

## **ABSTRACT**

**Background:** Migraine is a common chronic episodic condition caused by increased excitability of the central nervous system. Past studies showed increased psychiatric morbidity in migraine patients but local data in Chinese patients are not available.

**Aims:** (1) To evaluate the prevalence of psychiatric morbidity. (2) To identify associated factors of psychiatric disorders in Chinese migraine patients and (3) to assess the usefulness of the Hospital Anxiety & Depression Scale (HADS) as a screening instrument for psychiatric disorders in Chinese migraine patients in tertiary headache clinic.

**Methods:** This is a cross-sectional study of psychiatric morbidity, recruiting all consecutive Chinese migraine patients attending a tertiary headache clinic of a regional hospital from 1<sup>st</sup> October 2007 to 31<sup>st</sup> March 2008. Diagnoses of migraine were made with the International Classification of Headache Disorder 2<sup>nd</sup> edition by one neurologist specialized in headache management. Psychiatric diagnoses were made with the Chinese bilingual version of the Structured Clinical Interview for DSM-IV Axis I disorders. The HADS was completed by the patient in the same interview. Socio-demographic and clinical data were collected.

**Results:** Seventy-five patients were recruited with a response rate of 97.4%. The prevalence of Axis I psychiatric disorder over a six-month period was 74.7%. The three current psychiatric disorders with highest prevalence were recurrent depressive disorder (29.3%), generalized anxiety disorder (20%) and panic disorder (13.3%). Over one third (36%) had more than one psychiatric diagnosis. By using Mann-Whitney U test, perceived stress from problems of family relationship and finance were the two significant associated factors in overall psychiatric disorders, depressive disorders and anxiety disorders; fear of pain worsening during mild headache was a significant associated factor

in depressive and anxiety disorders. After adjusting for effect from confounding variables, for overall psychiatric disorders, 'monthly household income' remained as the only independent associated factor. For depressive disorders, 'days with headache last month' and 'hours of daily contact with family/friend' remained as independent associated factors. For anxiety disorder, no associated factor remained in logistic regression. The HADS had satisfactory psychometric properties at cut-off point 7 for depression subscale in detecting depressive disorders; and 6 for anxiety subscale in detecting anxiety disorders respectively.

**Conclusions:** The prevalence of recurrent depressive disorder, generalized anxiety disorder, panic disorder and comorbidity of these disorders in Chinese migraine patients in tertiary headache clinic is comparable to the Western population. The identified independent associated factor for overall psychiatric disorders is 'monthly household income'; for depressive disorders are 'days with headache last month' and 'hours of daily contact with family/friends'. HADS depression subscale is useful in detecting depressive disorders; and anxiety subscale is useful in detecting anxiety disorders.

**Keywords:** Psychiatric morbidity, migraine, Chinese

**Word count:** 9880