Effectiveness of Self- Management Instructional Program on Fatigue for Patient with Multiple Sclerosis

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Abstract

Multiple Sclerosis is an inflammatory-demyelinating disease of the central nervous system that may produce severe levels of disability in the long term.. Self-management is crucial to managing individuals with multiple sclerosis as advance their prognosis by learning about many aspects of the illness as well as closely monitoring their own health with their care providers evaluate the effect of an instruction program of patients with multiple sclerosis (MS)toward self-management fatigue patient.

 Key-wards: Self-management, Instructional Program , fatigue ,Multiple sclerosis

INTRODUCTION

The central nervous system is affected by the chronic demyelinating autoimmune disease known as multiple sclerosis (MS), which concentrates on the myelin sheaths surrounding nerves and causes inflammation, myelin loss, and axonal damage The highest priority in the medical and health services system is self-care. By providing just nursing care, nurses play a crucial role in developing patients' awareness of their disease and their self-care agency and skills. However, it is important to stress that patients themselves should accept responsibility for their own self-care as the primary agent and actor. Relapses or episodes of multiple sclerosis (M.S.) manifest as changes in neurological processes. Following the relapses, there is a period of partial or complete functional recovery and stability (remission) until the following episode. [1,12], According to 88% of patients with multiple sclerosis, fatigue is one of the most prevalent symptoms. It has a significant impact on many facets of life, such as changing everyday activities or psychosocial/mental function. Fatigue's pathogeneses and effects on self-management are still poorly understood [2,13].

MATERIALS AND METHODS

 A pre-experimental (one-group pretest–posttest) design was used to conduct this study at immunotherapy word in Bagdad teaching hospital for the period from .A non-probability (purposive) sampling was used to select (50) patients were recruited from the immunotherapy word in Bagdad teaching hospital

To measure the effectiveness of an instruction program on patients with multiple sclerosis, the researcher used form which included; Fatigue form which included (10) items

The instrument validity was determined through a (19) panel of expert Reliability of was determined through the use of test and retest

The analysis of data was performed through the application of description statistic (frequency ,percentage and cumulative percent ,arithmetic mean and standard deviations) and Inferential statistical to present the differences between the pre and post test

study findings showed that there are highly statistically significant differences between the scores of patients fatigue patient.in two levels of measurements (pre-test and post-test)

The instructional program is a positive effect on patients toward fatigue

RESILT

Table 1

Evaluation of Fatigue Severity among Patients with Multiple Sclerosis (N=50)

List	Fatigue severity	Scale	Pre-test			Post-test		
			f (%)	M	Eval	f (%)	M	Eval
1	My motivation is lower when I am fatigued	Never	1(2)	2.78	Severe	6(12)	2.06	Moderate
		Sometime	8(16)			35(70)		
		Always	41(82)			9(18)		
2	Exercise brings on my fatigue	Never	1(2)	2.66	Severe	15(30)	2.22	Moderate
		Sometime	15(30)			9(18)		
		Always	34(68)			26(52)		
3	I am easily fatigued.	Never	1(2)	2.44	Severe	20(40)	1.92	Moderate
		Sometime	26(52)			14(28)		
		Always	23(46)			16(32)		
4	Fatigue interferes with my physical functioning.	Never	1(2)	2.62	Severe	15(30)	2.06	Moderate
		Sometime	17(34)			17(34)		
		Always	32(64)			18(36)		
5	Fatigue causes frequent problems for me.	Never	2(4)	2.76	Severe	10(20)	2.18	Moderate
		Sometime	8(16)			21(42)		
		Always	40(80)			19(38)		
6	My fatigue prevents sustained physical functioning.	Never	9(18)	2.26	Moderate	0(0)	2.58	Severe
		Sometime	19(38)			21(42)		
		Always	22(44)			29(58)		
7	Fatigue interferes with carrying out certain duties and responsibilities.	Never	12(24)	2.14	Moderate	0(0)	2.48	Severe
		Sometime	19(38)			26(52)		
		Always	19(38)			24(48)		
8	Fatigue is among my most disabling symptoms.	Never	3(6)	2.76	Severe	0(0)	2.58	Severe
		Sometime	6(12)			21(42)		
		Always	41(82)			29(58)		
9	Fatigue interferes with my work, family, or social life.	Never	9(18)	2.40	Severe	2(4)	2.38	Severe
		Sometime	12(24)			27(54)		
		Alwa	29(58)			21(42)		

