Journal of Affective Disorders 184 (2015) 216–224

Contents lists available at ScienceDirect

Journal of Affective Disorders

journal homepage: www.elsevier.com/locate/jad

Review

Depression rating scales in Parkinson's disease: A critical review updating recent literature

Elizabeth Torbey [a,b], Nancy A. Pachana [a], Nadeeka N.W. Dissanayaka [a,b,c,*]

[a] School of Psychology, The University of Queensland, Brisbane, Australia
[b] The University of Queensland, UQ Centre for Clinical Research, Brisbane, Australia
[c] Neurology Research Centre, Royal Brisbane and Women's Hospital, Brisbane, Australia

A R T I C L E I N F O

Article history:
Received 28 October 2014
Received in revised form
27 May 2015
Accepted 29 May 2015
Available online 10 June 2015

Keywords:
Depression
Parkinson's disease
Rating scales
Review

A B S T R A C T

Depression is a prominent non-motor symptom in Parkinson's disease (PD). Assessing depression in PD remains a challenge due to the overlap of somatic symptoms between depression and PD. Other neuropsychiatric manifestations associated with PD, such as cognitive decline, also complicate assessment of depression. Therefore it is critical to investigate the validity of depression rating scales for use in PD. This will allow evaluation of observer- and self-report instruments to be administered in neurologically ill geriatric populations such as PD, and identification of appropriate scales to use in cognitively challenged PD patients. The present review includes all studies examining the validity of depression rating scales in PD. It discusses the usefulness of 13 depression rating scales in PD. The clinician-rated and widely used HAMD-17 and the self-report GDS scales are recommended for screening and measuring severity of depression in PD. The GDS-15 may be a preferred choice due to its brevity and ease of use design for older adults. Other valid and reliable instruments to use in PD include self-rated scales, such as the HADS-D, HDI, and the BDI, and the observer-report, MADRS. The CSDD displayed satisfactory validity and reliability for identification of PD patients with and without dementia. The PHQ-2, PHQ-10, SDS, CES-D, UPDRS-Depression item, IDS-SR, and IDS-C each showed some evidence of validity or reliability, however further research on the psychometric properties of these scales when used in a PD population are required.

© 2015 Elsevier B.V. All rights reserved.

Contents

1. Introduction . . . 217
1.1. Frequently used general depression rating scales . . . 217
1.1.1. Hamilton Depression Rating Scale (HAMD) . . . 217
1.1.2. Hamilton Depression Inventory (HDI) . . . 218
1.1.3. Beck Depression Inventory (BDI) . . . 218
1.1.4. Hospital Anxiety and Depression Scale-Depression Subscale (HADS-D) . . . 219
1.1.5. Zung Self-rating Depression Scale (SDS) . . . 219
1.1.6. Centre for Epidemiologic Studies Depression Scale (CES-D) . . . 219
1.1.7. Montgomery–Asberg Depression Rating Scale (MADRS) . . . 219
1.2. Infrequently used general depression rating scales . . . 220
1.2.1. Patient Health Questionnaires (PHQ-2 and PHQ-9) . . . 220
1.2.2. Inventory of Depression Symptoms: Clinical and Self-Report (IDS-C and IDS-SR) . . . 220
1.2.3. World Health Organisation (WHO)-Five Wellbeing Index (WHO-5) . . . 220
1.3. Depression rating scales developed for use in older adults . . . 220
1.3.1. Geriatric Depression Scale (GDS) . . . 220

* Corresponding author at: The University of Queensland, UQ Centre for Clinical Research, Building 71/918 Royal Brisbane and Women's Hospital, Herston QLD4029, Brisbane, Australia. Tel.: +61 733465577, +61 405715622.
E-mail address: n.dissanayaka@uq.edu.au (N.N.W. Dissanayaka).

http://dx.doi.org/10.1016/j.jad.2015.05.059
0165-0327/© 2015 Elsevier B.V. All rights reserved.

1.4. Depression rating scales developed for use in dementia. 221
1.4.1. Cornell Scale for Depression in Dementia (CSDD) 221
1.5. Screening item only for assessment of depression 221
1.5.1. Unified Parkinson's Disease Rating Scale (UPDRS) Depression item 221
2. Conclusion 221
Author declaration 221
Contributors 222
Role of the funding source 222
Conflict of interest. 222
Acknowledgement. 222
References 223

1. Introduction

With many depression scales available for clinical use in psychiatric populations, it is important to investigate which scales are valid and appropriate for use in Parkinson's disease (PD). It has been well established that several symptoms of depressive disorders overlap with other non-motor symptoms of PD (Gallagher and Schrag, 2012; Wishart and Macphee, 2011). For example, somatic and neurovegetative difficulties such as fatigue, psychoagitation, impaired concentration, and insomnia are seen in both depression and PD. Overlap in symptoms is likely to cause difficulties in the accurate identification and diagnosis of depression in PD, hence contributing to both under-detection of cases as well as under-treatment. The majority of rating scales used to assess depression consist of such overlapping symptoms, and therefore it is important to examine the validity of the use of depression rating scales in PD. For consistency of assessment and to enhance specificity, it has been suggested to use an “inclusive” approach when assessing depression in PD (Marsh et al., 2006), which involves rating of the presence or severity of the symptom regardless of the overlap with PD or other medical conditions.

