Original Article

THE EFFECT OF URINARY INCONTINENCE AND SEXUAL DYSFUNCTION ON THE QUALITY OF LIFE AMONG WOMEN WITH MULTIPLE SCLEROSIS

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ABSTRACT

Objectives: This study was conducted in order to determine the effect of urinary incontinence and sexual dysfunction on the quality of life among women with Multiple Sclerosis (MS).

Methodology: The descriptive study included 60 women with Multiple Sclerosis (MS). The data were collected through a questionnaire forms designed by the researchers, Arizona Sexual Experiences Scale and Short Items Form of Health-Related Quality of Life. Chi-square, t and ANOVA test were used.

Results: Almost half of the women had urinary incontinence problem and 63.0 % did not visit the doctor. It was determined that the urinary incontinence was higher in women, who were over 45 years old, married and had children, and diagnosed for 6 years and more ($p<0.05$). Twenty-eight point three percent (28.3%) of the MS women had sexual dysfunction.

Conclusions: It was determined that women with urinary incontinence had a lower quality of life and more sexual dysfunction.

KEY WORDS: Multiple sclerosis, women, urinary incontinence, sexual dysfunction, quality of life.

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INTRODUCTION

Multiple Sclerosis (MS) is a chronic disease triggered by complex relation of various genetic and environmental factors. It is thought to be originated by the cause of autoimmunity and is characterized by demyelinisation of central nervous system.[1] MS affects approximately 2.5 million people around the world.[2] MS occurs twice more frequently in women than men and the symptoms of MS usually start between the ages of 20-40. The most common symptoms of MS are parasthesia, ataxia, spasticity, paralysis, fatigue, pain, visual disorders, lack of coordination, bowel problems, bladder and sexual dysfunctions.[3]

Fifty percent to ninety percent (50-90%) of the individuals with MS have urinary problems – at least once-during their life.[4-6,7] Another problem is sexual dysfunction that included orgasmic problems, decreased vaginal lubrication, painful intercourse and decreased in vaginal sensation.[8,9] Sexual dysfunction and urinary incontinence are important problems that affect the quality of life of the people with MS.[7]

The women in Turkish society experience difficulty in expressing urinary incontinence and sexual dysfunction due to cultural factors. Therefore, collecting the data about urinary incontinence and sexual dysfunction will help plan the nursing care, to diagnose these problems earlier and to select the optimum medical treatment options.

This study was conducted in order to determine the effect of urinary incontinence and sexual dysfunction on the quality of life among women with MS.

METHODOLOGY

The data was collected with a questionnaire form specially designed by the researchers after a literature evaluation, using Arizona Sexual Experiences Scale (ASEX) and Short Items Form of Health-Related Quality of Life (SF-36)[10,11]

ASEX is self-assessment measurement, contains 5 questions and is available both for men and women. The measurement -excluding sexual functions, sexual tendencies and sexual relation with the spouse- includes questions such as sexual drive, psychological arousal, vaginal lubrication, and capacity to reach orgasm, satisfaction from orgasm. The total score is between 5 and 30 and each question has different points from 5 to 30. Lower scores indicate that sexual response is powerful, easy and satisfactory whereas higher scores indicate that sexual dysfunction exists.[10]

SF -36 (measurement of life quality) covers 36 questions that aim at 9 health topics i.e. physical functioning, social functioning, physical role functioning, emotional role functioning, bodily pain, mental health, vitality, and changes in health during the last one year and general perceptions. The scores are calculated between 0-100 for each scale. The lowest score indicates the worst health status.[11]

Study Sample: We performed the study at Neurology Outpatient Clinic of Gevher Nesibe Hospital, University of Erciyes in Kayseri, Turkey. There were 130 women with MS who were followed up at this center. Sixty women who were diagnosed as suffering from MS at least 6 months ago, accepted the interviews and did not have any verbal communication problems were included in the sample. We collected data in May-June 2007.

