

## **Abstract**

**Background:** Breast cancer is the most commonly occurring cancer in the female population of Hong Kong. A significant proportion of patients experience psychiatric morbidity in association with the diagnosis and treatment of breast cancer, especially in the early stage of the trajectory of the illness. However, little is known about the prevalence of psychiatric disorder during this period or about the risk factors for psychiatric disorder among breast cancer patients in Hong Kong.

**Aim:** We sought to evaluate the prevalence of psychiatric morbidity at three months after the operation and to identify risk factors for psychiatric disorders among Chinese patients with breast cancer in Hong Kong.

**Method:** This was a cohort study performed in a local breast clinic to investigate the psychiatric morbidity that a group of women suffered from following the first diagnosis of breast cancer. They were consecutively recruited at the pre-operative stage from August 2009 to March 2010. Information regarding patient-related, cancer-related, coping responses and environmental factors was collected while the anxiety and depressive symptoms were monitored. The Structured Clinical Interview for DSM-IV Axis I Disorders (SCID) was administered at three months after the operation to delineate any psychiatric disorder. The prevalence of psychiatric morbidity was measured, and the risk factors for psychiatric disorders were identified.

**Results:** 88 subjects were recruited pre-operatively and 73 of them (83%) completed the 3-months post-operative assessment. A majority of them were suffering from early-stage breast cancer. At 3-months post-operation, 22 subjects (30.1%) met criteria for DSM-IV Axis I psychiatric disorder, with adjustment disorder (19.2%) being the most common diagnosis, followed by major depressive disorder (8.2%) and anxiety disorder (4.1%). Potential risk factors for psychiatric disorders included younger age at diagnosis, past history of depression, an absence of confidant(s) and a high negative emotion (NE) score in the Chinese mini-Mental Adjustment to Cancer Scale (MAC) at the pre-operative stage. The presence of psychiatric disorder was also associated with a low physical component summary (PCS) score of the 36-item Short Form Health Survey (SF-36) at 3-months post-operation. Logistic regression analysis revealed that younger age at diagnosis and a high pre-operative NE score were independent risk factors for psychiatric disorders.

**Conclusion:** Psychiatric morbidity, in particular anxiety and depression, are common in breast cancer patients at the early post-operative stage. Patient-related factors appeared to be more important in determining psychiatric morbidity than objective cancer-related variables. Identifying predictive factors from the pre-operative stage would allow early interventions to those who were susceptible to psychiatric morbidity.