

Comparison of Obsessive Compulsive Symptoms in Patients with MS and Non-affected Individuals

Fahimeh Nazarzadeh* and Ali Adinehvand

Department of Psychology, Ahvaz Beranch Islamic Azad University, Ahvaz, Iran

Corresponding author: Fahimeh Nazarzadeh

ABSTRACT: This study ways to deal with stress and optimism in two groups of 68 patients with MS and 68 curls healthy that sampling were selected from Test LOT and scale Coping strategies Blyngzvmvs was used. Data analysis was performed using T-test in both groups. Variable optimism and coping styles between the two groups showed no significant difference. In each group are more optimistic than pessimistic about the problem-focused coping strategies were used. Well as the degree of optimism significantly in both groups were equal. Regression analyzes indicated that optimism - pessimism can explain significant variance in coping strategies ($p < 0.05$).

Keywords: multiple sclerosis, optimism, coping strategies.

INTRODUCTION

Obsessive-compulsive disorder (OCD) is associated with self-safety diseases such as Sayed Naham polar and PANDAS (Soudo , 1989), and also subcortical brain diseases such as Parkinson disease (Oyzerrat, , 2004). Moreover, it has been proposed that there is a self-safety mechanism in patients with OCD (Roye, , 1994).

The prevalence of obsession is the same among men and women and one of the reasons individuals are inclined towards obsession is learning, i.e. the person acquires this action out of his/her relatives and acquaintances. Unlike what is conceived in the society, men are also affected with obsession and the prevalence of this disease is equal in both genders; however, obsessive behaviors are more evident among women (Seyfi, 2009).

According to the research performed by Kaplan in 2003, rates of permanent compulsive-obsessive prevalence in general population is about 2-3%. The mean age for the onset of this disorder is almost at 20 years old which is slightly earlier in men and a little late in women. According to the research conducted at Stanford University (2007), about 2-3% of the population is affected to mental-functional disorder at the age of 18-54 years old. Mental-functional disorder evenly effects on men and women.

Multiple Sclerosis (MS) is the most common myelin disease which is considered a white matter and self-safety disease. A wide range of mental-neurological symptoms, including cognitive, mood and anxiety symptoms can be seen in this kind of disease.

It has been mentioned that MS symptoms is associated with anxiety disorder and symptoms in general (Minden, Orolou, , 2001, Jonsens, , 2004) and prevalence of anxiety and panic attacks (Jouf, Lipert, Gary, Sava and Horowath, 1087) in particular.

However, few studied are directly has been conducted to examine anxiety disorders in these patients. There are reliable and relatively old findings regarding MS and obsession which is considered an anxiety symptom and Filipopolus reported that there are 45% hysterical, anxiety and compulsive-obsessive symptoms in these patients.

There is a case report indicating the patients affected to MS and OCD (Miguel, , 1995). It seems that the incidence of symptoms such as psychosis that typically are considered in connection with a gray matter in the brain is not more than a chance in MS disease which contains a white matter (Fin Stein, 2003). Accordingly, given the dramatic prevalence of various neurotic symptoms in these patients, it is expected that some symptoms such as obsession and compulsion be seen which can be related to cortical-subcortical paths involvement (Cowan,).

The present study aims to compare sectional obsessive-compulsive symptoms frequency and assess OCD frequency in patients with MS and healthy individuals as a pilot study.

MATERIALS AND METHODS

Method

The present study is post-event aiming to compare obsessive-compulsive symptoms in patients with MS and non-affected individuals (control group). The sampling was chosen as an accessible method and the sample contains 68 people (men and women) of the members of MS Society of Iran with age range of 20-45, that was based on the case and the diagnosis of a neurologist affected to MS as well as 68 non-affected patients (men and women) with no history of acute and chronic disease who were compatible with the affected sample in terms of number, gender, education level and age.

Measurements were performed at the level of scale and distance. To measure the difference between the two groups (people with MS and non-affected individuals) of the mean of two groups and research hypotheses test, two-way ANOVA was used.

Tools

Maudsley Obsessive-Compulsive Test has 30 questions and each question has two parts of right and wrong answers. The questionnaire is designed in such a way that the person who is completely obsessive exactly gives half of the questions positive answer and the other half questions positive answer. Scoring criteria was in such a way that the answer that was compatible with the key is one and the one not compatible with the key is zero. Therefore, maximum score obtained is 30 and the minimum one is zero.

Research conducted by Rockman and Hodgson (1980) and Strenberger and Brenz (1990) indicate that this test has good validity and reliability.

The emphasis of the test on mental-functional symptoms other than personality traits caused this test has a special utility in the evaluation of mental-functional obsession symptoms-focused treatments (Stakti, translated by Alilou and Bakhshipour, 1997).

