

Dr. Ying-Yeh Chen



Dr. Ying-Yeh Chen is an associate professor at National Yang-Ming University, Taipei, Taiwan and an attending psychiatrist at Taipei City Psychiatric Center. She also serves as the chief of research division at Taipei City Suicide Prevention Center. She got her doctorate on social epidemiology from Harvard University. Her research focuses on socioenvironmental influences on suicidal behaviors; the social factors she evaluates include the mass-media, gendered socialization, childhood environment and access to suicide means. She also conducts a series of studies on suicide attempters, covering topics on media influences, outcome assessment and rationale for method choice.

### **Epidemiologic Characteristics and Mortality Outcomes among Suicide Attempters in Taipei City, Taiwan**

**Ying-Yeh Chen**

**Objective:** To introduce Taipei City's deliberate self-harm surveillance system and to investigate the epidemiologic characteristics and mortality outcomes of this deliberate self-harm cohort.

**Method:** Prospective cohort study of 7601 cases of self-harm presenting to emergency departments at hospitals in Taipei City between Jan 2004 and Dec. 2006. Information about deaths was determined through linkage with national mortality data. Standard mortality ratios (SMRs) for suicide and non-suicide mortality for the cohort were calculated. Potential risk factors of suicide were investigated by using Cox's proportional hazards models.

**Results:** After an average of 3-year follow up, 516 (6.8%) cases died (201 suicides; 315 non-suicide deaths). The SMRs for suicide was 119.6 [95% CI (Confidence Interval) (99.6, 142.5)] and 58.9 [95% CI (51.0, 67.6)] respectively in the first year and during the whole follow up period. Males, middle aged and older adults had the highest subsequent risk of suicide. The risk of suicide completion varied substantially according to the method used at the index episode of self-harm. Individuals who used hanging in their index episode had the worst prognosis [HR (hazard ratio): 7.8, 95% CI (4.3, 14.2)], followed by charcoal burning suicide [HR: 2.2, 95% CI(1.4 , 3.7)]. For non-suicide mortality the SMRs were 6.7 [95% CI (5.7, 7.8)] and 4.4 [95% CI (3.9, 4.9)] in the first year and during the whole follow up period respectively. Males and the elderly had higher subsequent non-suicide mortality after the self-harm.

**Conclusion:** Risk of suicide is extremely high in the period shortly after an episode of self-harm. Designing better aftercare following non-fatal self-harm, particularly for those who had underlying physical disorders or used lethal self-harm methods, should be a priority for suicide prevention programs.