedestrians (n=997) there were 46.6% mildly injured, 33.5% moderately and 12.2%

severely. Severity to drivers (n=1,338) was 49.1% mild, 38.4% moderate and 6.7% severe. And to passengers (n=1,169) the distribution of severity was 51.1% mild, 36.4% moderate and 6.7% severe. There were 107 fatalities (3%), the years potential life loss in males was 2,728 and for females 532.

#### **Conclusion**

Injuries related to transportation represent an important burden in the morbidity and premature death in Nicaragua. This emergency department based injury surveillance system identified the ages of those being injured and provided important information regarding the type of transport and user involved in the collisions. This information can be critical in the development of effective prevention strategies. This one year experience has motivated the health authorities in Nicaragua to be interested in determining the costs

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#### **Rodion, Rasulov**

Scientific Center of Reconstructive Surgery, Russia

#### **Management of the concomitant injuries of the main abdominal vessels**

##### **Problem**

The injury of abdominal vessels are a very high-gravity trauma with a high postoperative mortality

##### **Objectives**

To study the results of treatment of the concomitant injuries of the main abdominal vessels.

##### **Method or Approach**

During 1992-2002 yrs., 115 patients (M=100, F=15) were treated in the clinic for the concomitant injuries of the main abdominal vessels. Intraoperatively, the injuries of one (n=83), two (n=24) and three (n=5) vessels were found. The vessel injuries were the following: vena cava inferior (n=45), portal vein and its main inflows (n=31), iliac vessels (n=26), abdominal aorta (n=11), renal vessels (n=11), superior mesenteric vein (n=9), celiac trunk and its main branches (n=8), and inferior mesenteric vessels (n=5). In every case, the vessel injuries were combined with the abdominal organ traumas. The most difficult treatment was in the cases of decompensation hemorrhagic shock (n=53). To treat that group of patients, we used two different (opposite) surgical tactics. In group A (controls, n=28), the whole set of surgical interventions was performed in the course of one operation. In group B (main group, n=25), the staged surgical correction of the traumas was used. The first operation (stage 1) included the final arrest of the profuse bleeding (vascular suture, tamponing the abdominal cavity) and the prevention of microbial contamination. The correction of hypotony, acidosis, and hypothermia was conducted in the intensive care unit (stage 2). Scheduled relaparotomy (stage 3) with the complete correction of the abdominal organ injuries was performed after the hemodynamics stabilization.

##### **Results**

The retrospective analysis showed that operation duration was 213±15,5 min in group A and 140±6,3 min in group B. Intraoperative blood loss was 1735±112,2 ml in group A, and 1202±176,1 ml in group B. The severity of patients' state in group A according to APACHE II scale at the early operative stage was 25±0,5 and 36±0,8 in the end of the operation. In group B, those values were 24±0,4 and 25±0,5, respectively. Postoperative lethality made 78,5% (n=22) in group A, 40% (n=10) in group B. Over-all postoperative mortality in concomitant injuries of the main abdominal vessels was 40% (n=46).

##### **Conclusion**

The optimum volume of surgical intervention in group B in terms of coagulopathy allowed reducing the operation duration (p<0,05) and intra-operative blood loss (p<0,05). Large intra-operative blood loss and traumatic operative procedures in group A were responsible for the aggravation of patients' severe state (p<0,05) in the course of operation. In group B, significant (p=0,18) changes in patients' state severity were not observed. Multi-stage correction of injuries of the main vessels and abdominal organs allowed decreasing the postoperative lethality up to 40%.

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#### **Rodriguez Vasquez, Marieliz Belinda**

Health Ministry of Nicaragua, Nicaragua

#### **Violence in Nicaragua: An experience in two emergency departments: 2001-2002**

Co-authors: Clavel Arcas, Carme; Gonzalez, Maria Elena; Huete, Ixy; Rocha, Julio

##### **Problem**

The Nicaraguan Ministry of Health has estimated the interpersonal violence rates by 100.000 inhabitants in the past decade as 6,18 in the year 1991, 7,26 in 2000 and 6,4 in 2002. To better understand the magnitude and the morbidity and mortality of intentional injuries we evaluated data from two emergency departments. These two emergency departments are participants in a collaborative PAHO/CDC/Nicaraguan Ministry of Health injury surveillance pilot project

##### **Objectives**

To describe the epidemiological characteristics of persons injured by interpersonal violence captured in the emergency department in two hospital of Nicaragua.

