



# THE IMPACT OF PHYSICALTHERAPY ON FATIGUE OF PATIENTS WITH MULTIPLE SCLEROSIS



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# INTRODUCTION

sclerosis (MS) is Multiple chronic а demyelinating inflammatory autoimmune disease of the central nervous system that can result in various damages to the neuronal systems.

Physical therapy consisted of stretching of upper limbs, lower limbs and trunk, upper limb muscle strengthening (MMSS) and lower extremity limbs (MMII), exercises to work the balance and gait, lasting 45 minutes.



## **OBJECTIVE**

To assess the level of fatigue pre and post physiotherapy intervention in patients with multiple sclerosis undergoing a conventional physiotherapy program.

# METHODS

A retrospective clinical study was carried out, through the collection of data from medical records from the Modified Fatigue Impact Scale (MFIS) and Expanded Disability Status Scale (EDSS). The MFIS scale was applied by two trained professionals, in the pre and post physiotherapy intervention, during four months totaling 16 sessions, in which the patient underwent physiotherapy at least once a week. This study was carried out at the Brazilian Multiple Sclerosis Association (ABEM). Multiple sclerosis patients were recruited in the recurrent remission form, with a score of 1.0 to 6.5 of EDSS.

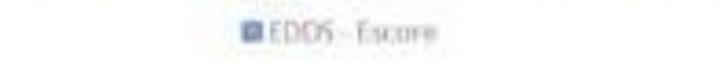
Eleven patients were selected, of which 8 were female and 3 were male. The age ranged from 22 to 61 years, with an average of 47.95 ( $\pm$  11.06) years. The clinical staging, evaluated through the EDSS scale ranged from 1.0 to 6.5 with a mean score of 3.81.There was a statistically significant improvement in the three domains of the scale (physical, cognitive and psychosocial) after the rehabilitation program.

Variable	n	MIN.	MAX.	MED.	SD	
MFIS PRE INTERVENTION - COGNITIVE DOMAIN	22	3,00	40,00	22,45	10,65	
MFIS PRE INTERVENTION - PHYSICAL DOMAIN	22	3,00	39,00	21,27	10,62	
MFIS PRE INTERVENTION - SOCIAL DOMAIN	22	0,00	8,00	4,68	2,01	
MFIS PRE INTERVENTION - TOTAL	22	7,00	84,00	47,73	21,80	
MFIS POST INTERVENTION COGNITIVE DOMAIN	22	2,00	34,00	14,00	9,22	
MFIS POST INTERVENTION PHYSICAL DOMAIN	22	1,00	31,00	12,59	8,86	
MFIS POST INTERVENTION SOCIAL DOMAIN	22	0,00	6,00	2,36	1,87	
MFIS POST INTERVENTION - TOTAL	22	3,00	71,00	28,95	19,51	



# CONCLUSION

We observed a significant improvement in the fatigue of all patients after the rehabilitation program. We suggest that new studies with this theme and with a larger group of



individuals be done to verify possible statistically more relevant changes.

#### REFERÊNCIAS

MOTL, R.W. Benefits, safety and prescription of exercise in person with multiple sclerosis. Expert Rev. 2014; 14(12), 1429-36.

FLORES-ALVARADO, L.J., GABRIEL-ORTIZ, G., PACHECO-MOIS, F.P., BITZER-QUINTER, K. Pathogenic mechanisms of neuronal damage in multiple sclerosis. Invest. Clin. 2015 Jun;56(2):201-14.

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