



ORIGINAL ARTICLE

Medicine Science 2021;10(3):976-81

Marriage and life satisfactions with sexual dysfunction in patients with multiple sclerosis

Tuba Aydin¹, Mehmet Emin Onger², Murat Terzi³

¹Ondokuz Mayıs University, Department of Neuroscience, Health Sciences Institute, Samsun, Turkey

²Bournemouth University, Department of Psychology, Doctor of Philosophy, Faculty of Science and Technology, Bournemouth, United Kingdom

³Ondokuz Mayıs University, Department of Neurology, Medical Faculty, Ondokuz Mayıs University, Samsun, Turkey

Received 29 December 2020; Accepted 08 March 2021

Available online 09.05.2021 with doi: 10.5455/medscience.2020.12.262

Copyright@Author(s) - Available online at www.medicinescience.org

Content of this journal is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.



Abstract

In the literature, there is a positive correlation between sexual and marital satisfactions. When the current literature is examined, there is no study examining the marriage satisfaction in patients with Multiple Sclerosis (PwMS). This study was conducted with 100 married PwMS. The majority of participants (n=71) are females. Demographic Information Form, Marital Life Scale (MLS), Life Satisfaction Scale (LSS), and Arizona Sexual Experiences Scale (ASEX) were used to collect data. Compared to other demographic variables, the median score of the marital life scale differs according to the type of marriage with the spouse ($p = 0.008$). The difference arises from the fact that the median score of the group getting married by introducing friends is low compared to the ones who get married by means of meeting and agreement. Marital life scale score did not differ according to other demographic characteristics ($p > 0.05$). Life satisfaction scale scores did not differ according to demographic characteristics ($p > 0.05$). The mean score of the ASEX differed by gender ($p = 0.015$). The mean value was found to be 13.8 for women and 17 for men. The mean score of the Arizona Sexual Experiences Scale differs according to age ($p = 0.019$). The mean score in the 25-34 age range was 14.2, in the 35-44 age range 16.2, in the 45-54 age range 16.1 and in the 55-64 age range 22.3. There was a significant positive relationship between marital life scale and life satisfaction ($p < 0.001$). A significant negative correlation was found between marital satisfaction and sexual experiences ($p < 0.009$). A negative correlation was found between life satisfaction and sexual experiences scale ($p < 0.001$). Sexual dysfunction affects marriage and life satisfactions negatively in PwMS and they need to have new therapeutic approaches.

Keywords: Multiple Sclerosis; marriage satisfaction; life satisfaction; sexual dysfunction

Introduction

Multiple Sclerosis (MS) is a disease occurs axonal damage in Central Nervous System (CNS). Chronic inflammation and demyelization that derived from autoimmune are seen in MS [1]. The causes of MS are unknown, but environmental and genetic factors such as viral infection, deficiency of vitamin D and action of sex hormones play a role is accepted. MS affects young people, especially between 20 and 40 years of age, and women is known [2]. The patients with MS (PwMS) complain the comorbidities such as depression, anxiety disorder, low quality of life (QoL), and sexual dysfunction [3].

Sexual dysfunction is one of the most common complaints in PwMS. It is more seen than general population. Rate of incidence varies by gender. The rate is 50 to 90% in men and 40 to 80% in women [4]. Erectile dysfunction (ED), ejaculatory disorders, orgasmic dysfunction and decreased libido are sexual problems in men. In women, hypoactive sexual desire, decreased lubrication, orgasmic dysfunction and dyspareunia are seen. These sexual dysfunctions affect PwMS, negatively [5, 6].

Sexual dysfunction can cause problems in marriage life [7]. According to the literature, there is a positive correlation between sexual and marital satisfactions [8]. When the current literature is examined, marriage satisfaction in PwMS is not examined. In the study we aimed to investigate the relation among marriage, life satisfaction and sexual dysfunction in PwMS.

Material and Methods

This study was conducted between May-June 2019 in Ondokuz Mayıs University Faculty of Medicine and Department of Neurology with 100 married PwMS. To be included in the study,

*Corresponding Author: Mehmet Emin Onger, Ondokuz Mayıs University, Department of Neuroscience, Health Sciences Institute, Samsun, Turkey, mehmetemin.onger@gmail.com

individuals had to (a) have an established definitive diagnosis of MS, (b) be married, (c) volunteer participation in the study, (d) no mental and organic disabilities to answer questions. The procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (Ondokuz Mayıs University Clinical Research Ethics Committee (OMU KAEK 2019/315) on April 12, 2019 (B.30.2.ODM.0.20.08/334)) and with the Helsinki Declaration.

