Child Road Injuries: Gauteng Status Quo

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Background

• Why focus on children\(^1\)?
  1) It is disturbing that children are not safe on our roads

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  2) Creating safer roads for children could result in safety of all road users

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  1) High road fatality rate per 100 000 population

Source: Peden et al. (2013)
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Source: Vanderschuren and Zuidgeest (2017)
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  4) Pedestrians still the victims because of lack of adequate infrastructure

Data Source: RTMC, 2016

Pedestrians: 38,4%  
Passengers: 32,7%  
Drivers: 25,6%  
Cyclists: 3,2%
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5) Road fatalities have high financial implications on individual and country. Pedestrian ZAR 78,800 and passenger ZAR 82,700

<table>
<thead>
<tr>
<th></th>
<th>PVC (41) Average/patient</th>
<th>MVC (59) Average/patient</th>
<th>Total</th>
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<tbody>
<tr>
<td>Days on ward</td>
<td>2152</td>
<td>3279</td>
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<tr>
<td>Days in ICU/HDU</td>
<td>534</td>
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<td>Ward sundries</td>
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<td>11</td>
<td>1276</td>
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<tr>
<td>NG feeds</td>
<td>10</td>
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<tr>
<td>Lab tests</td>
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<td>Blood transfusions</td>
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<td>Time in Operating theatre (OT)</td>
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<tr>
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<td>977</td>
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<tr>
<td>Total</td>
<td>6789</td>
<td>7127</td>
<td>698,850</td>
</tr>
</tbody>
</table>

Source: Parkinson et al., 2014
Demographics and Travel Statistics

Population
• Child Population (approximately 3,4 million children)

Data Source: NHTS, 2013
Demographics and Travel Statistics

Population
- Child Population (approximately 3.4 million children)
- Male vs Female Child Population
  - Statistics show that male children are more vulnerable

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Trip Destinations: Where are they travelling?
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- Education: Walking dominant (41%)

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Time taken to access education
- Majority take longer than 15 minutes (67%), crossing high-speed arterials

Data Source: NHTS, 2013
1) RTMC

- Children constitute 9% of road fatalities in South Africa and 7% of road fatalities in Gauteng

Source: RTMC, 2015-2017
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   • Child pedestrians most vulnerable – 73% – followed by child passengers – 26%

Source: RTMC, 2015-2017
Preliminary Findings

1) RTMC
   • Children constitute 9% of road fatalities in South Africa and 7% of road fatalities in Gauteng
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   • Cars, Minibus taxis (VKTs?) and Light duty vehicles placing road users at risk

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2) Pretoria Road Injury Data – Findings not correct

Data Source: Pretoria, 2011-2015
Implications

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• Better data is required that includes reporting on road injuries and that provides geocoded locations of injuries
  - Serious injuries can disable children. Most child cyclist injuries are unreported
  - Geocoded data can provide us information as to locations that are dangerous for children. Are these locations closer to home or to school?
Implications

- Example of geocoded data analysis – WC Central Karoo
Way Forward

• Road Safety Interventions – The difficult conversation
  1) Low Road Safety budget, therefore, we need to prioritise
  2) Prioritise child pedestrian and passenger children
  3) How? Determine cause of these injuries and recommend localised interventions based on the five pillars of road safety – ‘Lollipop measure’
  4) Lets help the RTMC in curbing the fatality problem.
  5) Road fatality is our problem
  6) Conducting a review of current policies and finding gaps.

• Data required yet – Let’s share all data
  1) Mortuary data that provides cause of road fatalities – gap in deaths caused by alcohol
  2) National geocoded data or geocoded data for Gauteng
  3) Data that divides child injuries by age group
‘Lollipop’ Intervention

Source: Amend and FIA, 2016
Quick video