

Y Ghani, N Isah, S Saleh, N F Mohd Soid. *Malaysian Institute of Road Safety Research, Malaysia*

**Background** Road safety issue is a major problem in Malaysia, with close to 7000 deaths are recorded every year. The government has introduced a number of intervention programmes nationwide to reduce fatalities. At the nation's administrative capital Putrajaya, in particular, the government in 2011 has embarked on a 'safe city' programme, emphasising on road safety issues through a community-based programme. The Precinct 8 was chosen for the intervention programmes that emphasis on enforcement, education, and campaign for a 6-month period.

**Objectives** It aimed to evaluate the percentage of seatbelt use among the community before, during, and after the intervention period.

**Methods** To measure the effectiveness of the programme, a scientific research via observation was carried out.

**Results** A total of 9487 all type of car occupants in Precinct 8, Putrajaya were observed. The study revealed that seatbelt use increased from 42% to 58%, before and during the enforcement period, respectively. The post enforcement period, however, revealed that the percentage of seatbelt compliance has decreased to 55%. A  $\chi^2$  test for independence indicated a significant association between enforcement programme period and seatbelt use,  $\chi^2(2, 9487)=202.36$ ,  $p=0.0001$ . Car occupants were one time more likely to use seatbelts during enforcement programme as compared to before enforcement programme was implemented (with RR: 1.371, 95% CI 1.31 to 1.44).

**Significance to the Field** The study concluded that the dosage of enforcement directly contributed to the seatbelt compliance. The study can be replicated in terms of programme design and implementation in other communities.