

Abstract

Background: Behavioural and psychological symptoms of dementia (BPSD) are associated with considerable burden to patients with dementia, their caregivers and the health care system. A significant proportion of older adults with dementia will eventually need to live in institutions because of these BPSD. The caregivers in residential care settings face significant challenges during their care to residents with dementia. Various instruments have been developed to assess BPSD for evaluation and intervention studies. However, the use of most of these instruments is limited as they emphasise on different aspects of BPSD in different settings.

Aims: This study aimed at validating an informant based global measure: the Chinese version of the Challenging Behaviour Scale (CCBS), which is specifically designed for assessing disturbing and challenging BPSD in residential care settings. Moreover, the clinical correlates of challenging behaviours in patients with dementia were evaluated.

Methods: One hundred and twenty-five participants were recruited from three local care-and-attention homes (nursing home equivalence) for a validation and correlation study. The CCBS was administered together with the Cantonese version of Mini-Mental State Examination, Clinical Dementia Rating, Chinese version of the Disability Assessment for Dementia and Chinese version of the Neuropsychiatric Inventory in order to examine the relationships between CCBS and important clinical correlates.

Results: The CCBS had good internal consistency ($\alpha=0.86$), inter-rater reliability (ICC=0.79) and test-retest reliability (ICC=0.98). A four-factor structure of the CCBS was demonstrated by factor analysis: hyperactivity, physically aggressive, verbally

aggressive and hypoactivity behaviours. Nearly all the participants had at least one type of challenging behaviour. Challenging behaviours were associated with male gender, more severe cognitive impairment, lower physical functioning, more neuropsychiatric symptoms, and higher caregiver's workload.

Conclusion: The Chinese Challenging Behaviour Scale is a valid and reliable measure to assess BPSD in residential settings in local Chinese community.

Key words: *dementia, Chinese, nursing home, BPSD, challenging behaviour*

Candidate's Role

I have made the sole contribution to this research from the very beginning except those procedures that required expert opinions (the expert panel for the content validity of the CCBS) and independent assessment, namely the administration of the Chinese Neuropsychiatric Inventory (nursing home version). The rating scales used in this study have been approved by the original authors.

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