The burden of Multiple Sclerosis and patients' cooping strategies

L. Lorefice[1], G. Fenu[1], J. Frau[1], G. Coghe[1], M.G. Marrosu[1], E. Cocco[1]

[1] Multiple Sclerosis Centre, University of Cagliari, Italy

Background. Multiple Sclerosis (MS) is a chronic disease that afflicts mainly young people, affecting different aspects of life. MS patients experience several emotional responses to changed perception of themselves, managing the situation in a variety of ways focused to control the overall burden of the disease.[1]

Aim. The present study aimed to evaluate the differences between MS patients and healthy controls (HCs) in coping styles, exploring which of the MS clinical features influence the adaptive responses.

Methods. MS patients, according to the McDonald 2010 criteria,[2] and HCs, were recruited. Coping strategies were assessed using the Italian version of the questionnaire "Coping Orientation to the Problems Experienced" (COPE-NVI).[3] The intergroup comparison was obtained by using Mann-Whitney U-test.

Results.

Table. 1 Demographic features of all subjects and clinical data of MS patients with COPE-NVI scores

	SM Group	HCs Group
	Total 135	Total 94
Age (mean ± sd)	37,9 (ds 8,2)	41 (ds 10,5)
Education level (mean ± sd)	12,1 (ds 3,4)	12,2 (ds 3,5)
Disease Duration (mean ± sd)	8,3 (ds 4,8)	
Age at Onset (mean ± sd)	29,6 (ds 8,1)	
Relapsing Remitting Course	119/135	
EDSS (mean ± sd)	2,6 (ds 1,2)	

Cooping Strategies: scores of each of five dimensions			
	Score	Score	P value
	MS Group	HCs Group	
Social support	26,7 (ds 6,7)	29,9 (ds 6,5)	0,003*
Avoidance strategies	25,6 (ds 5,2)	24,0 (ds 4,4)	0,05
Positive attitude	32,3 (ds 4,9)	33,1 (ds 4,5)	ns
Problem solving	29,4 (ds 6,0)	33,0 (ds 3,8)	0,0001*
Turning to religion	19,9 (ds 4,6)	20,2 (ds 3,9)	ns

*p<.05, MS *vs.* HCs group

Table 2. Multivariate Analysis with variables influencing the cooping strategies in MS group.

Social support	Avoidance strategies	Positive attitude	Problem solving	Turning to religion
Age	*Age*	*Age*	*Age*	*Age*
p 0.03 *	p 0.57	p 0.76	p 0.93	p 0.001*
95% C.I. -0.2;-0.01)	(95% C.I.-0.07;0.1)	(95% C.I.-0.08;0.1)	(95% C.I.-0.1;0.1)	(95% C.I.0.08;0.2)
Female (sex)	*Female (sex)*	*Female (sex)*	*Female (sex)*	*Female (sex)*
p 0.02*	p 0.08	p 0.65	p 0.61	p 0.01*
95% C.I. 0.0-0.2)	(95% C.I.-0.2;4.1)	(95% C.I.-2.8;1.7)	(95% C.I.-2.0;3.4)	(95% C.I.1.2;5.2)
RR Course	*RR Course*	*RR Course*	*RR Course*	*RR Course*
p 0.71	p 0.17	p 0.20	p 0.55	p 0.37
(95% C.I. -4.7;6.9)	(95% C.I.-1.4;7.4)	(95% C.I.-1.6;7.5)	(95% C.I.-3.8;7.1)	(95% C.I.-2.1;5.8)
Age at onset	*Age at onset*	*Age at onset*	*Age at onset*	*Age at onset*
p 0.21	p 0.80	p 0.96	p 0.71	p 0.001*
95% C.I. -0.2;-0.5)	(95% C.I. -0.1;0.09)	(95% C.I.-0.1;0.1)	(95% C.I.-0.6;0.1)	(95% C.I.0.07;0.2)
Disease Duration	*Disease Duration*	*Disease Duration*	*Disease Duration*	*Disease Duration*
p 0.002*	p 0.75	p 0.20	p 0.58	p 0.02
95% C.I. -0.6;-0.1)	(95% C.I.-0.2;0.1)	(95% C.I.-0.6;0.3)	(95% C.I.-0.1;0.2)	(95% C.I.0.1;0.3)
EDSS	*EDSS*	*EDSS*	*EDSS*	*EDSS*
p 0.55	p 0.01*	p 0.19	p 0.52	p 0.95
95% C.I. -0.8; 1.6)	(95% C.I. 0.01;0.08)	(95% C.I.-0.3;1.6)	(95% C.I.-0.8;1.5)	(95% C.I.-0.8;0.8)
Depression	*Depression*	*Depression*	*Depression*	*Depression*
p 0.69	p 0.001*	p 0.55	p 0.98	p 0.73
(95% C.I. -2.5;4.0)	(95% C.I.2.2;7.2)	(95% C.I.-3.3;1.8)	(95% C.I.-3.0;3.1)	(95% C.I.-1.8;2.6)

*p<.05, MS *vs.* HCs group;

Conclusions. The results of this study highlight the negative impact of MS on social relationships. Therefore a psychosocial intervention is needed to increase the adaptive way by MS patients cope with their disease and to provide patients with the best care and quality of life.

References: 1. Reade JW, et Al. J Neurosci Nurs. 2012 Feb;44(1):54-63.
2. Polman CH, et Al. Ann Neurol.;69:292-302.
3. Claudio Sica. Psicoterapia Cognitiva e Comportamentale - Vol. 14 - n. 1 • 2008 (pp. 27-53).
Disclosure: No conflict of interest exists regarding the present study