The majority of participants (n=71) are females. Most of the participants are in the 35-44 age range (n=41). Most of the participants are primary / secondary school graduates (n=51). Most of the participants are not working (n=64).

Instruments

Demographic Information Form, Marital Life Scale (MLS), Life Satisfaction Scale (LSS), and Arizona Sexual Experiences Scale (ASEX) were used to collect data.

Marital Life Scale (MLS)

MLS is developed by E. Tezer in 1996 to measure the general satisfaction level of the spouses from the marital relationship. It is a 5-point Likert-type scale with 10 questions. The lowest and highest scores that can be obtained from the scale are 10 and 50, respectively. A low or high score indicates the satisfaction level [9].

Life Satisfaction Scale (LSS)

LSS is developed in 1985 by Diener, Emmons, Larsen and Griffin. In 2016, Turkish version and validity and reliability studies are conducted by Dağlı and Baysal. Correlation coefficient is .92, internal consistency coefficient is .88 and test-retest reliability are .97 [10].

Arizona Sexual Experiences Scale (ASEX)

The Arizona Sexual Experiences Scale is a 6-point Likert-type 5-item scale that examines the basic elements of sexual functioning. In 2004, the adaptation study is conducted by Soykan and the correlation coefficient is found to be as .53, internal consistency coefficient is .89 - .90 and test-retest reliability is .88 [11].

Results

The median score of the marital life scale differs according to the type of marriage with the spouse ($p = 0.008$). The median score was 42 for those who met and agreed, 18 for those who were introduced to friends, 42 for those who had been blindly married, and 44 for those who elope. The difference arises from the fact that the median score of the group getting married by introducing friends is low compared to the ones who get married by means of meeting and agreement. Marital life scale score did not differ according to other demographic characteristics ($p > 0.05$) (Table 1).

Table 1. Comparison of marital life scale score according to demographic characteristics

	Mean/SD	Test statistics	P value
Gender			
Female	37.8 ± 10.7	t=-1.010	0.315
Male	40.2 ± 10.3		
Age			
25-34	35.3 ± 12	F=0.797	0.499
35-44	39.4 ± 9,4		
45-54	38.4 ± 11.5		
55-64	40.9 ± 10.3		
Age difference with spouse			
0-5	38.7 ± 10.6	t=-0.037	0.970
6-10	38.8 ± 10.6		
Working status			
I'm working	37.2 ± 11.5	t=-0.943	0.348
I'm not working	39.3 ± 10.1		
How did you marry your wife?			
Meet and agree	42 (16 - 50)b	$\chi^2=11.724$	0.008
Introducing friends	18 (15 - 38)a		
Arranged marriage	42 (13 - 56)b		
Escape	44 (26 - 48)		
Degree of intimacy with the spouse			
Close relative	48 (14 - 50)	$\chi^2=2.083$	0.353
Distant relative	45 (21 - 56)		
No kinship	41 (13 - 50)		

χ^2 :Kruskal Wallis test statistic, t: Independent samples t test statistic F: Variance Analysis test statistic a-b: There is no difference between groups with the same letter

Life satisfaction scale scores did not differ according to demographic characteristics ($p > 0.05$) (Table 2).

The mean score of the ASEX differed by gender ($p = 0.015$). The mean value was found to be 13.8 for women and 17 for men. The mean score of the ASEX differs according to age ($p = 0.019$). The mean score in the 25-34 age range was 14.2, in the 35-44 age range 16.2, in the 45-54 age range 16.1 and in the 55-64 age range 22.3. The difference arises from the fact that the average score of the 55-64 age group was higher than the other groups. The

mean score of ASEX did not differ according to other demographic characteristics ($p > 0.05$) (Table 3).

There was a significant positive relationship between marital life scale and life satisfaction ($p < 0.001$) (Table 4).

A significant negative correlation was found between marital satisfaction and sexual experiences ($p < 0.009$). A negative correlation was found between life satisfaction and sexual experiences scale ($p < 0.001$) (Table 5).

