

## ABSTRACT

**Introduction:** Suicide in the elderly is a major public health problem in Hong Kong, and its importance shall escalate with the graying of the population. Our study aimed at determining the risk and protective factors for attempted and completed suicide in this population and their relative significances.

**Method:** There were 219 subjects in this study, 67 in the completed suicide group (CS), 61 in the attempted suicide group (AS) and 91 acted as controls. The study comprised three case-control designs: the first two examined the factors in the psychiatric, physical and social spheres that were associated with CS and AS respectively, as compared to the controls. In the third one a direct comparison between CS and AS was made.

**Results:** 70.1% of the CS were first attempters. Major depression carried with it the highest odds for both CS (OR=13.5,  $p<0.001$ ) and AS (OR=60.1,  $p<0.0001$ ), even after adjustment for other psychosocial and physical factors. Other characteristics shared by both CS and AS included a higher prevalence of painful musculo-skeletal conditions ( $p<0.05$  for CS and  $p<0.001$  for AS), hospitalization(s) within the past three months ( $p<0.001$  for both CS & AS), family discords ( $p<0.001$  for CS &  $p=0.01$  for AS) and a lower regard for religion or faith ( $p<0.001$  for both CS & AS). A small number of features distinguished the CS from the AS on multivariate logistic regression, which included a even higher prevalence of recent hospitalizations ( $p<0.001$ ), stronger association with COAD ( $p<0.02$ ), greater total number of recent life events ( $p<0.0001$ ), practice of ancestor worship ( $p<0.02$ ), better ADL abilities ( $p<0.002$ ) and higher Suicide Intent Scale (SIS) scores ( $p<0.005$ ) in the CS.

**Conclusions:** CS and AS were largely overlapping but distinct populations. Primary prevention should be the most promising avenue for preventing elderly suicides locally as most of the CS died on their first attempt. Adequate treatments for depression should be the mainstay of such efforts, along with attention to the psychosocial complications of physical illnesses, and crisis interventions for major life events. The complex roles of religious coping needed to be further explored. The features distinguishing CS from AS carried implications for the secondary prevention of elderly suicides.

**Keywords:** Suicide; Aged; Health; Population; Risk; Hospitalization; Family;

Prevention