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## Modeling Factors Influence Stay Duration in Unit Due to Maxillofacial Fracture

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### ABSTRACT

**Introduction:** Different causes such as accidents, physical collisions, falls from height can be a cause of fracture. In different communities, given the age range of patients, social issues, and the use of industrial supplies, the prevalence of fractures are different from each other. The purpose of this study was to determine the types, causes and location of the fractures and the relationships between demographic factors and the above factors. We also tend to examine factors affecting stay duration in inpatients. **Methods:** This is a Retrospective study. In this study, 1665 patients, in the period from March 2011 to March 2014, were suffered from maxillofacial trauma aged 10 years or more. The patients were admitted to maxillofacial unit of Imam Khomeini Hospital, Urmia. **Results:** In this study, there is a significant correlation between the type of fracture and fracture cause with sex. Also, the results obtained from the estimation of COX model with PH have shown that age, fracture cause and fracture types variables (mandibular, maxillary and orbit and other fractures) are significant in stay duration in the hospital that were hospitalized due to fracture. **Conclusion:** Vehicles, due to being faster and more powerful, have also more severe damage, which subsequently causes more hospitalization duration and more expenses incurred by the patient and the hospital.

**Keywords:** Stay duration, fracture, jaw, face