

drivers and persons involved. This report was based on 9,611 crashes caused by drivers' fault. Results: On average, the fatality rate was 5.2%. Two major causes of fatal crashes were driving under the influence of alcohol (DUI) 38.2% and speeding 17.7%. In rural districts, of the 5,748 crashes, the average fatality rate was 7.7% and the primary causes were DUI (15.3%) and speeding (9.0%). Of the 444 fatal crashes, speeding (14.7%) and DUI (35.1%) accounted for nearly half of them. In urban districts, of 3,863 crashes, the average fatality rate was 1.3%. Also speeding (3.3%) and DUI (6.2%) were the primary causes of the crashes. Of those crashes, the average fatality rate was about 3% to 6%. Multivariate analysis showed DUI and speeding were the significant factors associated with fatality in rural district.

Conclusions: Driving under alcohol influence was really common in eastern Taiwan, especially at rural district. This issue should be tackle without delay. The characteristics of road-users and the efficiency of trauma rescue system should be further assessed. Campaigns of road safety and public transport education are in needed.

SP-074

The Roles and Experience of Bystanders in the Bullying Process

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Background: The responses of bystanders can enhance or reduce the effects of bullying. Besides adolescents, adults could also be bystanders. This study intended to understand the bullying process via bystanders' observation and the possible factors of the bystanders' various responses.

Method: Ten focus groups (five for boys and five for girls) were conducted to collect adolescents' attitude and responses about bullying. Each group consisted of six junior high school students. Five teachers and five parents were interviewed to understand their experiences about youth bullying. Content analysis and ground theory were used to analyze the results. All participants have signed the informed consents.

Results: According to students' observation, girls conducted verbal and indirect bullying more frequently than boys. The victim was probably bullied by different ways consecutively, such as starting from verbally abused, followed by social isolated and physical bullied in the end. Some distinct roles of adolescent bystanders can be identified as reinforcers, defenders, and outsiders. Factors accounting for becoming bystanders may include victim characteristics, class atmosphere, teacher's attitude, and bystander's personality. Most of the teachers reacted to bully passively, which means not until something happened did they deal with it. Unlike verbal bullying or social isolation, physical bullying always caught teachers' attention. Parents usually did not

realize the serious part of youth bullying unless their child was the target.

Conclusion: Most students, teachers and parents are aware of or even involved in the bullying process. Future interventions should emphasize on persuading bystanders to prevent or stop bullying.

SP-075

Epidemiology of Hospitalized Burns Patients in Taiwan, 2007

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Although burn injuries are not the leading causes of injury-related deaths in Taiwan, patients need a lot of time and medical services to treatment or recovery after burning. This research brought "inpatient expenditures by admissions (DD)" and "registry for contracted medical facilities (HOSB)" form national health insurance research database in 2007 into analysis by using SPSS 14.0 software. There was 7,126 inpatient cases caused by burn injuries (males 61.23%, females 38.77%), and the average medical expenditures in each admission was 107,448 NT dollars in Taiwan, 2007. The total inpatient rate was 31.04 per 100,000, and males were higher than females (males 37.58 per 100,000, females 31.04 per 100,000). The inpatient rate of child form 0 through 4 years old was higher than any others. Among hospitalized burns patients, 53.79% (3,833 people) were consulted at plastic surgical department, 41.36% (2,947 people) were hospitalized in the medicine center. Each person complicated with 2.5 other diseases or injuries and received 1.51 surgeries or operations in the average. The hospital mortality caused by burn injuries was 138 people. The factors associated with hospital mortality caused by burn injuries were 1) ages, 2) sites of burn injuries, 3) inhalation injury, 4) degrees of burn injuries, 5) intentional burn, 6) hospitalized in the medicine center, 7) the number of other diseases or injuries, and 8) the number of operations by using logistic regression analysis.

