Taiwan

Tsai et al., aimed to profile the epidemiological changes of driving under the influence (DUI) in southern Taiwan after the legal blood alcohol concentration (BAC) limit was lowered from 50 to 30 mg/dL in 2013.

SETTING: Level 1 trauma medical centre in southern Taiwan.

PARTICIPANTS: Data from 7447 patients (4375 males and 3072 females) were retrieved from the trauma registry system of a single trauma centre to examine patient characteristics (gender, age and BAC), clinical outcome variables (Abbreviated Injury Score, Injury Severity Score and mortality) and vehicular crash-related factors (vehicle type, airbag use in car crashes, helmet use in motorcycle crashes and time of crash) before and after the BAC limit change.

RESULTS: Our results indicated that the percentage of DUI patients significantly declined from 10.99% (n=373) to 6.64% (n=269) after the BAC limit was lowered. Airbag use in car crashes (OR: 0.30, 95% CI 0.10 to 0.88, p=0.007) and helmet use in motorcycle crashes (OR: 0.20, 95% CI 0.15 to 0.26, p<0.001) was lower in DUI patients compared with non-DUI patients after the BAC limit change, with significant negative correlation. DUI behaviour increased crash mortality risk before the BAC limit change (OR: 4.33, 95% CI 2.20 to 8.54), and even more so after (OR: 5.60, 95% CI 3.16 to 9.93). The difference in ORs for mortality before and after the change in the BAC legal limit was not significant (p=0.568).

This study revealed that lowering the BAC limit to 30 mg/dL significantly reduced the number of DUI events, but failed to result in a significant reduction in mortality in these trauma patients [1)]

Hospitals

Changhua

Chiayi

Hualien.

Kaohsiung.

Taoyuan.

Taichung.

Taipei.

Traumatic brain injury

The COVID-19 Pandemic has become a threat to global healthcare because of its rapid spread and evolution. In severe cases, the initial management of the disease is mainly supportive care and mechanical ventilation. Therefore, Huang et al. investigated whether a modified emergency department workflow affects the efficacy and will influence the efficacy and traumatic brain injury outcome in Taiwan. This retrospective observational study used the Chang Gung Research Database in Taiwan from 7 hospitals in the Chang Gung Memorial Hospital System. Clinical index parameters and treatment efficiencies were analyzed between the locally transmitted period (January 20, 2020-June 7, 2020, period 2) and the community spread period (May 19, 2021-July 27, 2021, period 4) with the same interval of the pre-pandemic in 2019 as a reference period. During the locally transmitted period, only the time interval for patients who had to wait for a brain CT examination was, on average, 7.7 minutes shorter, which reached statistical significance. In addition, the number of TBI patients under 18 years of age decreased significantly during the community spread period. The "Door to the operating room (OR)," with polymerase chain reaction (PCR) testing, was on average 109.7 minutes slower than without the PCR testing in the reference period 2019. TBI treatment efficiency was delayed because of the PCR test. However, the surgical volume and functional outcome during these 2 periods were statistically insignificant compared to the pre-pandemic period because the spread of the virus was well controlled and hospital capacity was increased [2)]

1)
Tsai YC, Wu SC, Huang JF, Kuo SCH, Rau CS, Chien PC, Hsieh HY, Hsieh CH. The effect of lowering the legal blood alcohol concentration limit on driving under the influence (DUI) in southern Taiwan: a cross-sectional retrospective analysis. BMJ Open. 2019 Apr 20;9(4):e026481. doi: 10.1136/bmjopen-2018-026481. PubMed PMID: 31005931.
2)
Huang WC, Chen YJ, Lee MH, Kuo TY, Lin MH, Lin MH. Analysis of effectiveness and outcome of traumatic brain injury treatment in ED during COVID-19 pandemic: A multicenter in Taiwan. Medicine (Baltimore). 2023 Jun 30;102(26):e34128. doi: 10.1097/MD.0000000000034128. PMID: 37390292.