

## **SP 2003-09 - ABSTRACT**

### **A NEW CHALLENGE TO CHILD SURVIVAL IN DEVELOPING COUNTRIES: AN INCREASING BURDEN OF URBAN ROAD TRAFFIC INJURIES**

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#### **HOST ORGANIZATION**

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#### **PROJECT TIMELINE**

March 2004 – May 2006

#### **PROJECT GOAL**

To provide a comprehensive epidemiological profile of urban road traffic injuries in children less than 15 years old in sub-Saharan Africa and South Asia.

#### **PROJECT SUMMARY**

Overall, this work was critical in order to determine the burden of road traffic injuries in sub-Saharan Africa and South Asia. Using summary measures of population health, this study focused on a review of 48 countries in sub-Saharan Africa (where data was available) and also six countries in South Asia (i.e., India, Pakistan, Bangladesh, Bhutan, Malaysia and Sri Lanka).

Research activities in both regions included the following:

- Data analysis
- Development of an epidemiological profile
- Estimation of the burden of disease of road traffic injuries
- Development of manuscripts and reports
- Submission to journals for publication
- Development of a dissemination plan

Researchers also developed a specific case study for Nigeria, one of the most populous countries in Africa, and the home country of one of the research fellows affiliated with this project.

At the conclusion of the project, researchers had explored mortality rates from road traffic injuries – including crude death rates, case-fatality rates and morbidity data – in both regions. Data was analyzed by the following variables: anatomical location of injury, road user type including the type of vehicle, and injury outcomes (i.e., fatal or non fatal). These variables were further explored by age intervals and gender (where data was available). Risk factors for road traffic injuries in children were also explored.

This project led to the following scientific publications:

- Hyder AA, Muzaffar SS, Bachani AM. Road traffic injuries in urban Africa and Asia: a policy gap in child and adolescent health. *Public Health*, 2008;122(10):1104-10
- Hyder AA, Labinjo M, Muzaffar SS. A new challenge to child and adolescent survival in urban Africa: an increasing burden of road traffic injuries. *Traffic Injury Prevention*, 2006;7(4):381-8
- Hyder AA, Amach OH, Garg N, Labinjo MT. Estimating the burden of road traffic injuries among children and adolescents in urban South Asia. *Health Policy*, 2006;77:129-139

Overall, the researchers found that data on urban road traffic injuries in children <20 years of age in sub-Saharan Africa and South Asia is available, though limited in nature and scope. Most available literature is limited to hospital-based studies, which may underestimate the full burden of road traffic injuries in children within these communities. However, this project was one of the first independent reviews of childhood road traffic injuries in both regions.

Researchers faced some challenges, but they were able to overcome most of them. Recommendations for future work included presenting the results to experts in both regions for feedback.

In addition, researchers recommended that decision makers in these regions – particularly experts in the field of injury prevention, transport and health – review the results and begin to collaborate toward the development of policies and interventions that could help mitigate the increasing burden of road traffic injuries in their communities.