# Evaluation of relationship self esteem with perceived social support in patients with Multiple Sclerosis

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#### **Abstract**

**Background:** Multiple Sclerosis is the chronic and progressive diseases of central neurons in adolescent that almost is accidently and had psychological effects on individuals that this subject can occurrence after change of patients trusts toward self and perceived social support. Therefore, this study was to examine the relation between self esteem with perceived social support in multiple sclerosis patients.

**Methods:** This research Study was descriptive Correlations and in this study, 395 patients of the MS Society in Tehran were selected by continuous sampling. Data gathering tool were questionnaire of Rosenberg self esteem and questionnaire of Northouse social support. For data analysis, SPSS/16 was used.

**Results:** Results showed that the average and standard deviation of self-esteem of patients was respectively  $17/5 \pm 53/20$ . Most patients had moderate self-esteem, and only a small percentage of them (2/16%) had high self-esteem. A significant percentage of patients' perceived social support (39/5%) was at moderate levels. The results of the spearman correlation showed that there were a linear direct significant association between self esteem and perceived social support  $(p<0/001, r_s=0.302)$ .

**Conclusions:** The results of this study showed that self esteem with perceived social support had significant linear relationship. The nurses with findings can by development and fortification of social network, support sense of values in patients and by this way help to patients for decision and control on diseases and treatment.

Keywords: multiple sclerosis, self esteem, social support

#### Introduction

Multiple sclerosis (MS) is a progressive, prevalent and chronic disease of demyelization of central nervous system in young adults.<sup>1</sup> this disease is the second common cause of neural disability in low and mid adulthood after trauma. MS threatens individuals' independency and ability to attend efficiently in the family and the society,<sup>2</sup> and influences all dimensions of daily life so that the patients are driven to the feeling of incapability and lack of assurance.<sup>1, 3</sup> Since the onset of the disease is often at early part of life,<sup>4</sup> and is almost unpredictable, it leaves strong psychological effects on the individuals after changes occur in patients' self beliefs and attitude and their concept from their social support.<sup>5</sup> Progression of MS negatively affects individual's personal life, self confidence and especially self esteem<sup>6</sup> through making psychological changes.<sup>7</sup> Self esteem is one of the most important factors affecting mental health, and plays a major role in its promotion among individuals.<sup>7,8</sup> In the other words, our life satisfaction is absolutely associated with our feelings about our self worth.<sup>9</sup> Self esteem has been known as a tension balancing element; therefore, those who have higher self esteem, have a higher feeling of self worth in stressful situations, which protects them against tension negative effects.<sup>10</sup> These individuals rely on their abilities and can benefit from and make best of supportive resources in case of miserable events.<sup>11</sup>

These individuals understand social support more and have more motivation for life. Therefore, self esteem is effective on patient's motivation to go on with life. 12

Chronic diseases patients may feel they do not deserve specific care or other's attention as a result of a defect in their self esteem and consequently, do self care insufficiently, withdraw from social occasions and lose their ability of decision making.<sup>13</sup>

The strong association between perceived social support and self esteem highlights social support as a major relieving element of the disease since the structure of the family unit, relationship with friends and society members deeply affect the type and severity of the problems the patients face. <sup>14</sup> Social support influences healthy behavior, disease outcome and treatments through changing individual interpretations of life stressful events like MS and reduction of the negative psychological responses to these stressful factors. <sup>15, 16, 17</sup> Ms Patients usually receive low social support, which may predispose them to psychological problems such as depression and anxiety. <sup>18</sup> Burton et al believe that satisfaction with social support is accompanied with a reduction in depression and anxiety and going over hypochondrias and leads to increase self esteem and social communications development. <sup>19</sup> Since the effect of chronic diseases, their treatment and complications on psychological dimensions such as self esteem and social support conception is notable, <sup>20</sup> the present study aimed to investigate the association between self esteem and concept of social support in patients with multiple sclerosis referring to Tehran MS association.

#### Methods

This is a cross-sectional descriptive correlation study. The sample size was estimated to be 395 subjects with confidence level of 95%, test power of 80% and r=0.2. The subjects were gradually selected and entered the study.

