



Variation in the perception of family function in MS and its relationship with patient self-efficacy



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Abstract

Background: Family and social support play a crucial role in helping patients with multiple sclerosis (MS) manage the significant practical and psychological burden of living with and caring for their MS. In this way, healthy family function is crucial to MS patients but ironically, MS itself places a great strain on families. It is difficult to measure the effect of MS on patient families and little is known about this important relationship.

Objectives: To measure both patient and family assessment of family function and consider the possible differences in perception and the role of this perception in patient self-efficacy.

Methods: 79 patients with confirmed MS were given measures of disease severity and self-efficacy (the *Multiple Sclerosis Self-Efficacy Scale [MSSE]*)¹ while both patients and their family members completed the *McMaster Family Assessment Device (FAD)*² as a measure of perceived family function. Pearson r correlations were run to determine the relationship of patient perception and family perception in assessing family function as well as the effects of both of these perceptions on patient perceived self-efficacy.

Results: The cohorts of MS patients and MS family members showed no significant difference in perceived family function; patient Mean=1.916, family Mean=1.922 (on a scale of 1-4 where lower scores imply better function). However, in comparing the ratings of individual MS patients with ratings of their family members, scores of family members differed from those of patients by a mean of 0.40 (SD in this population is 0.58). Patient and family perceptions of family function were significantly, but only moderately, correlated ($r = .54, p < .001$). In predicting patient self-efficacy, patient perceived family function was significant ($r = -.354, p = .002$), while family member's perception of functioning was only trending significance as a predictor of patient self-efficacy ($r = -.202, p = .08$)

Conclusions: Moderate discrepancy between patient perception of family function and family perception is likely. Of the two it is patient perception that is more likely to correlate with poorer self-efficacy outcomes. Thus when considering the role of family and disease burden in MS it is important to distinguish between the experience and perception of patients and that of their families. It is important that healthcare providers be aware of the effects of MS on families both for MS patients as well as for their families.

Conclusions

- Perceived family functioning is not unitary, but differs between patients and their families.
- Although the difference between patient and family report is small it is significant as the correlation between family and patient report is surprisingly low.
- In predicting patient perception of disease burden (patient's self-efficacy) patient perception of family function is significant, but not family perception.
- Study results emphasize the importance of family function as a predictor of disease perception and results specifically highlight the importance of ascertaining the patients own perception.

Background

Family functioning and perceived family function play a significant role in the experience of disease burden, particularly in a chronic debilitating disease such as MS. Little is known about family function in MS nor of the relative effect of disease burden on patients as compared to family members. It seems likely that in the subjective experience of disease burden, MS patients will view the disease's effects on family well-being differently from their family members.

Methods

Sample: Data was collected via mailed questionnaires and over the phone from 79 individuals between ages 20-65 who had confirmed diagnoses of MS, lived with at least one person aged 12 and up, did not have significant cognitive impairments, and did not have or live with someone with another seriously disabling disease or condition.

Materials: *Multiple Sclerosis Self-Efficacy Scale (MSSE)* is an 18-item self-report measure, designed specifically for the assessment of self-efficacy in patients with MS. *McMaster Family Assessment Device (FAD)* is a 60-item self-report questionnaire designed to measure overall family functioning.

Statistics: The primary analysis for this study are Pearson r correlations to determine the relationship of patient perception and family perception in assessing family function as well as determine the effects of both of these perceptions on patient perceived self-efficacy.

Results

	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
FAD Population Parameters ²	--	1.00	4.00	2.2	.58
Study Sample					
FAD Patient Report	77	1.00	3.42	1.9167	.55607
FAD Family Report	77	1.00	3.50	1.9227	.56701
Mean Difference : .404					

	Correlations (Pearson r)		
	FAD Pt Report	FAD Fam Report	MS SE total score
FAD Patient report	1	.544*	-.354*
FAD Family Report	.544*	1	-.202
	.000	.000	.080

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

References

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2. Epstein, N.B., Baldwin, L.M., and Bishop, D.S. (1983). The McMaster Family Assessment Device. *Journal of Marital and Family Therapy*, 9, 171-180.