

## **ABSTRACT**

### **Background**

A significant minority of patients committed suicide while receiving in-patient treatment in psychiatric hospitals. Many previous studies on psychiatric in-patient suicides were descriptive studies without controls, based on few hospitals over many years, mixture of general and psychiatric patients, and were conducted in the West.

### **Aims & Objectives**

To identify characteristics and risk factors of psychiatric in-patient suicides on a territory wide basis in a local population.

### **Method**

Patients who died with a Coroner's Court verdict of suicides (ICD-9, E950-E959) and "undetermined deaths" (ICD-9, E980-E989), while receiving psychiatric in-patient care in Hong Kong between 1997 and 1999, were identified. A retrospective one to one case-control study design was used with cases and controls matched for admission to the same hospital, sex, diagnosis, age, duration of in-patient care and date of admission. Odd ratios for risk factors were calculated by multiple conditional logistic regression.

### **Results**

Ninety-three patients committed suicide while receiving psychiatric in-patient care between 1997 and 1999. Ninety-two case-control pairs were available. Five independent risk factors were found: history of previous deliberate self-harm (odd ratio [OR]= 4.60, 95% confident interval [CI]= 1.57-13.5), deliberate self-harm/suicidal ideas as reason for admission (OR= 3.92, 95% CI= 1.30-11.9), depressive symptoms at time of suicide (OR= 8.53, 95% CI= 1.40-52.0), away without leave during admission (OR= 17.0, 95% CI= 1.76-163.4) and drug side effects at time of suicide (OR= 10.8, 95% CI= 1.75-66.7). Four out of the five risk factors were related to the index admission.

### **Conclusion**

Risk factors found in previous studies in the West also operate in a predominantly Chinese population. The identified risk factors have poor sensitivity but good specificity. Prevention of psychiatric in-patient suicide needs to be more focused at what happened during the index admission.