Table 2. Comparison of life satisfaction scale score according to demographic characteristics

	Mean/SD	Test statistics	P value
Gender			
Female	16.9 ± 5.6	t=-1.910	0.315
Male	19.1 ± 4.4		
Age			
25-34	17.5 ± 6	F=0.788	0.503
35-44	17.8 ± 4.8		
45-54	16.5 ± 5.7		
55-64	19.7 ± 5.4		
Age difference with spouse			
0-5	17.8 ± 5.4	t=0.549	0.584
6-10	17.1 ± 5.4		
Working status			
I'm working	18.5 ± 4.3	t=1.368	0.174
I'm not working	17 ± 5.9		
How did you marry your wife?			
Meet and agree	18.1 ± 4.5	F=0.785	0.505
Introducing friends	14.8 ± 6.1		
Arranged marriage	17.8 ± 5.7		
Escape	19 ± 7		
Degree of intimacy with the spouse			
Close relative	18.6 ± 7.3	F=0.191	0.827
Distant relative	18.1 ± 6.4		
No kinship	17.4 ± 5.2		

t: Independent samples t test statistic F: Analysis of variance test statistic

Table 3. The comparison of Arizona sexual experiences scale score according to demographic characteristics

	Mean/SD	Test statistics	P value
Gender			
Female	17 ± 6.4	t=2.475	0.015
Male	13.8 ± 4.1		
Age			
25-34	14.2 ± 5.7a	F=3.490	0.019
35-44	16.2 ± 4.9a		
45-54	16.1 ± 6.5a		
55-64	22.3 ± 6.8b		
Age difference with spouse			
0-5	15.3 ± 5.5	t=-1.710	0.091
6-10	17.5 ± 6.4		
Working status			
I'm working	14.7 ± 4.7	t=-1.802	0.075
I'm not working	16.9 ± 6.5		
How did you marry your wife?			
Meet and agree	15.6 ± 5.9	F=0.187	0.905
Introducing friends	15.7 ± 3.3		
Arranged marriage	15.9 ± 6.1		
Escape	17.6 ± 4.2		
Degree of intimacy with the spouse			
Close relative	17.3 ± 6.7	F=0.768	0.467
Distant relative	18.4 ± 9.3		
No kinship	15.8 ± 5.7		

t: Independent samples t test statistic F: Analysis of variance test statistic

Table 4. Examination of the relationship between life satisfaction and marital life scale

		Life satisfaction
Marital life scale	r	0.559
	p	<0.001

r: Spearman correlation coefficient

Table 5. Investigating the relationships according to marriage satisfaction and life satisfaction scales

		Marital life scale	Life satisfaction
Arizona Sexual Experiences Scale	r	-0.260	-0.324
	p	0.009	0.001

r: Spearman correlation coefficient

Discussion

The We examined the relationship among sexual dysfunction, marriage and life satisfaction in PwMS. We found that there is a significant negative relationship among sexual dysfunction, marriage and life satisfaction in PwMS. Also, there is a significant positive relationship between marital and life satisfactions.

The participants were married with the introduction of friends; they have lower marriage satisfaction than those who have met and agreed, arranged and fled. In the literature, there are limited studies on the relationship between marriage style and marriage satisfaction. There is a discrepancy in the results of these limited studies. Kublay and Oktan (2015) found that marriage satisfaction did not differ according to the type of marriage [12], while Haylı et

al. (2017) found that they differ according to the type of marriage [13].

Kumcağız and Güner (2017) found that there was a relationship between gender, age, marriage duration and income status and marriage satisfaction [14], while Zaheri et al. (2016) found that the effect of demographic variables on marriage satisfaction may vary according to culture and geographic features [15]. Our study supports the conclusion that there is no relationship between these variables and marriage satisfaction.

Life satisfaction of participants did not differ according to various demographic variables. Aşiret et al. (2014) found that life satisfaction varies according to gender and economic status [16]. Strober (2017) found that life satisfaction did not differ according to age, sex and education level [17]. Our study supports the conclusion that there is no significant relationship between age and life satisfaction in the literature.

Sexual dysfunction is one of the common symptoms of MS patients. According to the literature, the prevalence is 40-80% in females and 50-90% in males [18]. Çelik et al. (2013) investigated the distribution of sexual dysfunctions in MS patients by gender and found that women complained of sexual dysfunction more than males [19]. Our study supports this result.

Sexual dysfunction increases with age in general population [20, 21]. This situation is also valid in MS patients [22, 23]. The results of our study support this situation in both healthy individuals and MS patients.

