

Abstract

Objective

The study reported herein examined the point prevalence of depressive disorders, their clinical correlates and health-related quality of life (HRQoL) in Chinese patients with Parkinson's disease (PD).

Study design

The study used a cross-sectional design and the data was collected between 1 July 2005 and 30 June 2006. All eligible Chinese PD patients that attended the neurology outpatient clinics at the Prince of Wales Hospital (PWH) and the Alice Ho Miu Ling Nethersole Hospital (AHNH) and a random sample of eligible subjects that attended the Pamela Youde Nethersole Eastern Hospital (PYNEH) were recruited. The diagnoses of PD were made according to the United Kingdom Parkinson's Disease Society Brain Bank clinical diagnostic criteria (UKPDSBB) by the neurologists. All of the participants were interviewed by the candidate using the Chinese-Bilingual Structured Clinical Interview for the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Axis I, Patient Version to identify patients who suffered from a major depressive episode, minor depression or dysthymia, according to the Diagnostic and Statistical Manual of Mental Disorder, Fourth Edition.

The research assistant (RA) assessed all of the participants with the Lubben Social Network Scale (LSNS) and the Cantonese-Chinese version of the Mini Mental State Examination (CC-MMSE), which measured the degree of social support and the cognitive function, respectively. The RA also assessed the severity of PD with the Hoehn and Yahr staging (HYS). A self-rated battery which included a short form of the Geriatric Depression Scale (GDS-15), the Hospital Anxiety & Depression Scale-Anxiety Subscale (HADS-Anxiety), the Parkinson's disease questionnaire (PDQ-39) and the Schwab and England Activities of Daily Living Scale (SEADL) was administered. GDS-15 and HADS-Anxiety measured the severity of depressive and anxiety symptoms, respectively. PDQ-39 and SEADL measured the HRQoL and the global functional state of the subjects, respectively.

Results

One-hundred and eighty-eight PD patients were invited to participate, and 55 of them were excluded. Eight out of the 55 were excluded because the data set was incomplete, and 47 were excluded according to the exclusion criteria. One-hundred and thirty-three eligible PD patients were recruited in the study. The point prevalence of any type of depressive disorder was 26.3% (n=35). Major depressive episodes were diagnosed in 19 patients (14.3%) and seven of them had concurrent dysthymia. Four

patients (3.0%) and 12 patients (9.0%) had minor depression and dysthymia, respectively. There was a significant difference between the two groups, 'any type of depression' (AD) and 'no depression' (ND), in terms of history of depression ($p=0.002$), age of onset of PD ($p=0.047$), HYS ($p=0.001$), akinesia ($p<0.001$), LSNS ($p=0.002$), GDS ($p<0.001$), HAD-Anxiety ($p=0.001$), SEADL ($p=0.001$) and PDQ-39 ($p=0.001$). There was a marginally significant difference in the duration of PD ($p=0.075$) and the use of Catechol O-Methyltransferase inhibitor (COMT inhibitor) medication between the two groups ($p=0.085$). History of depression, age of onset of PD and SEADL were found to be the clinical correlates of depression in PD (dPD) by binary logistic regression. The mean score of PDQ-39 in the sample population was 84.32 ± 31.15 . There was a statistically significant difference in the mean score of PDQ-39 between the AD and ND - 112.26 ± 30.64 and 74.35 ± 24.68 , respectively. Linear regression on PDQ-39 by depression account for 28.4% of the total variance of PDQ-39.

Conclusion

This study indicated that depression is equally prevalent in the Chinese PD patients of neurology clinics in Hong Kong (HK) and in their Western counterparts. The clinical variables that were found in this study were compatible with the variables that

have been found in other studies. Depression was found to exert a significant effect on the HRQoL of PD patients.

Implications

The results of this study draw the attention of physicians to the depressed PD patients in their busy neurology clinics. It will help physicians to identify the group of PD patients that is particularly vulnerable to depression by identifying its clinical correlates. The results show that depression significantly affects a patient's quality of life (QOL). The correct identification and prompt treatment of depression in PD (dPD) is the first step towards improving the quality of care in debilitated PD patients. To this end, it is important for physicians to be trained to handle dPD; therefore, liaison services would be an important component of the local service setting.

Keywords

Parkinson's disease, depression, prevalence, clinical correlates, Chinese