## Driver characteristics associated with child safety seat usage in Malaysia : a crosssectional study.

## ABSTRACT

Background: The rapidly motorizing environment in Malaysia has made child occupant safety a current public health concern. The usage of child safety seats (CSS) is a widely regarded intervention to enhance child occupant safety, yet no study has been conducted on CSS in Malaysia. This study aims to determine the CSS usage rates in Malaysia and to assess driver characteristics that are associated with CSS usage. Methods: Nine variables - urban versus rural study location, age, gender, marital status, educational status, monthly family income, number of children present in the vehicle, distance traveled to the study location, and attitude - were examined through a cross-sectional study of interviewing drivers of 230 vehicles transporting at least one child <10 years of age at the time of the study. The vehicles were also observed for whether or not there was a CSS present. The interviews were conducted at six sampling locations - three urban and three rural - in the state of Melaka. Results: 27.4% of the drivers were found to be using at least one CSS at the time of the survey. Among the nine variables studied, three of the driver characteristics showed statistical significance (p < 0.05) with CSS usage: age (p = 0.047), educational status (p = 0.009), and attitude (p = 0.009). Discussion: This study begins to create knowledge on child occupant safety in Malaysia. The results indicate that interventional efforts should focus on educational programs geared toward drivers that are less educated or extended family members who inconsistently transport young children. Furthermore, any educational efforts could be strongly enhanced by legislation mandating the use of CSS. Every effort should be made to thoroughly assess the effectiveness of any educational or legislative activities that are implemented.

Keyword: Child health; Occupant safety; Road traffic injury.