There is a significant positive relationship between marital and life satisfactions [24, 25]. Schrag et al. (2003) in their study with young and old-onset PD, found that patients with low life satisfaction had lower marital satisfaction [26]. Elliot et al. (2011) found in their study with epilepsy patients that life satisfaction was low in marriages where social support was low [27]. In their study with dementia patients, Pote and Wright (2018) found higher levels of perceived intimacy and higher marital and life satisfaction in patients with lower levels of anxiety and preventive attachment [28]. The medium positive relationship we found in our study is consistent with the literature.

Conclusion

Sexual dysfunction is one of the factors affecting negatively the marital and life satisfactions of individuals. Haghi et al. (2017) found that women with sexual problems adversely affect marriage intimacy [29]. Öztürk and Arkar (2018) found that sexual dysfunction decreases marital adjustment in their marital adjustment study in couples with sexual dysfunction [30]. Flynn et al. (2016) found a positive relationship between sexual health and life satisfaction in their study with adults [31]. Sexual dysfunction in MS patients negatively affects life satisfaction [32, 33]. Zamani et al. (2017) found that sexual therapy decreased sexual problems in female MS patients and increased quality of life [34]. The result of our study supports this idea.

Conflict of interests

The authors declare that they have no competing financial interests.

Financial Disclosure

All authors declare no financial support.

Ethical approval

The procedures followed were in accordance with the ethical standards of the responsible committee on human experimentation (Ondokuz Mayıs University Clinical Research Ethics Committee (OMU KAEK 2019/315) on April 12, 2019 (B.30.2.ODM.0.20.08/334)) and with the Helsinki Declaration.

References

1. Kaminska J, Koper OM, Piechal K, et al. Multiple sclerosis - etiology and diagnostic potential. *Postepy Hig Med Dosw (Online)*. 2017;71:551-63.
2. Kubsik-Gidlewska AM, Klimkiewicz P, Klimkiewicz R, et al. M. Rehabilitation in multiple sclerosis. *Adv Clin Exp Med*. 2017;26:709-15.
3. Moss BP, Rensel MR, Hersh CM. Wellness and the Role of Comorbidities in Multiple Sclerosis. *Neurotherapeutics*. 2017;14(4):999-1017.
4. Pottgen J, Rose A, van de Vis W, et al. Sexual dysfunctions in MS in relation to neuropsychiatric aspects and its psychological treatment: A scoping review. *PLoS One*. 2018;13(2):e0193381.
5. Tome ALF, Miranda EP, de Bessa Junior J, et al. Lower urinary tract symptoms and sexual dysfunction in men with multiple sclerosis. *Clinics (Sao Paulo)*. 2019;74:e713.
6. Courtois F, Gerard M, Charvier K, et al. Assessment of sexual function in women with neurological disorders: A review. *Ann Phys Rehabil Med*. 2018;61:235-44.
7. Rust J, Golombok S, Collier J. Marital problems and sexual dysfunction: how are they related? *Br J Psychiatry*. 1988;152:629-31.
8. Cao H, Zhou N, Fine MA, et al. Sexual Satisfaction and Marital Satisfaction During the Early Years of Chinese Marriage: A Three-Wave, Cross-Lagged, Actor-Partner Interdependence Model. *J Sex Res*. 2019;56:391-407.
9. Tezer E. Marital Satisfaction: Marital Life Scale. *Turkish Psychological Counseling and Guidance Journal*. 2016;2.
10. Dağlı A, Baysal N. Adaptation of the satisfaction with life scale into Turkish: the study of validity and reliability. *Electronic Journal of Social Sciences*. 2016;15:1250-62.
11. Soykan A. The reliability and validity of Arizona sexual experiences scale in Turkish ESRD patients undergoing hemodialysis. *International Journal of Impotence Research*. 2004;16:531-4.
12. Kublay D, Oktan V. Evlilik uyumu: değer tercihleri ve öznel mutluluk açısından incelenmesi. *Türk Psikolojik Danışma ve Rehberlik Dergisi*. 2015;5:25-35.
13. Haylı RG, durmuş E, kış A. Evlilik doyumunun evlenme biçimi açısından incelenmesi: bir meta-analiz çalışması. *Electronic Turkish Studies*. 2017;12.
14. Kumcağız H, Güner Z. Analysis of various variables including social support and marital adjustment as predictors of job satisfaction for nurses Hemşirelerin iş doyumlarının yordayıcısı olarak sosyal destek, evlilik uyumu ve bazı değişkenler açısından incelenmesi. *Journal of Human Sciences*. 2017;14:225-49.
15. Zaheri F, Dolatian M, Shariati M, et al. Effective Factors in Marital Satisfaction in Perspective of Iranian Women and Men: A systematic review. *Electron Physician*. 2016;8:3369-77.
16. Aşiret GD, Özdemir L, Maraşlıoğlu N. Hopelessness, depression and life satisfaction among patients with multiple sclerosis. *Turkish journal of neurology*. 2014;20:2014.
17. Strober LB. Personality in multiple sclerosis (MS): impact on health, psychological well-being, coping, and overall quality of life. *Psychol Health Med*. 2017;22:152-61.
18. Domingo S, Kinzy T, Thompson N, et al. Factors Associated with Sexual Dysfunction in Individuals with Multiple Sclerosis: Implications for Assessment and Treatment. *Int J MS Care*. 2018;20:191-7.
19. Çelik M, Sanberk İ, Devenci F. Öğretmen adaylarının yaşam doyumlarının yordayıcısı olarak psikolojik dayanıklılık ve umutsuzluk. *Elementary Education Online*. 2017;16.
20. Lee DM, Nazroo J, O'Connor DB, et al. Sexual Health and Well-being Among Older Men and Women in England: Findings from the English Longitudinal Study of Ageing. *Arch Sex Behav*. 2016;45:133-44.
21. Hughes AK, Rostant OS, Pelon S. Sexual Problems Among Older Women by Age and Race. *J Womens Health (Larchmt)*. 2015;24:663-9.