Inclusion criteria were having a medical profile in MS association, the disease diagnosed by the physician in the association, not being involved in any other physical and mental diseases, at least six months after disease diagnosis, being able to verbally respond to the questions of the questionnaire and not being in progressive phase of the disease. The data collection tool included two questionnaires of Rosenberg selfesteem and Northouse social support. Rosenberg Self – esteem Questionnaire included 10 general phrases. The answers are in a four point Likert scale with scoring range of 0-3 including absolutely disagree (0), disagree (1), agree (2) and absolutely agree (3) with total score of 30. The scores>25 show high self esteem, scores 15-25 moderate self esteem and scores <15 show low self esteem.<sup>21</sup> Northouse Social Support Questionnaire includes 40 questions in 5 sections (spouse, family members, friends, physician and nurse). Each section has 8 items, which measures the level of patients' perceived social support from their spouse, family members, friends, the physician and the nurse. The items are in five point Likert scale whose scores range 1-5: absolutely disagree (1), disagree (2), no idea (3), agree (4) and absolutely agree (5). Score of perceived social support from each supportive resource are separately calculated and the total score of perceived social support is calculated by adding up the obtained scores of all resources. Total perceived social support score ranges 40-200 scores, and the obtained score for each resource ranges 8-40 scores. Overall score of perceive social support in each resource is classified in three levels of low (8-18), moderate (19-29) and high (30-40).<sup>22</sup> The aforementioned tools, together with demographic characteristics, were distributed among 10 faculty members of nursing and midwifery school of Tehran University of Medical Sciences to confirm their content validity.

After taking their indications into consideration, the tools were given back to them for their final revision. The validity was measured by content validity in the present study. It was so that firstly, the primary tool was designed based on referral to scientific resources and corresponding with foreign authors of published articles as well as consultation with supervisors, counselor and statisticians. Then, the survey tool was given to 10 academic members in nursing and midwifery school of Tehran University of Medical Sciences. After making modifications based on their indications, it was returned to the research supervisors and counselor for their final approval. Reliability of the above questionnaire was measured by Cronbach's alpha so that the researcher initially distributed the questionnaires among 30 MS patients. Then after collection of the questionnaires, Cronbach's alpha and social support tools were reported 0.91 and 0.90 for self esteem and social support tools respectively. The aforementioned MS patients were left out of the final samples and their data were not analyzed.

After finalizing the qualified subjects of the study, the researcher introduced herself to them and explained about the goal of the study and after obtaining their written consents and assuring them of the confidentiality of their personal information; the questionnaires were distributed to them. Sampling went on up to completion of the expected subjects' number and lasted for three months.

Then, the tables were made and the data were analyzed by descriptive statistical tests as well as spearman correlation coefficient and chi- square tests through SPSS/16.

## Results

In the present study, there were 278 female and 117 male subjects. Their demographic characteristics have been thoroughly presented in table 1.

Table1: Frequency distribution of subjects' demographic characteristics

(16.2) 64		

The obtained results showed that mean and SD of patients' self esteem was 20.53±5.17, and 48 subjects had low self esteem (12.2%), 283 had moderate (71.6%) and 64 subjects (16.2%) had high self esteem.

Frequency distribution of subjects self esteem has been presented in table 2.

Chi- square test showed a significant association between self esteem and age (p=0.032,  $X^2$ =6.867), marital status (p=0.023,  $X^2$ =11.373), education level (P<0.001,  $X^2$ =20.051), occupation status (p=0.004,  $X^2$ =22.743) and length of disease diagnosis (p=0.007,  $X^2$ =21.193), but there was no significant association between self esteem and sex, monthly income, history of disease in family members and history of hospitalization.

Table 2: Frequency distribution of subjects' self esteem

Self esteem	(%) Frequency			
Low	(12.2) 48			
Moderate	(71.6) 283			
High	(16.2) 64			
Total	(100) 395			
Range	4-30			
Range	4-30			

A notable percentage of patients' perceived social support was at moderate level. Most of the subjects showed social support from the side of their spouses or family at high level and from their friends, nurses and physicians at moderate level. Tables 3 and 4 represent frequency distribution of perceived social support and perceived social support from subjects' supportive recourses respectively.

Chi – square test showed a significant association between perceived social support and age (p=0.003,  $X^2$ =6.180), level of education (p=0.29,  $X^2$ =7.091), occupation status (p=0.031,  $X^2$ =4.628) and monthly income (p=0.001,  $X^2$  =10.353), but there was no significant association between perceived social support and gender, marital status, history of disease in family members, length of disease diagnosis and history of hospitalization.

