

Abstract

Objectives: Bipolar spectrum disorders are commonly under-recognized and misdiagnosed in clinical practice. Screening instruments and clinical indicators can improve the recognition. This study aimed to examine and compare the psychometric properties of the Chinese versions of Mood Disorder Questionnaire (MDQ) and Hypomania Checklist-32 (HCL-32) in a general psychiatric outpatient population in Hong Kong. This study also aimed to identify the clinical correlates that indicate bipolarity, and to determine the best combination of MDQ, HCL-32 and clinical indicators in screening for bipolar disorder in this population.

Methods: A random sample of 450 subjects was selected from 3534 Chinese adult psychiatric outpatients without previous diagnosis of bipolar disorder at a regional clinic. A total of 340 subjects completed MDQ and HCL-32 during their scheduled visits and then 305 out of them received a telephone-based diagnostic interview using the Structured Clinical Interview for DSM-IV (SCID) within 2 weeks. The 4-week test-retest reliability of MDQ and HCL-32 was also examined in 107 subjects.

Results: The Chinese HCL-32 had a higher internal consistency (0.89 vs 0.75) and test-retest reliability (0.81 vs 0.74) than the Chinese MDQ. The HCL-32 had a 3-factor structure, while MDQ showed a 2-factor structure. From Receiver-Operating-Characteristic

(ROC) analysis, HCL-32 had better discriminatory capacity, higher sensitivity but lower specificity than MDQ. For MDQ, the optimal cut-off was a clustering of 4 positive symptoms with omission of the impairment criterion (sensitivity 0.65; specificity 0.77). For HCL-32, the optimal cut-off score was 11 (sensitivity 0.84; specificity 0.70). Multivariable logistic regression found that bipolar family history was the only significant clinical indicator of bipolarity (OR = 4.93). Simultaneous use of bipolar family history with HCL-32 and MDQ provided a sensitivity of 0.97 and specificity of 0.54 in screening for bipolar disorder.

Conclusions: The Chinese versions of MDQ and HCL-32 are valid and reliable screening instruments for bipolar disorder in a general psychiatric setting, but their optimal cut-offs are different from the original criteria. HCL-32 is more effective than MDQ in detecting hypomanic conditions. Simultaneous use of HCL-32 and MDQ with bipolar family history further improved the sensitivity compared to either questionnaire alone and it is potentially the most useful screening method for bipolar disorder in the Chinese general psychiatric outpatient population.

Keywords: Bipolar spectrum disorder, screening, Mood Disorder Questionnaire, Hypomania Checklist