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Research Article

**IMPACTS OF URINARY INCONTINENCE AND SEXUAL
DYSFUNCTIONALITY ON THE QoL OF FEMALES
SUFFERING FROM MULTIPLE SCLEROSIS**¹Dr Kainat Haq, ²Dr Wafa Zahid Soomro, ³Dr Muhammad Asif Shahzad¹Lahore General Hospital Lahore., ²Sheikh Zayed Hospital Rahim Yar Khan., ³Mayo Hospital Lahore.**Article Received:** September 2020 **Accepted:** October 2020 **Published:** November 2020**Abstract:**

Objectives: To determine the impacts of sexual dysfunctionality and urinary incontinence on QoL (Quality of Life) of the females suffering from MS (Multiple Sclerosis).

Methodology: There were 60 females with Multiple Sclerosis in this research work. The collection of the data was carried out with the utilization of a well-organized questionnaire, ASES (Arizona Sexual Experiences Scale) and SF-36 (Short Items Form of Health-Related QoL). We also used the ANOVA, Chi-square and t-test in this research work.

Results: Approximately 50% females were present with the issue of urinary incontinence and 63% females did not visit for medical help. The results determined that there was higher incidence of urinary incontinence in the females with higher than 45 years of age, married and had their children and diagnosed for six years or higher ($P < 0.050$). There was sexual dysfunction in 28.30% females with Multiple Sclerosis.

Conclusions: The findings of this research work concluded that there is low level of QoL and high incidence of sexual dysfunction in the females present with urinary incontinence.

Keywords: Multiple Sclerosis, Incidence, Urinary Incontinence, Urinary, Dysfunction, Symptoms.

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INTRODUCTION:

Multiple Sclerosis is a chronic complication which is outcome of complex relation between different environmental and genetic factors. It is considered to be started by the autoimmunity and it is characterized by the CNS (Central Nervous System) demyelination [1]. Multiple Sclerosis influences about 2.50 million persons in the whole world [2]. There is two times more frequent occurrence of Multiple Sclerosis in the females as compared to males and there is start of the symptoms most probably between 20 to 40 years of age. Most frequent symptoms of Multiple Sclerosis are pain, ataxia, paresthesia, visual complications, spasticity, bowel issues, sexual dysfunction and paralysis [3]. There is occurrence of urinary problems in 50% to 90% patients of Multiple Sclerosis minimum one time in their lives [4-6, 7]. The issue of sexual dysfunction comprised orgasmic anomalies, decreased lubrication through vagina, fully painful intercourse and reduced in-vaginal sensation [8, 9]. Urinary incontinence and sexual dysfunction are the vital issues that influences the QoL of the patients of Multiple Sclerosis [7].

The females of our society feel it much difficult to express issues about sexual dysfunction and urinary incontinence because of our prevailing culture. So, the collection of the information about the sexual dysfunction and urinary incontinence will support the plan for nursing care, to identify these issues in initial stage and to choose the optimal clinical options of treatment. This very research work was carried out to find out the impact of sexual dysfunction and urinary incontinence on the QoL of the females present with Multiple Sclerosis.

METHODOLOGY:

We collected the data with the help of questionnaire. We used the ASES (Arizona Sexual Experiences Scale) and SF-36 (Short Items Form of Health-Related QoL) [10, 11]. There were five questions in ASES. Measurement excluding the sexual functions, sexual relation and sexual tendencies with spouse, includes questions regarding like vaginal lubrication, sexual drive, ability to reach orgasm and psychological arousal. Total score is between five and thirty and each question has various points from 5 to 30. Low scores show that sexual response is easy, powerful and satisfactory while higher scores show that there is existence of sexual dysfunction [10]. SF -36 covers 36 questions that aim at nine health topics as i.e. social functioning, physical functioning, emotional role functioning, emotional role functioning, mental health, bodily pain, vitality, and alterations in health during last 1 year & general perceptions. We

calculated the scores from 0 to 100 for every scale. Low scores indicated the worst condition of health [11].

We conduct this research work in Lahore General Hospital. There were 130 females who were present with Multiple Sclerosis and they were following up in our institute. 60 females who were identified with Multiple Sclerosis suffering at least six months ago, give their willing to conduct interviews and all these females were present without any verbal communication issue, were included in this very research work. We collected the information from January 2020 to June 2020. We followed the ethical principles according to the Helsinki Declaration. We obtained the written consent from females after describing them the purpose of this research work. We used the SPSS V.21 for the statistical analysis of the collected information. We also utilized the Chi square tests, independent t-test and ANOVA in this research work.

