



## Service Priorities and Programmes Electronic Presentations

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**Work related Traumatic Brain Injury: first multi-centres study in Hong Kong**

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**Introduction**

Traumatic brain injury (TBI) can lead to a spectrum of problems including concussion, contusion or diffuse injuries that cause more severe neurological damage (WHO, 2011). The epidemiology and outcomes of patients who sustained TBI during work are not known in this locality.

**Objectives**

To explore the epidemiology and outcome of TBI in adult working group.

**Methodology**

This is a retrospective review of victims who sustained TBI while engaged in work activities, apprenticeship, vocational training, or when arriving or leaving working were included. This study recruited data from 1st January 2012 to 31st December 2012 from all 5 trauma centres in Hong Kong which were equipped with Level I facilities: Queen Mary Hospital in Hong Kong Island, Princess Margaret Hospital and Queen Elizabeth Hospital from Kowloon, Prince of Wales Hospital and Tun Mun Hospital from New Territories. All data were managed by a designated Trauma Nurse Coordinator with RTS, ISS, AIS coding and patient classification. Descriptive analysis were performed.

**Result**

There were 123 trauma patients with work-related TBI (WR-TBI) recruited during the study period. WR-TBI represented 3.95% of all admitted cases under the annual registry. The mean age was 48.3 years old (ranging: 21 – 71; SD=10.1). Male presented the predominant proportion (male: female = 109:14). There was 47.2 % pure TBI cases, and 52.8% sustained TBI and other body parts injury. Fall was the major cause of injury (62.6%). Most of the injuries (40.7%) occurred in the afternoon. There was a significantly lower incidence on Sunday. It was found that 21% workers did not use any safety devices and sustained TBI with other injuries. There was no death when safety devices were used in the major trauma group.