

Road Safety Education Intervention For Primary Schools in Malaysia: Any Reduction in Traffic Casualties?

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Abstract

Malaysia records high number of road crashes and deaths as compared to the population and country size. In 2014, there were 476,196 reported road crashes with 6,674 road deaths. The government is committed to ensure that the road crash fatalities be reduced and towards achieving this aim, various strategies and plan have been formulated for implementation under the Malaysia Road Safety Plan 2006-2010. One such strategy was in implementing a Road Safety Education program in primary schools within Malaysia. Findings show road safety education is showing a promising sign on declining trend of road casualties over the period.

Background

Road Safety Education (RSE) intervention is a joint effort between Ministry of Transport Malaysia and Ministry of Education Malaysia. RSE was implemented in stages from 2007 to nationwide rollout in all standards and in all primary schools in the country by 2010. The RSE knowledge is embedded in the existing curriculum through the Bahasa Malaysia subject. RSE was taught once a week (40 minutes exposure) in the classroom by the Bahasa Malaysia teachers whom have undergone special 3 days training on RSE module. The RSE modules are developed appropriately tailored to the age-range of the students. The question that triggers in everyones mind: Is this education intervention reducing traffic casualties? There is a tremendous need to study the effectiveness of this important program especially in a developing country since much less is known about the role of RSE in reducing RTI. Carrying out this kind of study in a developing country is vital as most similar studies are only carried out within high-income countries. The findings from this study will add new knowledge in terms of its impact on RTI.

Methods

A prospective intervention-control study following children who are exposed and not exposed to RSE program for 2 years and observing whether they are involved in road traffic injuries (RTI) over the period of time. Children with intervention in this study will be taken from schools where new RSE program is to be implemented. There will be matched controls from neighbouring districts with schools where program not implemented. This gives a ratio of 1:1 between intervention and control. For this study, Quasi Experimental-interrupted time series design with comparison group was applied since random allocation was not possible. Six intervention districts and six comparison districts was selected as per Education District List under the Ministry of Education Malaysia. Total sample size of 67,232 children for both years involved in study (33,616 per arm). Minimum sample of 33,616 children from 6 intervention districts and 33,616 children from control districts of Standard 2 (age 8) and 4 (age 10) were required. A simple checklist was developed to determine school children involvement in road crash.

Results

Health Outcome based study was conducted for two years (2008-2009) for different targets groups. Total students sampled for the study are 20,396 among year 2 (age 8) and 19,721 year 4 (age 10). Results from injury surveillance study showed a significant reduction in number of crashes in intervention districts with RSE program compared to control districts without RSE program for both year 2 (age 8) and 4 (age 10) students after following up for two years. Next, results from

police crash data showed a reduction in number of road crashes for pedestrian age group 7-12 years in intervention districts as compared to control districts comparing year 2007 and 2009. During this two years of study period, the researchers did not notice any other major road safety interventions specifically happening in the intervention districts only other than RSE.

Conclusions

The study has shown from the injury surveillance study, a declining trend in number of children road crashes recorded for year 2 (age 8) and 4 (age 10) students whom receive RSE intervention as compared to those who did not receive the intervention.

References

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