The Burden of Injuries in South Asia: Case Study

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Section A

Motor Vehicle Crashes in South Asia
Road Traffic Accidents in South Korea

Figure 1: Population and Accident Trends

- Number of Accidents
- Population (in 1000's)

Adapted by CTLT from: Korea Road Traffic Safety Association, 1993
# Fatality Rates by Motor Vehicle Crashes in South Asia

<table>
<thead>
<tr>
<th>Country</th>
<th>Author, year</th>
<th>Rates / 10,000 Vehicles</th>
<th>Rates / 100,000 Population</th>
<th>Motor Index (Veh. / 1,000 per)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>Bhandari 1969</td>
<td>37.0</td>
<td>12.6</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Mohan 1985</td>
<td>12.4</td>
<td>11.6</td>
<td>93.9</td>
</tr>
<tr>
<td></td>
<td>Guruaj 1993</td>
<td>67.4</td>
<td>9.9</td>
<td>14.7</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>Sayer 1985</td>
<td>39.0</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>Selgado 1988</td>
<td>23.3</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Pakistan</td>
<td>Hyder 2000 (for year 1956)</td>
<td>38.9</td>
<td>—</td>
<td>13.25</td>
</tr>
<tr>
<td></td>
<td>Hyder 2000 (for year 1996)</td>
<td>13.75</td>
<td>3.9</td>
<td>25.08</td>
</tr>
</tbody>
</table>
% of Traffic Fatalities by Type of Road User, India

- Pedestrian: 51%
- Passenger: 11%
- Driver: 2%
- Cyclist: 39%

Source: Mohan 1985
% of Traffic Fatalities by Type of Road User, Sri Lanka

Source: Salgado, 1988
Section B

Injuries in Pakistan
Questions

1. Identify the data source for mortality
2. Comment on figure one and critique the presentation of the data
3. Which intentional and unintentional injuries are covered in this article?
4. Do you agree with the policy recommendations? Why or why not?
5. If given the opportunity of doing one study after viewing this paper, what would be the area of study?

Continued
Road Traffic Crashes and Fatalities in Pakistan

Source: Ghaffar, A., Health Pol Plan 1999; 14: 11-17
Ratio of Deaths to Road Accidents in Pakistan, 1985-1994

Source: Ghaffar A. Health Pol Plan 1999; 14: 11-17
Questions

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Homicide and Assault Rates in Pakistan, 1985–1994

Source: Government of Pakistan
Contribution of Commercial Vehicles to Motor Vehicle Crashes in Pakistan

Recommendations for Pakistan

- Government of Pakistan needs to seriously consider an operational *assessment* of the burden of injuries in Pakistan.
- It should facilitate the way for *legislation and implementation* of safety standards.
Recommendations for Pakistan

- Clearly define the *public health related effects* of injuries and prepare to meet the challenges that urbanization will bring in the future

*Source: Ghaffar A. Health Pol Plan 1999; 14: 11-17*
Questions

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Section C

Motor Vehicle Crashes in Pakistan: A Review
Distribution of Motor Vehicle Injuries

Presenting to Two Trauma Hospitals, Pakistan

- Pedestrian: 33%
- Unknown: 28%
- Car: 12%
- Motorcyclist: 13%
- Bus: 8%
- Other: 3%
- Truck: 3%

% of Motor Vehicle Crash Deaths

Presenting to Two Trauma Hospitals, Pakistan

Total Number of Registered Vehicles, Crashes, Deaths, and Injuries in Pakistan

Motor Vehicle Crashes and Deaths in Pakistan, 1956–1996

Change in Motor Vehicle Injury Risk Factors, 1956 and 1996
Pakistan

## Police Data for Motor Vehicle Crashes in Pakistan

<table>
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<tr>
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<tbody>
<tr>
<td>No. of Injuries (100%)</td>
<td>35</td>
<td>2,048</td>
<td>28,889-78,302*</td>
</tr>
<tr>
<td>Injuries in Police Records (%)</td>
<td>5 (14.28%)</td>
<td>793 (38.7%)</td>
<td>11,186</td>
</tr>
</tbody>
</table>

* Estimated

Motor Vehicle Crashes: The Emerging Epidemic in Pakistan

- Pakistan is a developing nation demonstrating all the features of urbanization and economic growth that portend an increasing risk for motor vehicle crashes (MVC)

- Persistent growth in number of MVC since 1956 as indicated by police reports (40 year period 1956-1996)

Motor Vehicle Crashes: The Emerging Epidemic in Pakistan

- Commercial and public service vehicles are disproportionately involved in majority of crashes
- Public health sector in Pakistan must recognize and respond to the emerging epidemic