Table 3: Frequency distribution of subjects' perceived social support

Perceived	Frequency	%	
social support			
Low	1	0.3	
Moderate	156	39.5	
High	36	9.1	
total	193	48.9	

**Table 4:** Frequency distribution of perceived social support from subjects' supportive resources

Evaluation Support	spouse		Family members		friends		nurses		physicians	
resources	F	%	F	%	F	%	F	%	F	%
Low	42	10.6	44	11.1	32	8.1	60	15.2	36	9.1
Moderate	45	11.4	162	41	209	52.9	290	73.4	232	58.7
High	106	26.8	186	47.8	154	39	45	11.4	127	32.2
total	395	100	395	100	395	100	395	100	395	100

Spearman correlation coefficient showed a linear direct signification association between self esteem and perceived social support (P<0.001,  $r_s$ =0.302). It also showed a linear direct significant association between self esteem and perceived social support from the side of family (p<0.001,  $r_s$ =0.216), and self esteem and perceived social support from friends (p=0.001,  $r_s$ =0.163).

Table 5: Association between self esteem and subjects' perceived social support

Self esteem	Perceived social support			
Spearman correlation	Spearman correlation			
-	$r_s = 0.302$			
	P<0.001			
$r_s = 0.302$	-			
P<0.001				
	Spearman correlation - r <sub>s</sub> =0.302			

Table 6: Association between self esteem and subjects' perceived social support

Perceive social support	From family members	From friends	From physicians	From nurses	From spouses
	Spearman correlation				
Self esteem	$r_s = 0.216$	$r_s = 0.163$	$r_s = 0.088$	$r_s = 0.024$	$r_s = 0.119$
	P<0.001	P=0.001	P=0.081	P=0.634	P=0.099

## Discussion

Spearman correlation coefficient showed a linear direct significant association between self esteem and perceived social support (p<0.001,  $r_s$ =0.302). Self esteem plays a key role in absorption of social support.<sup>23</sup> Chronic diseases can influence self esteem, which gradually leads to social isolation and reduction of social support perception.<sup>24</sup> Cordero also confirms this issue. The results obtained by Silverio et al concord with those of the present study.<sup>26</sup> Spearman correlation coefficient showed a linear direct significant association between self esteem and perceived social support from family (p<0.001,  $r_s$ =0.216) and self esteem and perceived social support from friends (p<0.001,  $r_s$ =0.163).

In this regard, Nalavany and Carawan) also confirm these findings.<sup>27</sup> Social support and its perception are counted to play a major role in management of psychological problems. Reduction of social support predisposes the individuals to problems such as depression, anxiety and diminished self esteem. Since the family and friends are the closest supportive resources, individuals' perception and receiving support from these resources affect their personal and public life. Presence of friends and family members in individuals'

social network provides them with supportive resources in forms of emotional, instrumental and informational support through the feeling of belonging.<sup>28</sup> The experts believe that self esteem, at the first place, is the product of being loved and receiving positive feedback from others. In other words, the cause of ego and self worth should be found in individuals' relationship with their societies.<sup>9</sup> Disability, as a result of the disease, affects individuals' social communications and their occupational roles, and can result in the feeling of loneliness, which consequently leads to being subject of a reduction in self esteem.<sup>12</sup> Patients' friends and surrounding family members may be reluctant to communicate with them due to existence of their unfavorable signs, discomfort and pain. All these factors make the patients feel alone when they are diseased and think there is no body to express their discomfort and real feeling with.<sup>29</sup>

#### **Conclusions**

The results showed that self esteem has a positive significant association with the perceived social support in MS patients. Nurses can improve the feeling of being worthy among these patients through development and reinforcement of their social network so as to help them to control their decision making, disease and treatment.

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# References

- 1- Brito Ferreira M. (2010). Cognitive deficits in multiple sclerosis, Arq Neuropsiquiatr, 68(4): 632-641.
- 2- Deborah B, Spiro MS. (2011). Early onset multiple sclerosis: A review for nurse Practitioners, *Journal of Pediatric Health Care*, 2(1): 1-10.
- 3- Birnbaum G. (2009). The patterns and pathophysiology of MS. InG. Birnbaum (Ed.), Multiple sclerosis: Clinicians guide to diagnosis and treatment, New York, *NY:OxfordUniversity Press*, 7(3): 15-18.
- 4- Williams RM. (2004). Social support among veterans with multiple sclerosis, *Rehabil Psychol*, 49(2): 106–13.
- 5- Korwin P K, Samochowiec J. (2010). Self perception among patients with multiple sclerosis, *Archives of Psychiatry and Psychotherapy*, 7(1):63-68.
- 6- Walsh A, Walsh P, Love. (2009). Self esteem and multiple sclerosis. Soc Sci med, 29(6):793-799.
- 7- Jose Sa M. (2008). Psychological aspects of multiple sclerosis, *Clinical Neurology and Neurosurgery*, 110(14); 868-877.
- 8- Sit CH, Lau CH, Vertinsky P. (2009). Physical activity and self-perceptions among Hong Kong Chinese with an acquired physical disability, *Arq Neuropsiquiatr*, 26(4): 321-335.
- 9- Manning M A, Bear G G, Minke K M. (2006). Self concept and self esteem Washington: *National association of school psychologists*, 5(1): 341-356.