		ys							
1 0	When I do something, I can focus well	**Never**	2(4)				1(2)		
		Somet ime	10)	2.72	Sever e		24(48)	2.48	Sever e
		Alwa ys	38(76)				25(50)		

Fig4:Eval: Assessment, M: Mean, Mild= 1- 1.66, Moderate= 1.66 – 2.33, Severe= 2.34 - 3

The table 4-6 presents the items of fatigue severity; the finding indicates that patients during the pre-test show severe fatigue among most of items except items 6 and 7 that show fair. During the post-test the fatigue severity decreased to moderate among items 1, 2, 3, 4, and 5 while still severe in items 6, 7, 8, 9,

Table 1

Overall Evaluation of Fatigue Severity among Patients with Multiple Sclerosis

Fatigue	**Pre-test**				**Post-test**			
	f	**%**	**M**	**SD**	**f**	**%**	**M**	**SD**
Mild	1	2			0	0		
Moderate	6	12	25.54	3.032	31	62	22.94	1.834
Severe	43	86			19	38		
Total	50	100			50	100		

Fig5: Frequency, %: Percentage, M: Mean of total score, SD Standard deviation

Mild= 10 – 16.66, Moderate= 16.67 – 23.33, Severe= 23.34 - 30

This table presents the overall evaluation of fatigue among patients with multiple sclerosis; the findings reveals that 86% of patients associated with severe fatigue during pre-test (M±SD= 25.54 ± 3.032) while their fatigue decreased to moderate level as reported among 62% of them during post-test (M±SD= 22.94 ± 1.834).
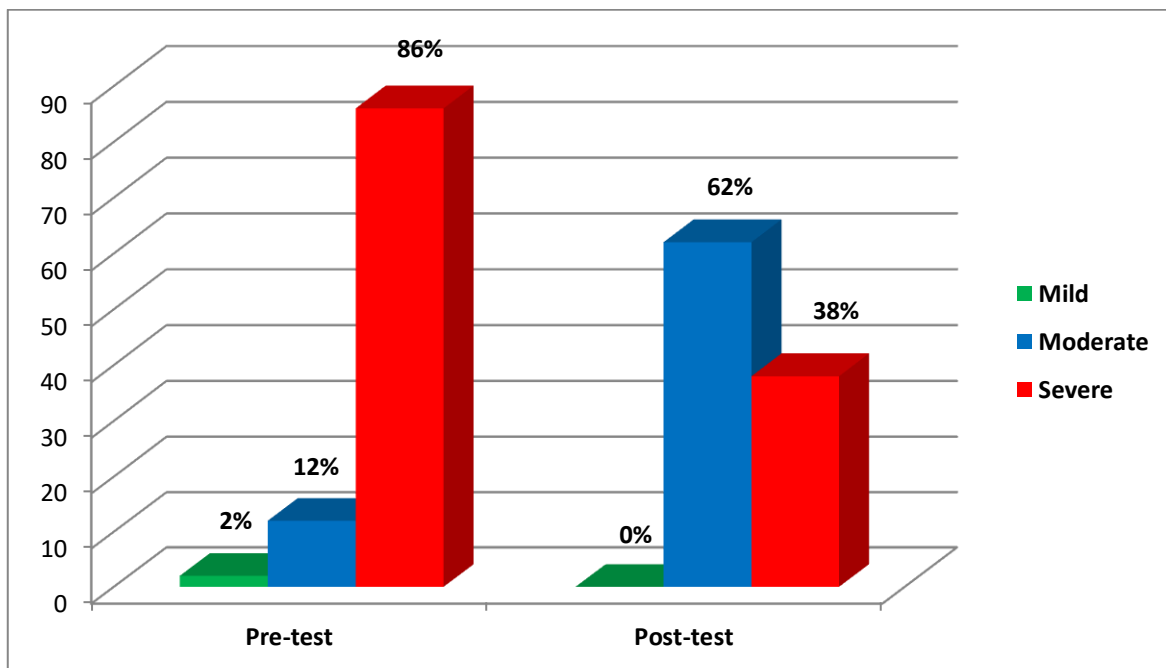

