Title: Evidence to inform the regulation and policy development of motorcycle taxi services in

Nepal: a secondary data analysis.

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Background

Globally, 30% of road traffic deaths involve motorcycles rising to 43% in South-East Asia, where motorcycles are often used as taxis. Road transport provides the main mode of mobility in Nepal, and in Kathmandu valley motorcycles constitute 79.1% of the total vehicle fleet. Nepal does not have any legislation authorising the development of a motorcycle taxi system, but motorcycle taxi ride-hailing app services started in 2016 in response to consumer demand. As part of a mixed methods study, we conducted an analysis of secondary data from the police and media crash reports.

Objective

To systematically gather evidence to inform regulation and policy development of the motorcycle taxi system in Nepal.

Methods

We obtained permissions to access crash data from police headquarters in Kathmandu. They provided us with de-identified data on all motorcycle crashes categorised as taxis in their database over three fiscal years 2021/22 to 2023/24 covering a total of 27 months. We used descriptive statistics to calculate frequencies and rates. To provide context for these crashes, we sought media reports of the motorcycle taxi crashes in the police records that were published in a daily newspaper widely read in Kathmandu.

Results

Since the police began recording motorcycle taxi crashes, they have reported 29 crash events resulting in 42 people being injured and one fatality. This provides a baseline motorcycle taxi crash rate of 1.07 per month in Kathmandu valley. Over the same period, no motorcycle taxi crashes were reported in the media outlet searched.

Conclusion:

Our study has reported all the motorcycle taxi crashes recorded by the police, but based on evidence from other contexts this is likely to be an underestimate of the true number. The police rely on motorcycle riders disclosing that they are providing a taxi service, and the growing number of offline riders are even less likely to self-report than those working for ridehailing apps. Options to strengthen the completeness of the police motorcycle taxi crash records needs to be explored. The underreporting of crashes in the media means that the public are unaware of the risks associated with riding motorcycle taxis.