10- Bringle G R, Bagby G. (2008). Self esteem and perceived quality of romantic and family relationships in young, *Journal of Gerontology*, 8(2):340-356.

- 11- Coskun A, Anger. (2009). self-esteem and perceived social support in adolescence, *Journal Behave Health*, 37(4): 555-564.
- 12- Siqueira N, Guerreiro M, Souza E. (2010). Self-esteem, social support perception and seizure controllability perception in adolescents with epilepsy, *Arg Neuropsiquiatr*, 69(5): 770-774.
- 13- Kuehner CH, Buerger CH. (2005). Determinants of subjective quality of life in depressed patients: The role of self-esteem, response styles, and social support. *Journal of Affective Disorders*, 86(5): 205-213.
- 14- Russell D, Taylor J. (2009). Living Alone and Depressive Symptoms: The Influence of Gender, Physical Disability, And Social Support Among Hispanic and Non- Hispanic Older Adults, *Journal of Gerontology: Social Sciences*, 9(4): 1-10.
- 15-Al-Zarka J. (2012). Occupational stress, social support, and quality of life among Jordanian mental health nurses, *Journal of Health and Social Behavior*, 33(1): 15-23.
- 16- Yang Y. (2006). How Does Functional Disability Affect Depressive Symptoms in Late Life? The Role of Perceived Social Support and Psychological Resources, *Journal of Health and Social Behavior*, 47(6): 355-372.
- 17- Poder K. (2009). Social anxiety in a multiple sclerosis clinic population, *Journal homepage*, 15(3): 393-398.
- 18- Turpin KV, Carroll LJ, Cassidy JD, Hader WJ. (2007). Deterioration in the health-related quality of life of persons with sclerosis: the possible warning signs, *Mult Scler*, 13(8): 1038-1045.
- 19- Van Leeuwen MC. (2010). Social support and Life satisfaction in spinal cord injury during and up to one year after inpatient rehabilitation, *Journal of psychology*, 3(4): 265-271.
- 20- Irvine H, Davidson K, Hoy K, Lowe-Strong A. (2009). Psychosocial adjustment to multiple sclerosis: exploration of identity redefinition. *Disability and Rehabilitation*, 12(6): 1-8.
- 21- Rajabi Gh, Bohlol N. (2006). Self-Esteem Scale reliability and validity assessment in first year students martyr Chamran University. Educational and Psychological Research. *School of Educational Sciences and Psychology Department*. 3(2): 33-48.
- 22- Haidari S. Salahshourian A. Rafii F. Hosaini F. (2006). Relationship between social support and quality of life in cancer patient affiliated to Iran and Tehran University. MSc. Dissertation. Tehran: *Iran University. College of Nursing and Midwifery*.
- 23- Lin YR, Shiah IS, Chang YC, Lai TJ, Wang KY, Chou KR. (2010). Evaluation of an assertiveness training program on nursing and medical students assertiveness, self-esteem and interpersonal communication satisfaction, *Nurse Educ Today*, 24(10):656-65.
- 24- Janowski K, Steuden S, Pietrzak A, Krasowska D, Kaczmarek L, Gradus I. et al. (2012). Social support and adaptation to the disease in men and women with psoriasis, *Arch dermatol res*, 15(2): 1-12.
- 25- Cordero E. (2011). Self-esteem, social support, collectivism, and the thin-ideal in Latina Undergraduates, *Journal homepage*, 8(1): 82-85.

26- Silverio C, Dantas R, Carvalho A. (2009). Gender-specific evaluation of coronary disease patients' self-esteem and social support, *Psychology & Health*, 43(2): 405-411.

- 27- Nalavany BA, Carawan LW. (2012). Perceived family support and self-esteem: the meditational role of emotional experience in adults with dyslexia, *Journal of Family Psychology*, 18(1): 58-74.
- 28-Taylor CT, Bomyea J, Amir N. (2010). Attentional bias away from positive social information mediates. The link between social anxiety and anxiety vulnerability to a social stressor, *Journal of Anxiety Disorders*, 24 (4): 403-408.

29-Winefield H. (2006). Support and emotional work in an internet support group for cancer patients, *Patients education and counseling*, 12(4): 193-197.