In clinical practise, patients undergoing assessment for psychiatric disorders such as depression should be interviewed using a standardised clinical interview based on diagnostic criteria, such as those from the Diagnostic Statistical Manual, Fifth Edition (DSM-5) (American Psychiatric Association, 2013). However, rating scales (either self-report, clinician-based, or informant-rated) are often used to screen for psychiatric symptoms and their severity and assist with eventual diagnosis. Often administration of rating scales is also more feasible than conducting interviews for the assessment of psychological disorders in epidemiological studies, surveys, and clinical trials. The use of brief, valid rating scales administered by clinicians and researchers is therefore vital in improving the detection of depressive disorders, which are highly prevalent in PD (Reijnders et al., 2008).

Despite measuring the same overall psychological construct of depression, each rating scale is unique in what symptoms their items aim to assess. The aim of the present review is therefore to explore tools used to measure depression in PD to determine their reliability and validity in PD, in order to ascertain the most useful rating scales. A similar review was previously published by Schrag et al. (2007). However since then a number of original articles focusing on depression rating scales in PD have been published. For example an original study by Williams et al. (2012) compared the utility of 9 depression rating scales in PD. This review is a comprehensive update of the literature pertaining to reliability and validity studies of all depression rating scales in PD, and also provides an updated overview, based on this literature, of the utility of these measures in PD.

A literature search was performed using PsycInfo, PubMed and Web of Science databases. The search terms included Parkinson* disease, psychiatric, depress*, assessment, scales, and valid*. * is used to identify exact and similar words. No years were specified in the search, and therefore all years up until the present were included. The inclusion criterion for the literature review was review articles and studies that have investigated the validation of depression instruments in PD, and written in English. The results of the search revealed 13 depression rating scales that have been used in PD. The structure of this review consists two parts for each scale. First is to provide general information about the scale and second is to comprehensively discuss validity and reliability details relating to PD. First part (general information) guides the reader to understand more about the scale when used in the general population, specially those who are unfamiliar with various rating scales used to measure depression. Second part clearly describes studies examining the validity and reliability in PD. For each scale, a brief conclusions as to whether the evidence suggests that the scale is appropriate for use in PD are outlined. A summary of each depression scale reviewed and its usefulness in PD is provided in Table 4.

1.1. *Frequently used general depression rating scales*

1.1.1. *Hamilton Depression Rating Scale (HAMD)*

The HAMD was one of the first semi-structured interview measures developed for the clinical evaluation of depression in adults and remains the most widely used measure in clinical practise (Hamilton, 1960). There are multiple versions of the clinician-rated HAMD available, including 6-item, 17-item, 21-item, and 24-item scales (Serrano-Duenas and Soledad Serrano, 2008; Weintraub et al., 2006). The 17-item version (HAMD-17) is the most frequently used version. Each item is scored on a 3-point or 5-point scale, with higher scores indicating greater severity of symptoms. The HAMD exhibits good discriminant validity, test-retest reliability, inter-rater reliability, and good sensitivity to change in non-PD depressed patients (Bagby et al., 2004). One main criticism of the HAMD, however, is that somatic symptoms of depression are heavily represented in item content.

The reliability and validity of the HAMD in PD has been evaluated in a number of studies. The results from studies which have assessed the discriminant validity of the HAMD-17 and HAMD-24 in PD are summarised in Table 1. An optimal HAMD-24 cut-off score for distinguishing between patients with and without a depressive disorder was found to be 9/10, with a high area under the curve (AUC) (0.91) indicating excellent discrimination (Weintraub et al., 2006). In this study, a depressive disorder indicated a diagnosis of major or minor depression according to the gold standard DSM-IV diagnostic criteria. Limitations of the study, however, include the relatively older mean age of patients in the sample (72 years) and the fact that it was a predominantly male sample. The researchers also did not include any cognitive assessment or exclude patients diagnosed with dementia. Leentjens et al. (2000a) investigated the discriminant validity of the HAMD-17, with results also indicating a high AUC (0.95) and

Download English Version:

https://daneshyari.com/en/article/6231294

Download Persian Version:

https://daneshyari.com/article/6231294

Daneshyari.com