Ethical principles of the Declaration of Helsinki were followed. Before we distributed the forms to the women, we obtained formal permission from the Ethics Commission at Erciyes University (approval date: 08.05.2007, issue: 01/230). All women signed an informed consent form.

Data Analysis: We analyzed data with SPSS 11.0 for Windows (SPSS Inc, Chicago, IL) and chi-square tests, independent t tests and ANOVA were used.

RESULTS

Women's average age was 35.93±9.35 years, 36.7 % were in the 35-44 age groups, 75.0 % were married and 51.7 % had a primary school education. Of the participant 39.0 % was slightly overweight, 80.0 % had children, 81.3 % had given normal birth. The women had Relapsing Remittent type of MS (88.3%), 81.2 % did not have any other chronic diseases and 91.7 % did not have any other patients with MS among their family members. Sixty eight point three percent (68.3%) of women had urinating problems.

Forty five percent of the women had urinary incontinence. The women who had urinary incontinence had mixed type of incontinence 33.3%, had incontinence everyday 48.2%. About 44.4 % had incontinence as much as to wet under- wear and used pads daily due to the incontinence (55.6 %); however, 63.0 % did not go to hospital due to this problem. Urinary incontinence occurred more in women aged 45 years and above, were married, had children

Table-I: Distribution of women with incontinence according to state of sexual dysfunction (n=46)

	Sexual Dysfunction						Test	
	Have		Don't have		Total		X^2	p
	n	%	N	%	n	%		
Incontinence								
Have	10	41.7	14	58.3	24	100.0	4.44	<0.05
Don't have	3	13.6	19	86.4	22	100.0		

and were diagnosed as MS for 6 years and more (p<0.05).

In this study, it was found that 28.3% women had sexual dysfunction and 8.7% had incontinence during the sexual intercourse. The average score of the women with MS according to ASEX was 17.23±5.31 and the average scores for "orgasm" were the highest (3, 71±1, 25).

Women -whose ages were over 45, who had a lower educational status, had vaginal labor, had many children, were overweight, had menopause, had any other chronic disease and had urinary complaint- experienced more sexual dysfunction. The difference between sexual dysfunction and overweight problem was statistically significant (p< 0.05). It was determined that 41.7 % of the women with incontinence had sexual dysfunction (p<0.05) (Table-I).

When we analyzed average scores for the quality of life of the women, Global life quality average scores was 42, 95±15, 08. Furthermore, the average scores for physical role functioning, emotional role functioning and vitality were lower.

Table-II shows the average scores for quality of life of the women according to incontinence. It was observed that women with urinary incontinence had lower scores for the quality of life and the difference between physical functioning and emotional role functioning was significant (p< 0.05).

When we determined the average scores for quality of life of the patients according to sexual dysfunction; physical functioning, physical role functioning, emotional role functioning and general perception were lower among the patients who have sexual dysfunction (p>0.05) (Table-III).

DISCUSSION

Brain and spinal cord lesions caused by MS can produce bladder dysfunction. In many studies it is suggested that[4,6,12,13] 58-75% of the patients with MS had bladder control problems. Similarly, 68.3 % of the women that took part in this study had problems related to urinating. Urinary incontinence is an important symptom that affects the patients and their families psychologically, socially and economically. In this study, 45.0 % of the patient reported that they experienced urinary incontinence. As in other studies, urinary incontinence was seen more in women whose ages were over 45, were married women, in women with children and

Table–II: Average scores for the Quality of Life of the women with MS according to urinary incontinence

