Gender-Specific Associations Between Primary, Secondary, and Tertiary Sexual Dysfunction in MS

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Abstract

Objectives: Examine how correlations between primary, secondary, and tertiary sexual dysfunction (PSD, SSD, TSD) in MS differ between males and females.

Methods: The sample was selected from the North American Research Committee on Multiple Sclerosis (NARCOMS) Registry and included 5,667 participants who provided responses to all items on the Multiple Sclerosis Intimacy and Sexuality Questionnaire (MSISQ-15). Data in the analysis included gender and MSISQ-15 responses. A Fisher-z-transformation comparing bivariate Spearman-rho correlations was conducted to examine the difference in gender on the correlations of the SD subscales.

Results: Bivariate correlations were significant at all levels of SD. The correlation between PSD and TSD was significantly greater for men than for women. Further, a higher correlation between SSD and TSD was found for women than for men. There was no significant difference between men and women in the correlation between PSD and SSD.

Conclusions: Emotional/psychosocial factors impacting sexual satisfaction are more highly correlated with neurological changes associated with SD in men than women and more highly correlated with physical implications of SD in women than in men.

Background

Sexual dysfunction (SD) impacts up to 73% of individuals with MS.[1] SD in MS is complex and is divided into primary, secondary, and tertiary dysfunctions (PSD, SSD, TSD) characterized by neurologic changes with direct implications on sexuality, physical changes with indirect effects on sexual response, and psychosocial issues associated with disability that affect sexual satisfaction.[2] Because there are established gender differences in the reporting of SDs among individuals with MS, investigating potential gender differences in the types of SDs reported may prove to be an advantageous endeavor in enhancing the current understanding of SDs in the MS population as well as providing potential targets for novel treatment interventions.[3]

Methods

- The sample included 5,667 participants (1,405 males and 4,262 females) from the NARCOMS Registry who completed the MSISQ-15.
- A Fisher-z-transformation comparing bivariate Spearman-rho correlations was conducted to examine the difference in gender on the correlations of the SD subscales.

Results

- The bivariate correlations were significant at all levels of SD.
- There was a significant difference between genders in the bivariate correlation between PSD and TSD (p=.0129), such that men (rs=.663) had a higher correlation than women (rs=.623).
- The genders differed significantly in the correlation between SSD and TSD, p=.0192. Women (rs=.655) had a higher bivariate correlation than men (rs=.618).
- There was no significant difference between men and women in the correlation between PSD and SSD.

Demographics

	Males		Females	
	N	%	N	%
Education Level				
Less than 12 years	60	2.9%	106	1.6%
HS Diploma	621	29.7%	2022	30.8%
Associates Degree	376	18.0%	1380	21.0%
Bachelors Degree	537	25.7%	1669	25.4%
Post Graduate Degree	496	23.7%	1392	21.2%
	M	SD	M	SD
Age	56	11	52	10
Primary SD Total Score	14.25	5.7	14.18	6.01
Secondary SD Total Score	9.87	4.88	9.51	4.3
Tertiary SD Total Score	12.29	6.23	10.73	5.78
MSISQ-15 Total Score	36.14	14.31	34.09	13.68
SF-12 Total Score	32.55	7.78	34.24	7.97

Conclusions

- Men and women differ significantly in the correlations between PSD and TSD and SSD and TSD.
- Specifically, emotional/psychosocial factors impacting SD (i.e., TSD) are more highly correlated with neurological changes associated with SD (i.e., PSD) among men than women.
- In contrast, emotional/psychosocial factors impacting SD are more highly correlated with physical implications of SD (i.e., SSD) among women than in men.
- Further research to increase our understanding of how and why men and women are differentially impacted by SD, can impact the way in which these symptoms are addressed.

References

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