

Completeness of police reporting of traffic crashes in Nepal: evaluation using a community crash recording system

This page provides information about a publication describing research funded by the Global Health Research programme under award number 16/137/49, which has been published in a third-party journal. For information about copyright and reproduction of the original publication, please see the publisher's website.

Publication

Khadka A, Parkin J, Pilkington P, Joshi SK, Mytton J. Completeness of police reporting of traffic crashes in Nepal: evaluation using a community crash recording system. *Traffic Inj Prev* 2022;23:79–84. <https://doi.org/10.1080/15389588.2021.2012766>

Abstract

Objective

Accurate road crash reporting is essential for evaluating road safety interventions and plans. Under-reporting of road traffic crashes, injuries, and fatalities in police records has been widely described. The aim of this study was to apply and evaluate a community crash recording system, and assess the quality of the data in comparison with traffic police data in Nepal.

Methods

The crash data collection methodology involved recruiting Local Record Keepers working and living at locations known to be at a high risk of crashes. Six shopkeepers were recruited at three crash locations and trained to complete collision incident forms for crashes occurring over one year on the section of road visible from their premises. Manual traffic volume and pedestrian counts, and spot speed surveys were conducted. Data were compared with District police records for the same period and locations.

Results

Over 12 months, 110 crashes were recorded by the Local Record Keepers. Of these, 70 resulted in 145 injuries (5 fatalities, 62 severe, and 78 minor injuries), while 40 resulted only in property damage. Comparable police data recorded 23 crashes, of which 18 crashes resulted in 27 injuries (8 fatalities, 13 serious, and 6 minor injuries), and 5 crashes in property damage only. The difference in recording of fatal and serious injuries was statistically significant ($\chi^2(1) = 19.94$, $p < 0.001$). The police reporting rate was highest for fatalities (62.5%) but only 11.6% and 7.1% for property damage cases and minor injuries respectively, and 3.8% for single-vehicle crashes. Compared to the Local Record Keeper data, the overall police crash reporting rate was 19.7%.

Conclusions

Local Record Keepers' recording of road traffic crashes and casualties is feasible and provides a more complete record than routinely collected police data. The low reporting rate in the police records of minor injury, property damage, and single-vehicle crashes suggest significant underestimation and bias in the reporting of the actual burden of road traffic crashes. Local Record Keeper recording is a viable method for validating police reports.

Funding

This publication was funded by the Global Health Research programme as a part of award number 16/137/49.

This article reports on one component of the research award NIHR Global Health Research Group on Nepal Injury Research, University of the West of England, Bristol. For more information about this research please view the award page [<https://fundin.gawards.nihr.ac.uk/award/16/137/49>]

DOI

<https://doi.org/10.1080/15389588.2021.2012766>