77 PRACTICAL EXPERIENCE OF GATEWAY TREATMENT IN DEVELOPING COUNTRY

doi:10.1136/injuryprev-2012-040590u.37

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Background Many developing countries currently encounter critical high traffic accident rate. One cause is lack of controlling speed, especially along local road passing community. The gateway installation at entrance of community is one effective traffic calming measure to reduce speed of traffic approaching to community. However, implementation of gateway treatment in developing country should be highly concerned in many issues of careless driving behaviour, high motorcycle mode share and lack of road hierarchy planning.

Aims/Objectives/Purpose This study aims to evaluate the gateway treatment at an entrance of campus zone road section of Mahasarakham University, Thailand. It surveyed and analysed the traffic speed before and after gateway installation along the road through campus zone.

Methods Spot speed study was employed to measure speed of passenger car and motorcycle travelling through road section before/after gateway installation. Average 85 percentile speeds of both

vehicle types were calculated. The statistical T-test method was applied to compare average speed before/after gateway installation. **Results/Outcome** After installing gateway, average speed of passenger cars and motorcycles significantly reduced from 59 to 37 km/h (37% reduction) and 46 to 38 km/h (17% reduction), respectively. **Significance/Contribution to the Field** This study proved the gateway treatment is one efficient measure to calm the speedy traffic not only in developed countries but also in the developing counties with different traffic characteristics in term of high number of motorcyclists. Nevertheless, the appropriate implementation, for example, good design, location and illumination of gateway, is highly considered.

Inj Prev 2012;**18**(Suppl 1):A1-A246