Fig (6): Evaluation of Fatigue Severity among Patients with Multiple Sclerosis (N=50)

This figure shows that patients are suffering from severe fatigue during pre-test (86%) while they suffering from moderate fatigue during post-test (62%)

DISCUSSION

Discussion of Patients with Multiple Sclerosis Toward Fatigue for The Study Sample at (Pre-Post-Tests).

Fatigue is the most prevalent and one of the most incapacitating symptoms among people with multiple sclerosis (MS). Due to its complexity and subjective character, weariness' is still little understood despite its great occurrence and severe impact. [515]

According to the results of this study, patients during the pre-test displayed severe weariness across the majority of items, but during the post-test, the severity of the fatigue fell to moderate across the majority of things. (table1)

According to [4,13], weariness is often cited as the most incapacitating symptom, surpassing pain and even physical impairment.

weariness has substantial socioeconomic repercussions as well, including lost work hours and, in some cases, lost employment.
According to [3,9], MS-related fatigue is linked to daily physical functioning, and there is a significant inverse relationship between the dimensions of physical fatigue and physical behavior (more fatigued people are less active, according to [6,10,13], who examined the role of poor sleep in fatigue in Multiple Sclerosis. Frontiers in Neurology) revealed that psychosocial fatigue had a smaller influence on a person's life than physical and cognitive exhaustion. Additionally, [7,8,] verified that MS patients exhibited the highest levels of exhaustion in the physical subcategory The results of this study may be indicated that an instructional programs have a positive effect on reducing fatigue According to [8,9,14] out of a total of 25 MS patients, 23 (92%) were female and 2 (8%) were male, making for a F:M ratio of 11.5:1. These patients were between the ages of 18 and 55. With a standard deviation of +9.45 years, the average age was 33.32 years.

According to [5,6,12] Multiple Sclerosis (MS) is the most common non-traumatic neurological disability in young adults and is a chronic, demyelinating illness of the central nervous system (CNS) that affects young people.

According to the researcher, multiple sclerosis primarily affects people under the age of 36 who are in economically active roles, and more men than women participated in multiple sclerosis studies.

In terms of education, 44% of patients were reported to have graduated with a bachelor's degree, which is the highest rate. table (4.1)

According to [15,10,11], 40.0% of the study group's patients and 33.3% of the control group's patients are self-employed.
More than half of MS patients were unemployed, according to studies by

CONCLOUSION

The results of this study may be indicated that an instructional programs have a positive effect on reducing fatigu

References :

1-Safian A, Davodvand Sh, Masoudi R, Sedehi M, Tahmasebian Sh, Jivad N. The Effect of Mobile-Based Self-Care Program on Balance of People with Multiple Sclerosis. Iran J Rehabil Res Nurs. 2020;7(1):33-43. DOI: 10.29252/ijrn.7.1.33.

