



# A retrospective evaluation of hospital admissions of children who had a road traffic injury

Serpil Uğur Baysal, MD<sup>1</sup>, Özge Yıldırım Şalbaş, MD<sup>2</sup>, Emel Ulusoy, MD<sup>3</sup>, Murat Duman, MD<sup>3</sup>

[serpil.baysal@istun.edu.tr](mailto:serpil.baysal@istun.edu.tr)

<sup>1</sup>Istanbul Health and Technology University Faculty of Medicine, Department of Paediatrics, İstanbul, Turkey

<sup>2</sup>Dokuz Eylül University Faculty of Medicine, Department of Paediatrics, İzmir, Turkey

<sup>3</sup>Dokuz Eylül University Faculty of Medicine, Department of Paediatrics, Division of Paediatric Emergency Medicine, İzmir, Turkey

**Introduction and objectives:** In our country, the number of individuals injured in road traffic increases every year in proportion to the increase in population and number of vehicles. This study aimed to analyze road traffic injuries in children and reduce morbidity and mortality by identifying risk factors.

**Material and methods:** Children who applied to our Faculty of Medicine Paediatric Emergency Department due to traffic accidents in the last five years were examined retrospectively. 1227 cases with complete data were included in the study. The Data Record Form recorded descriptive information about the children and their families, the event, injury characteristics, follow-up, and results. Data were evaluated with frequency, percentage distribution, mean, median, and comparative analysis.

**Results:** Of the cases included in the study, 66.1% were male and 33.9% were female. 35.7 percent of those injured were between the ages of 5-9. Most of the injuries occurred in June and July. The peak admission hours were between 16:00 and 20:00. 45.6 percent of these cases were pedestrians. It was noted that the most frequently injured areas were the head and neck. Serious injury rates were 18.5% according to the Injury Severity Scale; According to the Glasgow Coma Scale, it was found to be 3%. For in-vehicle injuries, 12% of cases used seat belts; 5.5% traveled in a child safety seat. While 1.5 percent of children riding bicycles and motorcycles wore protective clothing, 26.7 percent used protective headgear. 33.7% (n=414) of the cases were hospitalized and monitored in the ward. It was determined that hospitalizations were mostly made in the Paediatric Emergency Service and Paediatric Surgery, and 9.7% of the injured children required surgery. The majority of surgeries (64.7%) were performed in Orthopedics and Traumatology. 4.6% of the cases were monitored in the Paediatric Intensive Care Unit. Disability developed in 2% of injured children. Of the seven deaths, the cause was hemorrhagic shock in three and intracranial hemorrhage in four.

**Conclusions:** Road traffic injuries are a significant cause of morbidity, mortality, and disability, especially for child pedestrians. Risk awareness regarding accidents/injuries is low, and protective measures are still insufficient in our country. Individual counseling is needed during routine health care. Injury prevention should be included in the health education curriculum in schools.

## Reference:

WHO and United Nations. Global Plan. Decade of Action for Road Safety 2021-2030.

<https://www.who.int/publications/m/item/global-plan-for-the-decade-of-action-for-road-safety-2021-2030>