**ABSTRACT**

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**Introduction:** Spinal immobilization is a basic and a standard scope of practice for either emergency medical technician or paramedic to be applied on trauma patients. Several studies have shown that some spinal immobilization devices have remarkable side effects on some patients. Due to that, protocols have been established to whom it should be applied in order to overcome the benefits on the drawbacks. This research aims to study the frequency of trauma patients who were immobilized on presentation to emergency departments in king Abdulaziz medical city and king Abdullah specialized children's hospital.

**Method:** This is a cross-sectional study done on 1571 patients who presented to emergency department during the period between July 2016 to September 2016. The data were collected from Best Care system and analyzed by using descriptive statistics.

**Result:** Out of 1571, 239 were included in this study. Mean age of the respondents was 22.49 (stander deviation 17.292). The total percentage of the immobilized patients was 23.8%. Of those who got immobilized 64.9% were adults and 84.2% were males. The majority of trauma in pediatrics was fall (81%). Similarly, in elderly population which was (60%). On the other hand, adult had traffic accidents as the major trauma (72.4). radiological test done in 109 patients, 54 were immobilized and 55 were non-immobilized. The result was positive in 44.4% immobilized where it was 50.9% in non-immobilized patients. The highest trauma with positive result in immobilized patients was traffic accidents, while in non-immobilized patients was fall.

**Conclusion:** Even when pediatric population visits were more than adult patients,this study reveals a significant value (p=0.001) immobilization application on Adults population more than pediatrics.

[[1]](#footnote-1)

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