SP-076

Injury Mortality Trends by Sex, Age and Cause in Taiwan

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Injury, threatening human lives and wealth, is the principal public health problem in Taiwan. The situation caused by injury in adolescent, youth, and middle-aged groups is especially remarkable. By long-term trend analysis of injury mortality rate, we may evaluate past injury prevention strategies and anticipate proper ones for the future. The research used the 1986-2007 Vital Statistics of Department of Health, Executive Yuan,

ROC, to calculate kinds of injury mortality rate by age, gender and cause. A 22-year trend of injury mortality rate was pictured then. The results and conclusions are as followed: In general, both of the counts of injury death and the injury mortality rate of male are higher than female in Taiwan. Injuries can be unintentional or intentional. The unintentional injury mortality rate decreased, but intentional one increased. Motor vehicle injury was the leading cause of injury death in Taiwan, followed by drowning. These two injury mortality rates decreased. Fall injury was ranked the third cause of death and has taken the place of drowning since 1996. The rate of fall mortality has remained stable. Suicide mortality rate significantly increased in study period, yet homicide mortality rate slightly decreased. While there is a downward trend in unintentional injury deaths, more effective measures to prevent motor vehicle injury, drowning and fall injury should be developed and fully implemented. On the other hand, to reduce suicide and homicide injury deaths should be most concerned in the future.

SP-077

An Epidemiologic Analysis of Suicide in Taiwan: 1986-2006

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In Taiwan, suicide has become a serious problem, ranking among the top ten leading cause of death since 1997. Therefore, it is necessary to understand the high-risk groups and methods of suicide for making prevention strategies. Data were obtained from the Death Certification data file provided by the Department of Health from 1986 to 2006. The aim of this study was to examine the age, sex, methods, and long-term trends in suicide mortality. The results shown: (1) There were 49,269 deaths, and 66.9% of them were males. The 30-34 year-old was dominant age group and accounted for 9.8% (4832 deaths). However, the highest mortality rate among the 80-84 year-old group (44.24 per 100,000). Hanging (40.9%) and poisoning with solids/liquids (29.9%) were two common methods of suicide. (2) Total suicide mortality rate declined from 1986 to 1994, but increased from 1994 to 2006. The suicide rate of male is higher than female, and both increased since 1994. (3) Divided into three age groups (0-19, 20-64, and 65 above), the mortality rate of 20-64 year-old has been increased dramatically since 2000. (4) Except for poisoning with solids/liquids and firearms, all kinds of suicide mortality rates increased. As all results shown, the suicide rate has been rising since 1994. Therefore, in addition to economic environment and social welfare policies, the government has to promote health education and suicide prevention programs for high-risk groups.

SP-078

The Preliminary Study of Disability Certification for Patient with Traumatic Brain Injury by Using WHO ICF System

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Traumatic brain injury (TBI) is an important public health problem which can result in death and permanent disabilities. Taiwan will start to use the International Classification of Functions, Disability and Health (ICF) for disability classification in 2012. The aim of this preliminary study is to try out ICF on TBI patients who have disability certificate. This study recruited 30 TBI patients with mean age of 47.4 ± 18.7 . The ratio of male to female is 9:1. There are 8 minor, 6 moderate, 12 severe and 4 critical disabled patients according to their certificates. At the time of injury occurrence, 27 patients had initial loss of consciousness, 28 intracranial hemorrhage, 14 amnesia, 22 neurological deficits and 6 co-morbidities. According to ICF core set, patients were evaluated separately for Body Function, Activities and Participation, and Environmental Factors. The result shows that 41 items may be relevant because more than 30% of patients had coded with these items. Relating ICF scores with TBI variables, it was found that disability classification and Body Function total score are statistically associated; Activities and Participation total score is significantly related to both disability classification and Glasgow Coma Score; convulsion, amnesia and neurological deficits are significantly associated with the Environmental Factors total score. In this study, we find ICF system and disability classification are positively related. Thus we can use the result of this study as a future reference for ICF core set for TBI patients in Taiwan.

SP-079

Factors Affecting the Outcome of Head Injury and Differences between Fall and Traffic Induced Head Injury

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Head injury is a major trauma to cause morbidity and mortality. Traffic accident and fall are two main mechanism to cause head injury. We evaluate factors affecting the outcome of head injury and differences between two major causes of head injury in a community based hospital. From 2006 to 2007, all victims admitted to intensive care unit in a community hospital under the diagnosis of head injury were collected. Among 325 cases evaluated, there were 138 cases of fall (42.5%) and 172 cases of traffic accident (52.9%), 72.9% were male, 24.6% were associated with alcohol consumption, and 37.3% received an operation. Outcome of head injury