Psychometric Properties of Malay Brief Quality of Life in Bipolar Disorder

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ABSTRACT

Background: Quality of life (QoL) is increasingly used to holistically evaluate bipolar disorder treatment beyond symptomatic response. For that purpose, the condition-specific QoL scale is better than the generic QoL scales. To date, there is no available QoL scale specifically designed for bipolar disorder (BD) for the Malaysian population.

Objective: This study aimed to translate into Malay and validate the Brief Quality of Life in Bipolar Disorder (QoL.BD) scale in the local population.

Method: The Brief QoL.BD was translated into Malay using the standard forward and back-translation method. The translated version was then administered to 40 patients with bipolar disorder from the outpatient psychiatric clinic, Hospital USM.

Result: The Brief QoL.BD (Malay) demonstrated a good psychometric property, i.e. good internal consistency (Cronbach alpha 0.92) and concurrent validity with WHOQOL-BREF (Malay) (r = 0.82).

Conclusion: The Brief QoL.BD (Malay) is a feasible, reliable, and valid tool for the assessment of QoL in bipolar disorder among the local population.

KEY WORDS

quality of life, bipolar disorder, QoL.BD, validation, psychometric

INTRODUCTION

Quality of life (QoL) instruments holistically measure a person’s fulfillment and functioning across a range of life domains and are, hence, increasingly used to evaluate bipolar disorder (BD) treatment outcomes beyond symptomatic response. The chronic course and significant impacts of BD across diverse life domains have made the assessment of QoL particularly important. Among the most used scales are Quality of Life Index (QLI), Quality of Life Enjoyment and satisfaction (Q-LES-Q), World Health Organization Disability Assessment Schedule (WHODAS), and Sheehan Disability Scale (SDS) and SF-36. These scales are widely used in the assessment of patients suffering from chronic physical illness and mental disorders.

Nevertheless, there is an advantage of using a scale that is specifically designed to assess QoL in BD. Condition-specific instruments are purported to assess aspects of QoL relevant to individuals with a given illness or disability. Qualitative interviews and surveys have suggested that patient groups value life domains distinct from the priorities of healthy comparison groups, and such aspects of QoL may not be adequately addressed by generic measures. Additional methodological advantages to using condition-specific measures include they are usually more sensitive to treatment-related changes, and more robust to ‘floor effects’, where particular patient groups scoring at the lower bound of a scale may nonetheless experience QoL decreases beyond what the questionnaire can show.

The QoL.BD scale is the first (and to date only) condition-specific QoL measure that is available. Items on the QoL.BD was generated based on lived experience perspectives about areas of life specifically impacted by or important to those with BD, supplemented by a literature review and interviews with family members and field experts. The resulting scale assesses cardinal life areas directly impacted by BD (mood, sleep, physical health, cognition), pragmatic and functional outcomes (home, work, education, leisure, finances), and psychosocially orientated constructs (relationships, self-esteem, spirituality, identity, independence). This study aimed to translate into Malay language and validate the original version of the Brief Quality of Life in Bipolar Disorder (QoL.BD) in the local population.

METHODS

Participants

The study was approved by the Human Research Ethics Committee [USM/JEPeM/280.3(10)]. Eligible subjects gave their written informed consent after the nature of the study was explained. Data were collected from patients aged 18-65 with DSM-IV-TR diagnosis of bipolar disorder attending the outpatient psychiatric clinic, Hospital Universiti Sains Malaysia (USM). All the participants were stable with no admission in the past 6 months, cooperative, literate, and understand the Malay language.

Instruments

WHOQOL-BREF (Malay) consists of 26 questions. It has internal consistency ranged from 0.64 in domain 2 (psychological domain) to 0.80 in domain 1 (physical domain) which were comparable to the data from the pilot study of WHOQOL-BREF in Hong Kong. Furthermore, it was demonstrated to have good psychometric properties including concurrent, discriminant, and construct validity.
The Brief Quality of Life in Bipolar Disorder (Brief QoL.BD) is the shorter version of QoL.BD. To date this is the only scale specifically developed for measuring subjective QoL in bipolar disorder patients. It is a self-reported questionnaire covering 12 important aspects of QoL — physical, sleep, mood, cognition, leisure, social, spirituality, finances, household, self-esteem, independence, and identity. Respondents score on a 5-point Likert scale that represents their range of experiences, from the original author. The forward and back-translation process on a 5-point Likert scale that represents their range of experiences, behaviours, and feelings related to QoL within 7 days. The total score ranges from 12 to a maximum of 60. A higher score indicates a better QoL. The scale has neither cut-off points nor ranks of QoL severity. No normative data of any population is available now.

The main researcher managed to obtain consent to translate the scale from the original author. The forward and back-translation process of the Brief QoL.BD was independently carried out by 2 sets of bilingual translators comprising of a psychiatrist and linguist. The forward and back-translated versions were reviewed and amended to improve the semantic accuracy while maintaining the intended original meaning of the English version. This amended scale was then agreed upon in consensus by the expert team to have good content validity. The scale was then pre-tested on a group of 10 Bipolar disorder patients to assess its face validity. Patients were enquired about their difficulty in understanding the questions. Their interpretations of all the items were checked. A further amendment was carried out leading to the final version of the Brief QoL.BD which is deemed to have satisfactory semantic and conceptual equivalence with the original version as well as good face and content validity. Subsequently, the Brief QoL.BD (Malay) and WHOQOL-BREF (Malay) were administered to 40 patients with bipolar disorder.

RESULTS

Psychometric properties

The Brief QoL.BD (Malay) showed excellent internal reliability (Cronbach alpha 0.92). Above 0.7 was considered good and commonly quoted in research based on an earlier recommendation. The reliability of the Malay version was comparable to the original English version. All items were retained for use in the translated questionnaire. The Brief QoL.BD (Malay) correlation with the WHOQOL-BREF (Malay) was 0.82, indicating a good convergent validity. Hence, this preliminary work demonstrated that the Brief QoL.BD (Malay) is reliable and valid as a research tool.

DISCUSSION

A systematic review identified six studies on psychometric properties of QoL.BD adaptations between 2015-2020: five reported on cross-cultural adaptations, and one described the development of a web-based adaptation of the QoL.BD. One study described a Spanish translation of the full-length QoL.BD. Other cross-cultural adaptations of the Brief QoL.BD, including a Chinese, two unique Persian adaptations and a Turkish. The same number of items and domains are retained in all adaptations to the language and format of the QoL.BD, and as such are scored consistently with the original instrument. Internal consistency across cross-cultural adaptations was high (Cronbach’s alpha > 0.8). External validity for the Spanish, Chinese, and both Persian translations was moderate to large positive correlations with generic measures of QoL.

In this study, the back and forward translational process ensured the newly translated questionnaire retain the concept of the original questionnaire. The Brief QoL.BD (Malay) had a good face and content validity. Its internal consistency (Cronbach alpha 0.92) was good and comparable to other adaptations. The main limitation of this study is the small sample size (n = 40). However, the sample size was slightly larger compared to the Spanish version (n = 32) validated in 2015[6]. In summary, the findings of this study validated the usefulness of the Malay version of the Brief QoL.BD for local use. This instrument would enable researchers to further investigate the quality of life in bipolar disorders and its associated factors in future studies.

REFERENCES