An Investigation of the Economic Impact of Road Safety Valuation Models on Road Safety Investments in low-income Countries

Charity Nankunda,
PhD Researcher,
Department of Civil Engineering
University of Birmingham, UK
Background

- RTIs are the leading cause of death for 5–29-year-olds
- > 1.3 million deaths per year globally (Global road safety report, 2018)
- 93% deaths occur in low- and middle-income countries
- RTIs have a huge financial and social impact on society.
Problem and Needs

- Road safety valuation models can be used to evaluate economic impact of RTIs.
- A systematic review helped identify which valuation model could be applicable for LICs.
- Existing models have not been developed using LIC data specifically.
- Lack of publications in LICs
Innovation and Challenges

- Develop a road safety valuation model applicable to LICs and developed using LIC data.
- Lack of accessible data – large barrier to entry for research.
- Poor quality of available data.
- Very high levels of underreporting.

**Case study: Uganda**

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<tbody>
<tr>
<td>Uganda’s Population, 2016</td>
<td>41,487,964</td>
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<tr>
<td>Uganda’s Reported Road Fatalities, 2016</td>
<td>3,503</td>
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<tr>
<td>WHO Estimated Fatalities, 2016</td>
<td>12,036</td>
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<tr>
<td>WHO Est. Fatalities per 100,000 Pop., 2016</td>
<td>29</td>
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Outputs

- Investigating the suitability of current models for LICs.
- Collection of data from Uganda as a case study.
- Investigation of the applicability of our developed model versus existing models

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<th>Lower</th>
<th>Central</th>
<th>Upper</th>
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<tbody>
<tr>
<td>Value of fatality</td>
<td>60*GDP/Capita</td>
<td>70*GDP/Capita</td>
<td>80*GDP/Capita</td>
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<tr>
<td>Value of serious injury</td>
<td>12*GDP/Capita (20%VSL)</td>
<td>17*GDP/Capita (25%VSL)</td>
<td>24*GDP/Capita (30%VSL)</td>
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<tr>
<td>Number of serious injuries to number of fatalities</td>
<td>8</td>
<td>10</td>
<td>12</td>
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The true cost of road crashes, McMahon and Dahdah (2008)
Impact

- Enable a more realistic description of the economic impact of road safety in LICs.
- Improve the choice of countermeasures.
- Enhance the prioritization of countermeasures implementation.
- Provide improved data management pertinent to the LICs conditions.
THANK YOU

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CHARITY NANKUNDA