

Characteristics of Unintentional Drowning Mortality and Hospitalized Cases in Taiwan, 2005–2007

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Abstract

Purposes: This study analyzes the characteristics of unintentional drowning cases using vital statistics and hospital data to identify the factors associated with hospital mortality. **Methods:** This study analyzed mortality data from vital statistics and hospital data from the National Health Insurance Research Database for 2005–2007 to determine the demographic distribution of unintentional drowning victims by gender, age, and month, and to investigate the factors associated with hospital mortality. **Results:** During the 3-year period of 2005–2007, unintentional drowning accounted for 1,683 deaths and 408 hospitalizations in Taiwan, and the number of deaths was approximately four times that of hospitalization cases. Analytical results for gender, age, and month distributions show that males are at higher risks for both mortality and hospitalization than females. Those aged > 65 have the highest mortality rate, and children aged 0–14 have the highest hospitalization rate. During 1 year, the period with the most unintentional drowning deaths and hospitalization cases was June–August. In multiple logistic regression models, hospitalization for ≤ 1 day (OR = 11.31), cardiac arrest (OR = 28.12), anoxic brain damage (OR = 4.98), acute respiratory failure (OR = 3.49), and surgery (OR = 3.30) significantly affected hospital mortality. **Conclusions:** Appropriate strategies should be developed that reduce mortality and the hospitalization rate caused by unintentional drowning; drowning prevention in summer should be prioritized. Additionally, departments of health and hospitals should enhance care quality to prevent cardiac arrest, anoxic brain damage, and acute respiratory failure to improve the prognoses of patients after drowning.

Key words: Unintentional drowning, vital statistics, national health insurance database, hospitalized mortality.

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