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10.1136/injuryprev-2021-safety.67

Context

Lack of data on road injuries in LMICs have hindered the development of evidence-based prevention programs. The purpose of this study is to assess the impact of historical motorcyclist crashes and road design on the wider community.

Methods

A community-based participatory research approach was used to collect data on road safety and community needs. The study included a focus group discussion and a community survey. Data was analyzed using descriptive statistics and thematic analysis.

Results

The study found that the road design and motorcyclist behavior were significant contributors to the high number of crashes. The participants highlighted the need for improved road design, increased enforcement of traffic laws, and education on road safety.

Conclusions

The research findings highlight the need for continued efforts to improve road safety in LMICs. The study calls for the development of evidence-based prevention programs that address the specific needs of the community and incorporate community involvement.

Learning Outcomes

Participants will gain knowledge on the methods and results of the research and understand the implications for future research and practice.

10.1136/injuryprev-2021-safety.68

Background

Neurotrauma is a significant public health problem in LMICs. The purpose of this study is to assess the impact of road design and motorcyclist behavior on the occurrence of neurotrauma.

Methods

A community-based participatory research approach was used to collect data on road safety and community needs. The study included a focus group discussion and a community survey. Data was analyzed using descriptive statistics and thematic analysis.

Results

The study found that the road design and motorcyclist behavior were significant contributors to the high number of crashes. The participants highlighted the need for improved road design, increased enforcement of traffic laws, and education on road safety.

Conclusions

The research findings highlight the need for continued efforts to improve road safety in LMICs. The study calls for the development of evidence-based prevention programs that address the specific needs of the community and incorporate community involvement.

Learning Outcomes

Participants will gain knowledge on the methods and results of the research and understand the implications for future research and practice.

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System Assessments (SSAs) are a process for quantifying the need for overhauling the current regulatory policies and practices to enforce the usage of standard mirrors in buses. This evidence was used to nudge bus transit agencies to improve the quality of mirrors in their bus fleets; subsequently, two agencies issued tenders to procure standard-sized rear-view mirrors.

Context

Public buses in India play a major role, serving 70 million passengers daily. Safety of these buses is a major concern. Aligned to SDG 3.6, this initiative is aimed to reduce public bus crashes.

Process

Between 2015–2017, WRI India and UL studied historical crash data of 13 bus transit agencies to analyze the reasons of crashes and drive programmatic interventions to improve safety. One finding was that a majority of buses were plying with substandard mirrors, which greatly compromised the field of vision of drivers, resulting in crashes involving motorcyclists and pedestrians.

Analysis

In 2017, we retrofitted 46 buses with standard rear-view mirrors in Bengaluru and evaluated the impact on blind spots and driver experience. The results indicated that the replacement of small mirrors with standard-sized rear-view mirrors improved the field of vision significantly (11% on the driver’s side and 103% on the passengers’ side). Further, 80% of the drivers surveyed felt this improved their experience and comfort.

Outcomes

This evidence was used to nudge bus transit agencies to improve the quality of mirrors in their bus fleets; subsequently, two agencies issued tenders to procure standard rearview mirrors.

Learning Outcomes

To ensure sustainable impact, there is a need for overhauling the current regulatory policies and practices to enforce the usage of standard mirrors in buses. This should include capacity building activities like training the drivers and other agency staff to facilitate compliance.