



# The 2<sup>nd</sup> International Neurotrauma Congress & the 4<sup>th</sup> International Roads Safety Congress

Shefa Neuroscience Research Center, Tehran, Iran, 18-20 February, 2015

*The Neuroscience Journal of Shefaye Khatam*

Volume 2, No. 4, Suppl. 3

## Oral Presentation

### Status of Road Safety and Injury Burden: Europe

Hagen Andruszkow<sup>1,2</sup>, Carl Haasper<sup>3</sup>, Guenter Lob<sup>4</sup>, Roman Pfeifer<sup>1,2</sup>, Dirk Stengel<sup>5</sup>, Frank Hildebrand<sup>1</sup>, Hans-Christoph Pape<sup>1\*</sup>

<sup>1</sup>Department of Trauma and Reconstructive Surgery, University Hospital Aachen, Aachen, Germany.

<sup>2</sup>Harald Tscherne Laboratory, University Hospital Aachen, Aachen, Germany.

<sup>3</sup>Department of Orthopaedic Surgery, Helios ENDO Klinik Hamburg, Hamburg, Germany.

<sup>4</sup>Section Injury Prevention, DGOU, Berlin, Germany.

<sup>5</sup>Center for Clinical Research, Unfallkrankenhaus Berlin, Berlin, Germany.

**Published: 18 February, 2015**

#### Abstract

Road traffic injuries are an ongoing global health burden and cause more than 1.2 million deaths per year. In Europe, the annual socioeconomic impact accounts for €130 billion. In 2011, the United Nations set a special focus on road safety and injury prevention by the proclamation of the “Decade of Action for Road Safety.” This initiative focuses mainly on developing countries. In Germany, many measures have been undertaken to improve the mortality rates associated with traffic injuries. Among these are countrywide mandatory helmet laws for motorcyclists, speed limits on the Autobahn, speed limit reinforcements associated with fines in and outside the cities, and a network of overlapping rescue helicopter coverage throughout the country. Despite a general decrease in mortality, the European Commission in 2001 set a new law to reduce the number of road traffic fatalities by another 50%. Until 2009, a reduction of more than one third (38%) was achieved. The improvements observed seem to be a result of improvements in education, engineering, and technical improvements in active and passive car safety. These have had effects for cyclists and pedestrians, as well. In addition, a 1% reduction of distance traveled by motorized vehicles has occurred, which may have contributed to a decreased incidence of accidents (1.8%). Based on these prerequisites, this article provides an overview on the current situation in Europe and focuses on 2 questions: 1. How can the improvements in road traffic-associated fatalities in Europe be explained? 2. Is there a special patient group that should be aimed at in the future? The observed decline of fatalities over the last decades can be explained by different factors. The highest number of fatalities was observed in the age group between 15 and 29 years. Furthermore, most pronounced decrease in fatalities was found for children younger than 14 years of age (55%). The age group between 15 and 24 years demonstrated a decrease of 40%. In elderly persons, the reduction was only 9%. This may be explained by the fact that more elderly people continue to drive. Moreover, if involved in a car accident, their chances of death are higher than in all other age groups.

**Keywords:** Road Safety, Injury Prevention, Europe.

**\*Corresponding Author:** Hans-Christoph Pape

E-mail: [hpape@ukaachen.de](mailto:hpape@ukaachen.de)