



Gender Differences in Sexual Dysfunction: An Examination of Primary, Secondary, Tertiary Subgroup Reporting on the MSISQ-15



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Abstract

Objectives: Assess whether gender differences exist in the reporting of primary, secondary, and tertiary symptoms of sexual dysfunction (PSD, SSD, TSD) on the Multiple Sclerosis Intimacy and Sexuality Questionnaire-15 (MSISQ-15).

Methods: The study sample consists of respondents ($N=5,667$) to a North American Research Committee on Multiple Sclerosis (NARCOMS) Registry. Data in the analysis included gender and self-reported responses to the MSISQ-15. An Independent Samples Mann-Whitney U Test and linear mixed effects model (LMEM) were conducted using SPSS 25.0 to assess whether gender difference exist in the three categories of sexual dysfunction.

Results: Gender was associated with the MSISQ-15 subscales, and gender was significantly associated with TSD. Men reported a greater amount of TSD symptoms compared to women. There was no significant gender difference in PSD and SSD.

Conclusions: Men reported a greater number of TSD symptoms compared to women, suggesting that men are more likely to experience MS-related emotional and psychosocial issues which negatively impact their sexual functioning. Future treatment and interventions for SD in MS should incorporate aims to target these factors.

Background

Sexual dysfunction (SD) is common in individuals with MS with an estimated prevalence of 73%.¹ SD in MS can be divided into three categories: primary, secondary, and tertiary sexual dysfunction (PSD, SSD, TSD) characterized by MS related neurologic changes with direct implications on sexuality, physical changes with indirect effects on sexual behavior, and psychosocial factors that negatively impact sexual functioning, respectively.² Past research has demonstrated gender differences related to the impact of MS on sexual functioning as well as differences in the efficacy of treatments.^{3,4} Investigation of gender differences in the reporting of the SD subgroupings, may provide insight into how these problems can best be differentially addressed.

Methods

- The sample includes 5,667 respondents (1,405 males and 4,262 females) to a NARCOMS Registry survey via email or mail.
- Only respondents who provided complete responses to the survey were included in the analysis (1,405 of 2,237 male respondents [62.8%]; 4,262 of 7,010 female respondents [60.8%]).
- Data in the analysis included gender and self-reported responses to the MSISQ-15.
- An Independent Samples Mann-Whitney U Test and LMEM were conducted using SPSS 25.0 to assess whether gender difference exist in the three categories of SD.

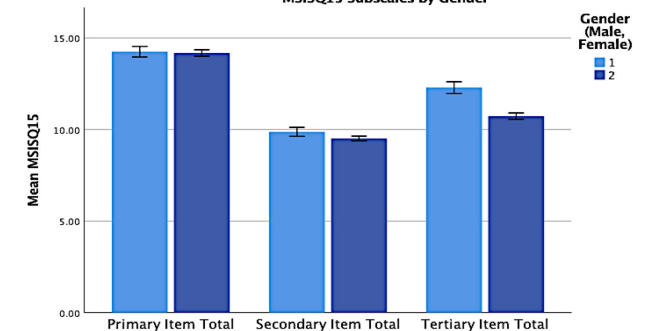
Demographics

	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

Results

- LMEM analysis showed gender was associated with the MSISQ-15 subscales ($p<.001$).
- Mann-Whitney U-Test found that gender was significantly associated with TSD ($p<.001$). Men reported a greater amount of TSD symptoms ($M=12.29$, $SE=.119$) compared to women ($M=10.73$, $SE=.069$). There was no significant gender difference in PSD ($p=.625$) and SSD ($p=.387$).

MSISQ15 Subscales by Gender



MSISQ_subscale

Conclusions

- Men reported a greater number of TSD symptoms compared to women, suggesting that men are more likely to experience MS-related emotional and psychosocial issues which negatively impact their sexual functioning.
- Future treatment and interventions for SD in MS should incorporate aims to target these factors.

References

- Zorzon, M., Zivadinov, R., Bragadin, L. M., Moretti, R., De Masi, R., Nasuelli, D., & Cazzato, G. (2001). Sexual dysfunction in multiple sclerosis: a 2-year follow-up study. *Journal of the neurological sciences*, 187(1), 1-5.
- Foley, F. W., Zemon, V., Campagnolo, D., Marrie, R. A., Cutter, G., Tyry, T., . . . Schairer, L. (2013). The Multiple Sclerosis Intimacy and Sexuality Questionnaire—re-validation and development of a 15-item version with a large US sample. *Multiple Sclerosis Journal*, 19(9), 1197-1203.
- Çelik, D. B., Poyraz, E. Ç., Bingöl, A., İdman, E., Özakbaş, S., & Kaya, D. (2013). Sexual dysfunction in multiple sclerosis: gender differences. *Journal of the neurological sciences*, 324(1), 17-20.
- Magyari, M. (2014). Gender differences in multiple sclerosis epidemiology and treatment response. *Mult Scler*, 20(9), 1244-1251.