Exploring the Economics of Motorcycle Helmet Law: Implications for Low and Middle-income Countries

Abstract


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This paper reviews economic evaluations of motorcycle helmet interventions in preventing injuries. A comprehensive literature review focusing on the effectiveness of motorcycle helmet use, and on mandatory helmet laws and their enforcement was done. When helmet laws were lifted between 1976-80, 48 states within the U.S.A. experienced a cost of $342,047 per excess fatality of annual net savings. Helmet laws in the USA had a benefit-cost ratio of 1.33 to 5.07. Taiwan witnessed a 14% decline in motorcycle fatalities and a 22% reduction of head injury fatalities with the introduction of a helmet law. In Thailand, where 70-90% of all crashes involve motorcycle, after enforcement of a helmet law, helmet-use increased five-fold, the number of injured motorcyclists decreased by 33.5%, head injuries decreased by 41.4%, and deaths decreased by 20.8%. There is considerable evidence that mandatory helmet laws with enforcement alleviate the burden of traffic injuries greatly. For low and middle-income countries with high rates of motorcycle injuries, enforced, mandatory motorcycle helmet laws are potentially one of the most cost-effective interventions available.