

Volume 11, Suppl. 2 August 2019 Publisher: Kermanshah University of Medical Sciences URL: http://www.jivresearch.org Copyright: (co) Ex

## Paper No. 104

# Helmet use determinants and barriers among motorcyclists in world: systematic review

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# Abstract:

**Background:** Road traffic injuries were introduced as leading cause of death worldwide and 1.2 million people die due to them every year. Motorcyclists are at an increased risk because of their lack of physical protection such as helmet makes them vulnerable to injury. This study aimed to identify helmet use barriers and determinants.

**Methods:** The information obtained in this review was retrieved from electronic databases such as PubMed, Scopus, Science Direct and Web of knowledge databases using keywords. Moreover, manual search of related journals were done. Also references of the selected articles were reviewed to increase the chance of articles finding. Article screening was done using Endnote X8.2. The inclusion criteria were articles with publishing date after 1995, reporting the barriers or facilitators of helmet using. Conference abstracts and proceedings which had reported the effects of helmet on accidents and with a publishing date before 1995 were excluded.

**Results:** Determinants of helmet use were identified and categorized in four categories as: Individual and psychological factors (such as awareness and positive attitudes towards the compulsory use of helmet, usefulness, older age, having accident background, experienced driving, and being married), road-related factors (such as riding long distances and in urban roads), socio-economic factors (such as higher socio-economic condition and education). Another category of determinants was other factors such as different climatic conditions, various motorcycle brands and certain day of week which had different roles as helmet use determinant or barrier in studies.

**Conclusion:** Governmental and nongovernmental organization dealing with road traffic prevention should ensure that standard helmets are made available and at affordable price to both motorcyclist and passenger. Continuous education on the importance of helmet use to the community should be addressed through media campaigns to improve the knowledge and attitude. However, compatible helmets must be produced to overarch some barriers.

## Keywords:

#### Helmet use, Motorcyclists, Determinants, Barriers, World

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