

# Pain severity and management according to gender in limb trauma patients referred to emergency wards

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**Background:** Pain is a common symptom following trauma. One of the main objectives of trauma management is pain relief. Gender also plays a prominent role in pain sensation and interpretation.

**Objectives:** This study was designed to evaluate the severity and management of pain in patients with limb trauma according to gender in patients referred to the emergency wards at Shahid Beheshti Hospital, Kashan 2014 Iran.

**Patients and Methods:** In this cross sectional study, 450 patients with limb trauma were evaluated for pain severity and management. The patients entered sequentially in August 2014. The researcher made the checklist that was used in this study. The pain severity upon admission to the emergency ward and every 30 minutes and 4 hours after were recorded via visual analogue scale (VAS) (0–10) and facial expression scale (FES) (0–8). The uses of pharmacological and non-pharmacological methods for pain relief also were recorded. The data were analyzed by t-test and Chi-square tests with SPSS (ver 16).

**Results:** 374 (83.1%) patients were male and 75 (16.7%) were female. The mean age of male and female patients was  $35.01 \pm 13.8$  and  $36.73 \pm 12.15$ , respectively ( $p = 0.314$ ). The pain severity in admission was  $6.24 \pm 2.65$  in male and  $5.71 \pm 2.48$  in female patients with VAS ( $P = 0.111$ ) and  $3.08 \pm 2.2$  in male and  $2.99 \pm 2.1$  in female by FES ( $p = 0.736$ ). Wounds (42.3%), contusion (8.9%), multiple trauma (12%), and fractures (11.6%) were the most common causes of injuries in men and women. Incidences of burns were twice as high in women (3.8% versus 1.9%). A total of 39.3% of men received intervention for pain relief in the first hour after admission; 32% of women received the same level of intervention. Although the difference was not significant ( $p = 234$ ), men slightly received more intervention than women. The mean of pain relief was 0.72 in women and 0.27 in men, which showed that women had a significantly better response to pain relief interventions ( $p = 0.011$ ).

**Conclusion:** The severity and type of injury as well as the severity of pain were almost same in men and women. Although men slightly received more

intervention for pain relief, the response of pain relief was better in women.

**Keywords:** Pain management, Trauma, Gender

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