

The study consisted of 2 phases. Phase I aimed at developing the assessment process of care indicator among traffic injury patients in emergency room by Delphi technique in the opinion of 11 experts for four processes of care and four processes of inpatient treatment. Phase II aimed at monitoring the process of care in emergency room and in inpatient treatment by 3 experts. The sample consisted of 1981 traffic injury patients (491 case and 1490 control subjects) which were collected in 8 hospitals during 1 April 2005-31 December 2006, and were evaluated for the process of care factors related to death within 48 hours (100 subjects, 40 case and 60 control subjects).

The result of the study indicated that the processes of care as risk factors toward patient death within 48 hours were the assessment of shock (OR=5.93; 95% CI: 1.13-31.14) and the recognition of presence or risk of abdominal injury (OR=3.58; 95% CI: 1.11-11.50). Risk factors toward patient death within 48 hours in inpatient treatment were the assessment of shock (OR=7.60; 95%CI: 1.47-32.49), the monitoring and treatment of shock (OR=4.40; 95% CI: 1.03-18.73), and the surgical treatment of abdominal injury (OR= 6.76; 95%CI: 1.73-26.45). Patient factors related to death within 48 hours were head injury and Injury Severity Score. Inappropriate care occurred in emergency room, ward and operating room. After controlling for confounders, patient characteristics related to death within 48 hours were severity score more than 16 and head injury.

These results suggest that trauma quality improvement should be in emergency room, ward, and operating room. The important processes of care are assessment, monitoring and appropriate operation, especially in patients who have both head and abdominal injuries.