22. Gava G, Visconti M, Salvi F, et al. Prevalence and Psychopathological Determinants of Sexual Dysfunction and Related Distress in Women With and Without Multiple Sclerosis. *J Sex Med.* 2019;16:833-42.
23. Odabaş FÖ, Gümüş H, Akkurt HE, et al. The assessment of sexual dysfunction in male patients with multiple sclerosis. *Archives of Neuropsychiatry.* 2018;55:349.
24. Kasapoğlu F, Yabanigül A. Marital satisfaction and life satisfaction: The mediating effect of spirituality. *Spiritual Psychology and Counseling.* 2018;3:177-95.
25. Gharibi M, Sanagouymoharer G, Yaghoubinia F. The Relationship Between Quality of Life With Marital Satisfaction in Nurses in Social Security Hospital in Zahedan. *Glob J Health Sci.* 2015;8:178-84.
26. Schrag A, Hovris A, Morley D, et al. Young-versus older-onset Parkinson's disease: impact of disease and psychosocial consequences. *Movement disorders: official journal of the Movement Disorder Society.* 2003;18:1250-6.
27. Elliott JO, Charyton C, Sprangers P, et al. The impact of marriage and social support on persons with active epilepsy. *Epilepsy Behav.* 2011;20:533-8.
28. Pote SC, Wright SL. Evaluating anticipatory grief as a moderator of life and marital satisfaction for spousal caregivers of individuals with dementia. *Educational Gerontology.* 2018;44:196-207.
29. Haghi F, Allahverdipour H, Nadrian H, et al. Sexual problems, marital intimacy and quality of sex life among married women: a study from an Islamic country. *Sexual and Relationship Therapy.* 2018;33:339-52.
30. Öztürk CŞ, Arkar H. Temperament and character dimensions, marital adjustment, and sexual satisfaction in couples with sexual dysfunction. *Klinik Psikiyatri Dergisi.* 2018;21.
31. Flynn KE, Lin L, Bruner DW, et al. Sexual Satisfaction and the Importance of Sexual Health to Quality of Life Throughout the Life Course of U.S. Adults. *J Sex Med.* 2016;13:1642-50.
32. Calabro RS, Russo M, Dattola V, et al. Sexual Function in Young Individuals With Multiple Sclerosis: Does Disability Matter? *J Neurosci Nurs.* 2018;50:161-6.
33. Tepavcevic DK, Kostic J, Basuroski ID, et al. The impact of sexual dysfunction on the quality of life measured by MSQoL-54 in patients with multiple sclerosis. *Mult Scler.* 2008;14:1131-6.
34. Zamani M, Tavoli A, Yazd Khasti B, et al. Sexual Therapy for Women with Multiple Sclerosis and Its Impact on Quality of Life. *Iran J Psychiatry.* 2017;12:58-65.