Descriptive analysis of 9 hospitals trauma registry in Taipei.

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Abstract

Background：Trauma registry is the major database of a global traumatological investigation. Using the enormous amount of trauma registry data records for analysis and study, the characteristic factors of suspiscious high risk groups in all kinds of trauma will be concluded, thus to be applied in setting the goals and protocols for trauma prevention. Like all other disease registries, the trauma registry collects, records, and provides data and indexes which are used to describe etiology, population characteristics, diagnosis, treatment and clinical outcomes. The patterns and causes of injury may be variable between local areas, thus obtaining locale trauma data is essential for establishing effective injury prevention policies. This study is designed to achieve this goal, and will try to explain and discuss the statistic results of the collected databases furthermore.Material and Methods：Our study was collected through January 1st, 2002 to December 31st, 2003 from 9 medical facilities in Taipei. Registry was based on Emergency Medical Association registration guideline. Each registry was recorded by medical staffs or nursing staffs of emergency room (ER) that had qualified related courses or trainings.Results：In all 9 medical fascilities, total of 7,192 cases were recorded, which consisted of 53.17% male. The two age groups of 25-44 years old and above 65 years old have higher trauma incidence than other age groups. The locations of trauma episodes are mostly on the road (51.92%) and at home (31.89%). Causes of injury are mostly traffic incidence (42.73%) and fall (28.78%). Highest incidence of trauma is occurred in January and lowest in June. Time of occurrence has dual peaks traffic accidents at 8 AM and 4 PM, while fall occurs mostly at 9 AM and 4 PM. Triage severity Level II is most common (77.8%), and ISS score $\leqq$ 8 has the highest incidence (68.81%) and ISS score $\geqq$ 9 also has 31.19%. Limbs are mostly involved (62.25%). As to the succeeding managements, 56.52% patients are hospitalized, 6.55% transfer to other medical facility and 2.09% died. Discussion：Kappa between ICD-9 classification and AIS injury diagnosis was good. If we use (ICD-9)-based scoring in predicting mortality will have a equal or even better prediction strength than ISS. The emergence of SARS in May 2002 caused the patient numbers obviously decreasing during study period. Though ISS averages of automobile

accidents are apparently getting higher in comparison to other traffic accidents, the bicycle accidents ISS averages are even higher than the motorcycle accidents, which may be due to the protections of wearing safety helmet when riding the motorcycle, that had been legally regulated in the Law. When the age groups are elevating, the ISS averages of low fall and slippering are also increasing gradually. Intentional injury ISS averages are even higher than traffic accident, which really worth thinking and discussion. Women have higher incidences than men in suicidal attempts and assult, yet this is one another social problem worth notified. Conclusion：We found that traffic accident and fall is the major trauma in Taipei. In addition, the influence of the age and sex must all be considered while making the strategy of injury prevention and control.