

## **Abstract**

**Background** Nasopharyngeal carcinoma (NPC) is the most common head and neck cancer (HNC) in Hong Kong. The rate of psychiatric morbidity is high in HNC survivors. Given its negative impact on quality of life and prognosis, psychiatric morbidity should be identified and treated early. Yet, little is known about the prevalence and associated factors of psychiatric morbidity in NPC patients.

**Objectives** To identify the prevalence and associated factors of psychiatric morbidities and evaluate the effectiveness of the 12-item General Health Questionnaire (GHQ-12) to screen for psychiatric morbidity in Chinese NPC patients after radiotherapy (RT) in a local oncology clinic.

**Methods** This cross-sectional study examined all Chinese NPC patients who attended follow up consultation after RT at a major oncology centre in Hong Kong from November 2009 to April 2010. They were evaluated for psychiatric diagnoses by semi-structured psychiatric interview, the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID). Socio-demographic and clinical characteristics were compared between patients with and without psychiatric disorders. Mental health status was also assessed by a self-rating questionnaire, GHQ-12, the accuracy of which was compared against the

psychiatric diagnoses made using SCID.

**Results** Of the 108 subjects, 36.1% had current psychiatric disorders. The point prevalence of depressive disorders, anxiety disorders, and alcohol abuse were 22.2%, 15.7% and 0.9%, respectively. The lifetime prevalence of psychiatric disorders was 63.0%. Depressive disorders, anxiety disorders, and alcohol use disorders affected 35.2%, 17.6%, and 26.9% of subjects, respectively, in their lifetime. Major depressive disorder was the commonest mood disorder and generalised anxiety disorder was the most prevalent anxiety disorder. Logistic regression analysis revealed that female sex, problem with speech, and problem with eating were independently associated with current psychiatric disorders and anxiety disorders; pain was associated with psychiatric disorders and depressive disorders, whereas trouble having social contact was related to depressive disorders. GHQ-12 was effective in screening for these disorders. The area under ROC curve was 0.898, and the optimal cut-off was 15/16 scored by Likert method (sensitivity 80.0%, specificity 91.3%).

**Conclusions** Psychiatric disorders, predominantly depression and anxiety, are common in Chinese NPC patients after RT. Identification of the independent associated factors can help oncologists detect these disorders earlier and arrange appropriate intervention. GHQ-12 is a reliable screening instrument for these psychiatric disorders.