

Is Depression Related To Quality of Life (QOL) and Activities of Daily Living (ADL) in Veterans with Parkinson's Disease (PD)?

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Background

Researchers estimate that depression affects 40-50% of Parkinson's disease (PD) patients. Depression influences the patient's quality of life (QOL) and ability to perform household chores and activities of daily living (ADL) such as personal care.

Methods

Methods: We gathered data on 93 PD veteran patients through a mail survey that included the Parkinson's Disease Questionnaire (PDQ-8), Beck Depression Inventory II (BDI II), and a demographic sheet that contained questions regarding depression, QOL, and ADL. Data were analyzed with nonparametric statistics and Pearson's product-moment correlation coefficient using SPSS-12.

Results

The Beck Depression Inventory II correlated with:

- The PDQ-8 (patients' perceived quality of life)
- Patients' perceived health status
- Patients' perceived level of ADL Assistance

There was no correlation between the BDI II and:

- education
- marital status

Results

Table 1 Description of the Study Population

Variable	All Patients N=93	None to Mild Depression (Beck score <=19) N=69	Moderate to Severe Depression (Beck score >19) N=24
Age (yrs) Mean	73.5	73.4	72.1
Gender, n (%)			
Men	91 (97.8%)	68 (98.6%)	23 (95.8%)
Women	2 (2.2%)	1 (1.4%)	1 (4.2%)
Disease Duration (yrs) Mean ± S.D	8.4 ± 6.3	8.2 ± 6.7	8.8 ± 5.3
Marital status n (%)			
Married	66 (71.0%)	49 (71.0%)	17 (70.8%)
Divorced/Separated	15 (16.1%)	11 (15.9%)	4 (16.7%)
Widowed	9 (9.7%)	8 (11.6%)	1 (4.2%)
Never married	3 (3.2%)	1 (1.4%)	2 (8.3%)
Education, n (%)			
College or graduate degree	37 (40%)	28 (40.6%)	9 (39.5%)
Anti-depressant intake, n (%)			
Yes	32 (34.4%)	21 (30.4%)	11 (45.8%)
No	58 (62.4%)	45 (65.2%)	13 (54.2%)
ADL status, n (%)			
Independent	25 (29.1%)	21 (30.4%)	4 (16.7%)
Minimal Assist	31 (36.1%)	25 (36.2%)	6 (25.0%)
Moderate Assist	23 (26.8%)	12 (17.4%)	11 (45.8%)
Maximum Assist	7 (8.2%)	4 (5.8%)	3 (12.5%)
Self-rated health status, n (%)			
Excellent	2 (2.2%)	2 (2.9%)	0 (0.0%)
Good	42 (45.2%)	38 (55.1%)	4 (16.7%)
Fair	42 (45.2%)	27 (39.1%)	15 (62.5%)
Poor	7 (7.5%)	2 (2.9%)	5 (20.8%)

Table 2 Spearman's rho correlation coefficients

	Patients' perceived health status	Patients' perceived level of ADL assistance	Quality of life (PDQ-8) score
Beck depression score	-0.465(**)	0.419(**)	0.670(**)
N	93	86	92

** Correlation is significant at the 0.01 level (2-tailed).

Table 3 Patient Responses

Variable	Score
Beck Depression Inventory-II (mean ± SD)	13.56 ± 8.47
No or minimal depression (scores 0-13)	52 (55.9%)
Mild depression (scores 14-19)	17 (18.3%)
Moderate depression (scores 20-28)	19 (20.4%)
Severe depression (scores >=29)	5 (5.4%)
	93 (100%)
Parkinson's Disease Questionnaire (PDQ-8)	44.09 ± 19.79
	(indicates moderate QOL)

Conclusions

- Depression appears to influence QOL and patients' ability to carry out ADL/IADL.
- PD patients should be evaluated for depression at each clinic visit.
- Health care providers should develop a systematic method to assess functional status, moods, and emotions that affect patients' well-being.