##### **Method or Approach**

All first time injuries were included in the emergency department based injury surveillance system. We extracted all recorded interpersonal violence events in two hospitals: the National Hospital, Antonio Lenin Fonseca in Managua, the capital of Nicaragua and the Hospital Santiago in the rural town of Jinotepe, in the north. The study period was August 1, 2001 July 31, 2002. The data were captured on a injury surveillance form which was completed by the emergency department. We analyzed the data by using EPI Info 2002. The variables analyzed were: age, sex, object, place mechanism and relationship and context of injury.

## Transport related injuries captured in two Emergency Departments in Nicaragua - 2001- 2002

**Author** Rocha, Julio  
Ministerio de Salud/CDC/OPS, Nicaragua

**Co-Author(s)** Noe, Rebeca  
Clavel, Carme

### Problem under study

In Nicaragua the magnitude of the transport related injuries during the last decade has remained 8.27 to 10.89 per 100,000 inhabitants and represent between 15% - 25% of the external cause of deaths. This problem is aggravated due to the noncompliance with transportation regulations and the ingestion of alcohol by drivers. As soon as the development in epidemiology of injuries and public health programs then prevention can be promoted.

### Objectives

To obtain information on who, circumstances, time, and place of occurrence of transport-related injuries. This information will permit the promotion of prevention at the local level with the participation of the authorities and civil society

### Methodology

Surveillance has been developed in two hospital emergency departments, in a national hospital (hospital A) and in a departmental hospital (hospital B) during August 2001- July 2002 with the technical and financial assistance from the Center of Disease Control, Atlanta, Georgia, USA. ICECI (International Classification of External Cause of Injury) coding was utilized and data were analyzed using EPI-Info 2000.

### Results

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## Road Safety

Monday, June 7<sup>th</sup>, 14:30–15:30

Foyer F

The number corresponds to the number of the poster board.

Monday, June 7<sup>th</sup>, 2004

Road Safety  
Child Safety  
Violence Prevention  
Work Safety and Health  
Trauma, Disaster,  
Civil Protection, Terrorism  
Sports, Leisure Safety  
Suicide Prevention  
Elder Safety  
Home & Institutional Safety  
Product Safety  
Cross-Sectoral

08:00

08:30

09:00

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10:00

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13:00

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14:30

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16:00

16:30

17:00

17:30

18:00

18:30

All posters  
remain hanging  
until 10:00 the  
following day.

242 Mbabazi, Enid  
**Drink driving among  
motor vehicle drivers on  
the Iganga-Jinja-Kampala  
highway, in Uganda**  
Ministry of Health,  
Uganda

243 Mikulik, Josef  
**IRTAD: reliable background  
for international comparison  
of road traffic accidents**  
Road Transport Research Centre  
(CDV), Czech Republic

244 Motevalian, Abbas  
**Driving under influence of  
opiates in commercial large  
vehicle drivers of Iran**  
Tehran University of Medical  
Sciences, Iran

245 Nicholson, Alf  
**Improving car safety in  
preschool children: an impact  
of an educational inter-  
vention at the antenatal clinic**  
Paediatric Department Lourdes  
Hospital, Ireland

246 Nicholson, Alf  
**Road related deaths and  
injuries in Irish children: what  
lessons should we learn from  
our fellow Europeans?**  
Paediatric Department Lourdes  
Hospital, Ireland

247 Nishida, Yasushi  
**An effect of light condition  
on multiple vehicle accident**  
National Research Institute of  
Police Science, Japan

248 Paisalwattana, Suebpong  
**Thailand Accident Research  
Center: establishment and  
operation experiences**  
Asian Institute of Technology,  
Thailand

249 Pana, Bogdan  
**Road traffic injuries in  
Romania: issues, causes and  
status of intervention**  
University of Medicine and  
Pharmacy "Carol Davila"  
Bucharest, Romania

250 Pratt, Stephanie  
**Occupational roadway  
fatalities in the USA:  
differences by vehicle  
registration and vehicle type**  
CDC/NIOSH, USA

251 Reddi, Malagaveli N.  
**Drink driving and road traffic  
injuries in Bangalore**  
Bangalore Police, India

252 Richter, Martinus  
**Whiplash-type neck  
distortions in restrained car  
drivers: Prognosis and  
possibilities of prevention?**  
Trauma Department, Hannover  
Medical School, Germany

253 Richter, Martinus  
**Actual injury situation  
of the geriatric road user –  
a medical and technical  
accident analysis**  
Trauma Department, Hannover  
Medical School, Germany

254 Rocha, Julio  
**Transport related injuries  
captured in two emergency  
departments.  
Nicaragua 2001–2002**  
Ministerio de Salud/CDC/OPS,  
Nicaragua

255 Rodriguez, Ruben  
**Bicycle riding injuries in  
Nueva Concepción Hospital,  
June 2002–July 2003**  
Ministry of Public Health in  
El Salvador, El Salvador