	Urinary Incontinence		Test	
Quality of Life Items	Have	Don't have	t	p
Physical Functioning	42.87±33.61	62.42±24.78	2.51	<0.05
Physical Role Functioning	16.66±25.00	32.82±40.70	1.80	>0.05
Emotional Role Functioning	27.13±22.69	42.39±33.60	2.09	<0.05
Social Functioning	56.62±26.93	68.36±25.35	1.73	>0.05
Mental Health	49.77±16.43	47.95±24.15	0.33	>0.05
Vitality	35.40±19.56	43.48±22.58	1.46	>0.05
Pain	45.21±27.35	56.86±35.86	1.38	>0.05
General perception	37.03±21.53	43.33±18.52	1.21	>0.05
Changes in health during the last one year	41.70±25.91	40.15±24.15	0.24	>0.05
Global	38.90 ±13.31	46.26±15.81	1.92	>0.05

Table-III: Average scores for the Quality of Life of the women with MS according to sexual dysfunction

	Sexual Dysfunction		*Test*	
Quality of Life Items	*Have*	*Don't have*	*t*	*p*
Physical Functioning	44.23±32.26	54.16± 29.01	1.01	>0.05
Physical Role Functioning	9.61±21.74	22.97±33.33	1.33	>0.05
Emotional Role Functioning	30.73±21.32	35.32±32.19	0.47	>0.05
Social Functioning	67.47±28.85	61.29±23.94	0.74	>0.05
Mental Health	53.23±15.17	43.27±22.34	1.47	>0.05
Vitality	40.38±20.96	34.72±20.08	0.85	>0.05
Pain	51.23±30.26	45.41±32.18	0.56	>0.05
General perception	33.46±19.83	38.63±20.73	0.77	>0.05
Changes in health during the last one year	44.23±27.29	37.87±22.63	0.80	>0.05
Global	41.82±11.85	39.70±14.92	0.45	>0.05

who had been diagnosed for more than 6 years in this study ($p<0.05$).[4,14-16]

MS patients rarely visit the doctors due to their urological complaints and these complaints are usually discovered during the normal medical examination.[17-20] It was observed that more than half of the women with incontinence complaint did not visit a doctor. The reasons might be that women consider incontinence as the result of the MS and care more other MS symptoms, thus ignore incontinence or they feel ashamed in the medical examination. In addition, the women in Turkish society might experience difficulty in expressing urinary incontinence due to cultural factors.

The sexual dysfunction in patients with MS is encountered as the result of neurological, psychological, physical and socio-cultural changes.[21] Studies have showed that 21.0– 80.4% of women had sexual dysfunction.[6,8,9,12,22-24] In our study, it was found that 28.3 % of the patients had sexual dysfunction. The studies showed that obese women complain of significant sexual impairment.[25-27] Our study has the similar result ($P<0.05$).

Some other studies[12,17,24,28] show that urinary incontinence in MS patients affect sexual function negatively. Our study showed that almost half of women with urinary incontinence experienced sexual dysfunction ($p<0.05$). The studies show that MS patients have a lower quality of life scores compared to general population.[12,29,30] Our study, it was found that women had a lower quality of life scores and the lowest average scores for the quality of life items such as physical role functioning, emotional role functioning and vitality. These results may illustrate those changes in MS cause incapability for the patients to perform their roles and to affect them emotionally.

Urinary incontinence and sexual dysfunction are important problem that affects the quality of life of MS patients.[12,17] Our study showed that urinary incontinence affected quality of life more than sexual dysfunction did. In this study, more than half of women with MS didn't visit a doctor although they had urinary incontinence complaint that affects the quality of life negatively is conspicuous. Women with incontinence had a lower quality of life and experienced more sexual dysfunction. The average scores for quality of life for physical functioning, physical role functioning, emotional role functioning and general perception were lower among the women who had sexual dysfunction. Under the lights of these findings, health professionals may be recommended to arrange educational programs related to the disease and to plan the patient care accordingly in order to diagnose the problems earlier and to increase the quality of life of the patient with MS.

Contribution by authors: Songul Goris was responsible for conception, design, analysis and interpretation of data and the final approval of the version to be published. Gonul Sungur, Sultan Tasci, Meral Mirza, Ozlem Ceyhan and Pinar Tekinsoy were responsible for drafting the article and revising it critically for important intellectual content.

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