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## ETIOLOGY AND PATTERNS OF FACIAL FRACTURES IN IRAN: A SYSTEMATIC REVIEW AND META-ANALYSIS

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**Background and aims:** One of the highest rates of car accidents and related morbidities and mortalities in the world is reported from Iran. Facial structures are usually injured in such accidents. This study is conducted to find the patterns and etiologies of mid-facial fractures in Iran.

Methods: Electronic search performed based on PubMed, Scopus, ISC and Web of Science for relevant studies and also hand-searching for recognizing non-indexed sources. English and Persian languages restriction included and only cross sectional studies entered to this study. 32 articles found through databases searching and also 3 Additional records identified by hand-searching. After excluding of duplicates and studies not meeting inclusion criteria like knowledge attitude studies, at last 8 Full-text articles assessed for eligibility. Quality assessment of this study was executed by using the Critical Appraisal Skills Programme (CASP). All of these studies were selected for meta-analysis by Comprehensive meta-analysis version 2.0.

Results: With male to female ratio of 4:1, 41% of fractures were related to automobile accidents, and 21% were attributed to motorcycle accidents. Other etiologies are collisions, falls, physical abuse, bicycle events, occupational events and sport events. Most fractures occurred in zygoma followed by Le Fort and nasal bone fractures.

Conclusion: The main etiology of mid-facial fractures is automobile and motorcycle accidents. Protective measures were not observed in the majority of patients.

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