# Determinants of certified motorcycle helmet use among postal delivery riders at rural areas in Peninsular Malaysia 


#### Abstract

This study aims to identify the determinants of certified helmet use among postal delivery riders (PDRs) in rural areas of Peninsular Malaysia. A cross-sectional study was done among 269 PDRs from 50 postal distribution centres (DC) nationwide. Data collection was achieved through observation of the helmets and a questionnaire. The quality of the motorcycle helmets was determined by the presence of the certification label issued by the Standards and Industrial Research Institute of Malaysia (SIRIM). The response rate was $99.3 \%$. The odds of full-shell helmets having the SIRIM label were 37.1 times more than that of the half-shell helmets. The odds of non-purchased helmets having the SIRIM label were 14.9 times more than that of the purchased helmets. The odds of expensive helmets having the SIRIM label were 4.4 times more than that for cheaper motorcycle helmets. The odds of helmets owned by riders without a previous crash history having the SIRIM label were 1.9 times more than helmets owned by riders with a crash history. Full-shell helmets with SIRIM standard certification, non-pur-chased helmets, helmet price of US $\$ 11.00$ or more, and motorcycle riders without any previous crash history were determinants that contributed towards the use of a certified motorcycle helmet. Multiple logistic regression indicated that two variables significantly predicted the use of a certified motorcycle helmet among PDRs-helmet type and cost. An employer that provides the employees with full-shell motorcycle helmets with SIRIM standard certification label that costs at least US $\$ 11.00$ and hiring motorcycle riders without any previous crash history gives a higher chance of compliance with standard certified motorcycle helmet usage


Keyword: Expensive helmets; Full-shell helmets; Occupational motorcyclists; Standard certification label; Certified motorcycle helmets

