

SOCIOECONOMIC INEQUALITY IN ROAD TRAFFIC INJURIES IN TEHRAN

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Background Road Traffic Injuries are the first cause of burden of disease in Iran. There is increasing evidence on the inverse relationship of socioeconomic status and traffic injury incidence.

Objectives The objective of this study was to quantify the extent of socioeconomic inequality in traffic injuries in Tehran.

Methods The study was carried out in 2008 and 81 418 inhabitants of Tehran were randomly selected by a three-stage cluster sampling scheme. In each household, the respondent was asked to describe injuries occurred for any of the household members during past 12 months which required medical intervention or caused 1 day loss of normal life. Household asset data was used to determine the socioeconomic status by applying principal component analysis. Concentration indices were calculated to measure inequalities.

Results Annual incidence rate for all types of traffic injuries was 16.2 (95% CI 15.1 to 17.3) per 1000 person year. Poorest to the richest OR was 1.7 (95% CI 1.36 to 2.13). The concentration index was -0.07 (95% CI -0.11 to -0.03) for all the population. Among age groups, the highest concentration index was -0.2 for less than 5 years, followed by 5–14 years which was -0.16 . The concentration indices for motorcycle related injuries and pedestrian injuries were -0.24 and -0.18 respectively. There was no significant inequality in car passenger injuries.

Significance This study emphasised that traffic injuries are more concentrated among lower socioeconomic groups. The extent of this inequality is more among younger age groups, motorcyclists and pedestrians. Developing appropriate strategies to reduce the observed inequality is needed.