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The Impact of Safe Community Program on safety promotion among motorcyclists in Iran with focus on helmet usage

ACADEMIC DISSERTATION
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ABSTRACT

Background: Injuries to motorcyclists are an important public health problem. Motorcycles' riders and pillions have the highest public health burden in terms of disability adjusted life years (DALY) lost. Many countries are facing the problem of a rapidly growing motorcyclists' death. This is important for us because the motorcycle fleet in Iran is rising quickly. These series of studies conducted to assess and evaluate the impact of safe community program on motorcyclist's safety in Islamic Republic of Iran.

Methods: Two cross sectional observations were conducted in 14 cities (5 safe community practicing and 9 safe community non practicing cities) independently on 2005 and 2007. 10% of registered motorcycles were observed and interviewed (n=1114 in each observation).

Results: results revealed that 87.9% used motorcycle for the commercial purposes. All motorcyclists were male, mostly aged 18-29 years old. Death rate significantly rose from 122 to 254 per 100000 motorcyclists in Fars province since first observation (p < 0.0001). Helmet usage rate was constant (13%). Recorded crashes increased from 16.4% to 23.1% in safe community setting (p < 0.0001). 11% carried more than one pillion. Heat disturbances, embarrassment, hearing blockage, and neglecting were the most mentioned excuses for not using helmet. Law enforcement, public education, accessible to helmet on discount rate, new legislation and finally access to new designed helmet were the most suggestions made by motorcyclists to promote helmet usage. No significant effect was noticed between two settings. Interventions were not constant in safe community cities. Community involvement into the safe program could ensure sustainability of initiatives.

Conclusion: Motorcyclists' death rate is high among the young adult male of 19-39 in both communities in Iran. A positive outcome was detected at the beginning of safe community program on knowledge, attitude and behaviour of motorcyclists' riders and preventive effect on death rate. As the time passes, this effect drops and no significant effect was noticed between the two settings. This suggests that the process of interventions must be constant.

Keywords: Safe community, Motorcyclists' safety, Helmet usage