

## One year evaluation of trauma patients' death

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### Dear Editor

Worldwide trauma is currently the sixth leading cause of death, according to 10% of mortalities (1,2). Injury impact and the death from trauma are more common in males than females. People aged between 15 and 45 years include about half of the trauma deaths (3). Citizens of low- and middle-income countries (LMICs) account for 89% of all deaths from trauma worldwide. This is particularly because of hospitals' lack of facilities, equipments, and peripheral care systems (4,5).

During last year since the 20th of March 2013 until the 20th of March 2014, 27740 traumatic patients were admitted to Iran's North West Trauma Center (Emam Reza hospital) in which 105 patients were expired in emergency, surgery, and neurosurgery departments. This included 11 female patients (10%) and 94 male patients (90%) (Figure 1).

According to previous studies, motor vehicle accidents are the most common reason of multitrauma. Researchers highlight that in developing countries, trauma is the leading cause of death for young people (6).

In our study, the reports show that the causes of injury that led to death in 71 patients were motor vehicle crash, in 25 patients falling from a high altitude, one patient because of pedestrian motor vehicle accident, and 8 patients because of fighting (Figure 2). Seventy-five patients in morning shifts (8 AM to 8 PM) and 30 patients in night shifts (8 PM to 8 AM) were admitted. Approximately about 30 patients in spring, 34 patients in summer, 25 patients in fall and 18 patients in winter experienced traumatic injury leading to death.

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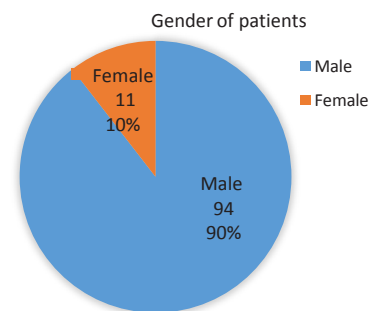
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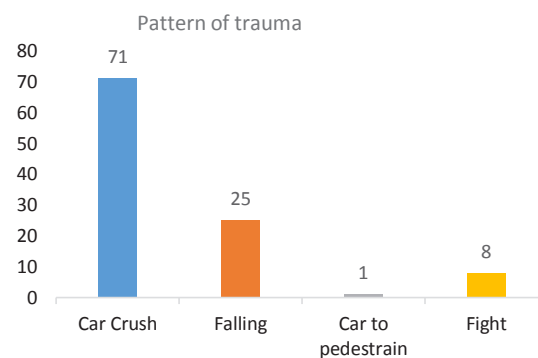
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**Figure 1.** Frequency of emergency department death in trauma patients.



**Figure 2.** Frequency of causes of trauma.

The average time of being in the hospital starting at the time of entering to emergency room was up to disposition including death. According to our results, it seems that crowded population in Nowruz holiday trips and summer vacation is one of the leading causes of death (7).

### Ethical issues

Not applicable.

### References

- Søreide K. Epidemiology of major trauma. Br J Surg 2009; 96(7): 697-8.
- Smith J, Greaves I, Porter K. Major Trauma. Oxford: Oxford University Press; 2010.



3. Norton R, Kobusingye O. Injuries. *N Engl J Med* 2013; 368(18): 1723-30.
4. Sakran JV, Greer SE, Werlin E, McCunn M. Care of the injured worldwide: trauma still the neglected disease of modern society. *Scand J Trauma Resusc Emerg Med* 2012; 20: 64.
5. Mock C, Quansah R, Krishnan R, Arreola-Risa C, Rivara F. Strengthening the prevention and care of injuries worldwide. *Lancet* 2004; 363(9427): 2172-9.
6. Krug EG, Sharma GK, Lozano R. The global burden of injuries. *Am J Public Health* 2000; 90(4): 523-6.
7. Shams Vahdati S, GhafarZad A, Rahmani F, Panahi F, Omrani Rad A. Patterns of road traffic accidents in North West of Iran during 2013 new year holidays: complications and casualties. *Bull Emerg Trauma* 2014; 2(2): 82-5.