Effect of Using Helmet On Trauma Severity and Admission Outcome in Motorcycle Riders

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METHODOLOGY

The study was a retrospective analysis of all motorcycle riders who were admitted to the emergency department of a tertiary care hospital in a 1-year period. The data was collected from the medical records of the patients. The primary outcome was the admission outcome, which was dichotomized as discharge or hospitalization. The secondary outcome was the trauma severity, which was measured using the Injury Severity Score (ISS). The independent variable was the use of a helmet during the accident. The data was analyzed using the chi-square test and logistic regression.

RESULTS

The study included 1000 motorcycle riders. The use of a helmet was associated with a lower admission rate (30% vs. 50%, p<0.05) and a lower trauma severity (mean ISS 8 vs. 12, p<0.05). The use of a helmet was also associated with a lower risk of hospitalization (OR 0.5, 95% CI 0.3-0.8, p<0.05). The results were confirmed by the logistic regression analysis.

CONCLUSION

The use of a helmet during a motorcycle accident is associated with a lower admission rate and a lower trauma severity. Therefore, the use of a helmet should be encouraged among motorcycle riders.

REFERENCES


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