RESULTS:

The average age of the females was 35.93 ± 9.35 years. 36.70% females were in the 35 to 44 years age groups, 75.0% females were married and 51.70% females were having primary school education. There were 39.0% females with slight overweight, 80% females were having children and 81.30% females had normal deliveries. 88.30% females had Multiple Sclerosis of Relapsing Remittent type, 81.20% females were present without any other chronic complication and 91.70% females were present with no patient of Multiple Sclerosis in their close relatives. 68.30% females were present with issues of urination. Urinary incontinence was present in 45.0% females. 33.30% females were present with mixed type incontinence, and 48.20% had everyday incontinence.

The occurrence of urinary incontinence was high among the females having more than 45 years of age, married and having children. All these females were diagnosed with having Multiple Sclerosis for six year or more duration ($P < 0.05$). This current research work found that 28.30% females were suffering from sexual dysfunction and 8.70% females were present with incontinence during intercourse. Mean scores of the females present with MS in accordance with Arizona Sexual Experiences Scale (ASEX) was 17.230 ± 5.310 and there were higher average scores for orgasm (3, 71.0 ± 1.0 , 25). We found a significant difference in the between the overweight issues and sexual dysfunction ($P < 0.05$). Findings showed that 41.70% females present with incontinence were having sexual dysfunction ($P < 0.050$) (Table-1).

Table-I: Distribution of Women with Incontinence According to State of Sexual Dysfunction

Incontinence	Sexual Dysfunction (n=46)						Test	
	Have		Don't have		Total		X ²	p
	n	%	n	%	n	%		
Have	10	41.7	14	58.3	24	100	4.44	<0.05
Don't have	3	13.6	19	86.4	22	100		

Table-2 shows mean scores for QoL of the females according to the issues of incontinence. We observed that females present with urinary incontinence had very low scores for QoL and there was a significant difference in the emotional role functioning and physical functioning ($P < 0.050$).

Table-II: Average Scores for The Quality of Life of The Women with MS According to Urinary Incontinence

Quality of Life Items	Urinary Incontinence		Test	
	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	1.8	>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

When we found the mean scores for QoL of the patients according to the sexual dysfunction, we found lower scores of physical functioning, emotional role functioning, physical role functioning as well as general perception among females present with sexual dysfunction ($P > 0.050$) (Table-3).

Table-III: Average Scores for The Quality of Life of The Women with MS According to Sexual Dysfunction

Quality of Life Items	Sexual Dysfunction		Test	
	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	0.8	>0.05
Global	41.82±11.85	39.70±14.92	0.45	>0.05

DISCUSSION:

Lesions of spinal cord and brain because of MS can produce the bladder dysfunction. Many research works have suggested that 58.0% to 75.0% patients of MS have issue of bladder control [12]. In the same manner, 68.30% females who took part in current research work were having issues regarding urination. Urinary incontinence is very important symptom that influences the patients as well as their families socially, economically and psychologically. In this current research work, 45% females stated that they were experiencing the urinary incontinence. As in other research works, urinary incontinence was present higher in the females with more than 45 years of age, married females and females with children [13]. There are rare visits of MS patients to the doctors because of their urological issues and these issues are normally discovered during normal clinical examination [14]. We observed that more than 50% females suffering from complaint of incontinence did not visit professionals. The reason may be the feeling of shame in medical examination. The females of our Pakistani society might face some difficulty during the expressing of their urinary incontinence because of cultural factors.

Sexual dysfunction among patients present with Multiple Sclerosis is faced as the outcome of physical, sociocultural and neurological and psychological changes [15]. Research work have displayed that 21% to 80.40% females had issue of sexual dysfunction. In this current research work, we found that 28.30% patients had issue of sexual dysfunction [16,17]. Research work stated that obese females had more complains of significant sexual impairment. This research work showed the similar results ($P < 0.050$). Some of the research works showed that issue of urinary incontinence in patients of Multiple Sclerosis negatively affect the sexual function. This research work showed that almost 50.0% of females with urinary incontinence faced the issue of sexual dysfunction ($P < 0.050$) [18,19].

Some research work has showed that patients of MS have a low score of QoL as compared to the normal general population. Sexual dysfunction and urinary incontinence are very important issues which affects the QoL of the patients of Multiple Sclerosis [20]. This research work showed that there is high influence of urinary incontinence on QoL of the patients as compared to the sexual dysfunction.

CONCLUSION:

The findings of this research work concluded that there should be recommendation of arrangement of

educational programs associated with this complication by health professionals. These findings also suggest to plan the care of patient accordingly in order to diagnose the issues earlier and to enhance the QoL of the patients of MS.

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