2- Fadil, al-Hakam M.& Khalifah, Muhammad Fadil. 2018. Evaluation of diabetes self-management among patients in Baghdad city : a comparative study. Iraqi National Journal of Nursing Specialties، Vol. 31, no. 1, pp.91-99. https://search.emarefa.net/detail/BIM-839666

3-Khaliel1 A H, and . Abbas AAH : Chlamydia Pneumoniae: The Potential Cause of Multiple Sclerosis Iraqi JMS 2016; Vol. 14(2)

4-Aqeeli M J S and Hassan, H S: Evaluation of Hypothyroidism Patients' Compliance to Thyroxine Drug in Baghdad City. Teikyo Medical Journal ISSN: 03875547 Volume 45, Issue 02, April, 202243-Thamer AA, Mohammed NH, Ibrahim AM. The Role of Trace elements in Multiple Sclerosis. JFacMedBagdad [Internet]. 2014 Jul. 1 [cited 2023 Apr. 1];56(2):116-20. Available from: https://iqjmc.uobaghdad.edu.iq/index.php/19JFac MedBaghdad36/article/view/473

5-Aljawadi ZA, Almahdawi AM, Kashmoola MA, Abdul-Majeed BA. Forkhead box P3 gene expression and chromosomal analysis in a sample of Iraqi patients with multiple sclerosis. JFacMedBagdad [Internet]. 2017 Apr. 2 [cited 2023 Apr. 1];59(1):98-104. Available from: https://iqjmc.uobaghdad.edu.iq/index.php/19JFac MedBaghdad36/article/view/177

6-Mustafa Makki Muqdad and , Zaki Noah Hassan Paroxysmal symptoms among Iraqi patients with multiple sclerosis at Dr. Saad Al Witri-

neurosciences hospital Muthanna Medical Journal 2021, Volume 8, Issue 2, Pages 62-69

7-Thamer AA, Mohammed NH, Ibrahim AM. The Role of Trace elements in Multiple Sclerosis. JFacMedBagdad [Internet]. 2014 Jul. 1 [cited 2023 Apr. 1];56(2):116-20. Available from: https://iqjmc.uobaghdad.edu.iq/index.php/19JFac MedBaghdad36/article/view/473

8-Najee AF, Hassan HS: **Effectiveness of an Instructional Program on Knowledge ofType 2 Diabetic Patient Toward Ocular Self – Care at Diabetic and Endocrine Center in Al- Nasiriya City**. Indian Journal of Forensic Medicine & Toxicology, October-December 2019, Vol. 13, No. 4 p.p.935-939

9-Al-Baghdady A Q: Magnetic Resonance Venography Findings In A Group Of Patients With Multiple Sclerosis . Vol. 13 No. 1 (2017): AL-KINDY COLLEGE MEDICAL JOURNAL vol.13 no.1

10-Aljawadi ZA, Al-Derzi AR, Abdul-Majeed BA, Almahdawi AM. MicroRNAs (20a, 146a, 155, and 145) expressions in a sample of Iraqi patients with multiple sclerosis. JFacMedBagdad [Internet]. 2016 Jan. 3 [cited 2023 Apr. 1];58(4):371-7. Available from: https://iqjmc.uobaghdad.edu.iq/index.php/19JFac MedBaghdad36/article/view/288

12-Khadyer A Y and Hassan S H Effectiveness of an Instructional Program on Knowledge for Patients with Chronic Obstructive Pulmonary Disease Toward Self-Care Management at Al- Hussein Teaching Hospital in Al- Nasiriyah City: Indian Journal of Forensic Medicine & Toxicology, October-December 2019, Vol. 13, No. 4

13. Khaleel M, Hassan H. Effectiveness of an Instructional Program on Knowledge of Patients with Renal Failure Undergoing Hemodialysis Concerning Self-Care in Baghdad Teaching Hospital. Indian Journal of Forensic Medicine & Toxicology. 2019 Oct 1;13(4).

14. Al-Ganmi AH, Al-Fayyadh S, Abd Ali MB, Alotaibi AM, Gholizadeh L, Perry L. Medication adherence and predictive factors in patients with cardiovascular disease: A comparison study between Australia and Iraq. Collegian. 2019 Jun 1;26(3):355-65.

15-Gourgees S. Evaluation of Knowledge and Practices of Nurses in Orthopedic wards concerning femur Fractures. Iraqi National Journal of Nursing Specialties. 2005;2(18):24-31.