Serious road traffic injuries in Europe: Lessons from SafetyCube

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SafetyCube

- Quantitative information on road safety risk factors and measures
Serious road injuries

- Road safety policy making was mainly aimed at reducing fatalities, but
- Serious road injuries are getting more attention in recent years
SafetyCube – Serious road injuries

• Estimation of the number of serious road injuries
• Health impacts of serious road injuries
• Cost related to serious road injuries
• Risk factors associated with serious road injuries

Serious injury = MAIS3+
Estimation of the number of serious road injuries
Introduction

- EU High Level Group on Road Safety identified three main ways to collect data on MAIS3+ casualties:
  1. Applying correction to police data
  2. Using hospital data
  3. Using linked police and hospital data
- Additional choices need to be made
- Methodological choices have an effect on the estimated number of MAIS3+ casualties
Method

- Description of current and planned practices
  - *Survey among EU countries (inspired by FERSI survey)*
  - *Current practices and experiences from number of countries*

- Analysis of consequences methodological differences;
  - *Application of different methods to the same data*

→ Practical guidelines
Results

- Methods differ between countries
- Methodological differences can have a considerable effect on the estimated number
Health impacts

Physical and psychological consequences of serious road traffic injuries

Deliverable 7.2
Introduction & method

• Impacts of (serious) road injuries on lives of casualties
  – Literature review
  – Analysis of additional studies and data, e.g. ESPARR cohort study

• Burden of (serious) road injuries to society → YLD
  – Literature review
  – Calculation of YLD for a number of countries
Results (1)

- Non-fatal road injuries can have a major impact on lives of casualties (and their families):
  - Pain, fatigue, mobility problems, sick leaves
  - Psychological consequences, e.g. PTSD
  - Socio-economic consequences, e.g. financial problems

- Reported prevalence of disabilities varies widely between studies (11% - 80%)
Results (2)

- YLD calculations: between 19% and 33% of MAIS3+ casualties encounter lifelong disabilities

- Consequences increase with injury severity, but:
  - Also minor injuries may have substantial long-term consequences
  - Because of their high number, the burden of injury of MAIS2-injuries is higher than the burden of injury of MAIS3+ injuries
Costs related to serious road injuries
Method & Results

- Survey among 32 EU countries
  - Joint effort between SafetyCube and InDev

- Costs per serious road injury: €28,000 - €975,000
- 14% - 77% of total costs of road crashes
- 0.04% - 2.7% of GDP
Main lessons learned from SafetyCube
Main lessons

1. Be careful when comparing MAIS3+ estimates from different countries
2. Good quality hospital data is inevitable for the estimation of the number of MAIS3+ casualties
3. As AIS3+ injuries can have major impacts on casualties’ lives, pose a burden to society and result in considerable costs, it is important to reduce the number of MAIS3+ casualties
4. From a burden of injury perspective, less serious injuries are as relevant as serious injuries
Thank you!

http://www.safetycube-project.eu/

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