Rockman and Hodgson (1980) reported that the validity coefficient for the re-test of this questionnaire is 89%. In the study conducted by Naalini (2002) on 318 Medical Students of Kermanshah Medical Sciences University, the reliability coefficient is 80% and validity coefficient is 75% in this questionnaire.

MOCI re-test reliability is good ($r=0.98$), and in two studies performed in Iran, the mean of this test concerning obsessive patients is 15.75 (standard deviation: 5.63) and 67.14 (standard deviation: 5.76) (Ghasemzadeh, 2002, Ghasemzadeh, Khamseh and Ebrahimkhani, 2005).

Dadfar (1997) reported that total test reliability coefficient is 0.84 and its convergence reliability with Pille Brown Compulsive-Obsessive scale is 87%.

RESULTS AND DISCUSSION

Results

For describing data, appropriate descriptive statistics such as frequency, percentage, measures of central tendency, dispersion and distribution are used. In addition, appropriate plots are illustrated to visually display the data. Finally, two-way ANOVA test was used to test the research hypotheses.

Table 1. Summary of descriptive data of the scores of healthy participants and patients in mental-functional obsession symptoms test

Dependent variable	Status	Gender	Mean	Standard deviation
Obsession	Healthy	Male	11.66	4.38
		Female	11.00	5.23
	Patient	Male	16.86	6.52
		Female	18.26	6.54
	Total	Male	14.26	6.10
		Female	14.63	6.92

According to the information given in the table above, the distribution of healthy individuals and patents' scores distribution in the scale of mental-functional symptoms, various descriptive indicators including mean, standard deviation and kurtosis and skewness indicate that the distribution of sample group scores in the variables measured is inclined towards normal distribution.

Two-way ANOVA was used to test research hypotheses:

- Hypothesis 1: there is a difference between the mean scores mental-functional obsession among healthy people and those affected to MS.
- Hypothesis 2: there is a difference between the mean scores of mental-functional obsession among men and women.
- Hypothesis 3: there is an interaction between gender and getting affected to MS disease in indicating variance of mental-functional obsession scores.

Table 2. Summary of equality test results of Lion variance of participant scores in mental-functional symptoms test

Dependent variable	Lion variance equality test	P
Obsession	1.559	0.202

Given the obtained F value (1.559) and its significance probability (0.202), the assumption of variances equality is confirmed.

Table 3. Results of effects tests among subjects (dependent variable: mental-functional obsession symptoms)

Sources of change	Total squares	Degree of freedom	Mean squares	F	P	Eta-squared
Main impact of health status	1302.033	1	1302.033	39.154**	0.000	0.229
Main impact of gender	4.465	1	4.465	0.134	0.715	0.001
Gender-health * status	35.680	1	35.680	1.073	0.302	0.008
Error	4389.502	132	35.254			
Total	34280.00	136				

** Significant at 0.01; * significant at 0.05 level

Given the obtained F proportions and significance level regarding the main impacts of variables to indicate variable variance at the mental-functional obsession level, the main impacts of health status (being healthy and affected to MS) ($F=39.154$, $P<0.01$) was significant. However, this difference was not significant regarding gender variable ($Sig=0.715$, $F=39.154$). Moreover, the interactional impacts between these two variables, namely health status (being healthy and affection to MS) and gender in indicating the variance of mental-functional obsession level variable was not statistically significant. Finally, it can be concluded that there are enough evidences to confirm hypothesis one, while the evidences related to the acceptance of the second and the third hypotheses are not sufficient.

Discussion

The findings of this study should be taken into consideration with regard to its limitations. Perhaps low rate of sample size is an important factor in not significance of some differences. Sampling method was not random and the type of people referred to Iran MS Society may largely consist of people with more severe and needier situation that will also lead to biases in selecting them.

Patients have not been evaluated in terms of the amount of disability or the type of MS progression. One factor that can be theoretically effective on the comorbidity with OCD is depressive disorder. Comorbidity with OCD in patients with major depressive disorder (MDD) (Chen and Dilsarou, 1995) has been reported 12% and 14% to 35% in clinical samples (Pini, , 1997, Krouger, Kouk, Hissi, Jourena and Prasad, 1995) in a study of epidemiology. In a clinical study in some Iranian centers, comorbidity with OCD in patients with MDD has been reported 18% (Shabani, , 2006).

However, the high frequency of OCD in MS cannot be simply explained by the high frequency of depression disorder in this sample of patients, because all patients with OCD knew that the symptoms is began before the onset of clinical manifestations of MS disease and in two cases related to their childhood, while it is predicted that many cases of depression are created after the onset of MS clinical manifestations as a reaction to the disability resulted from (Mclwer, Ricklan and Ress Nickoff, 1984) or the one associated with brain lesions (Pojol, Blou, Deous, Marti-Wilata and Kapdoyel, 1997; Bakshi, , 2000).

As mentioned, the onset of all OCD cases was before the onset of MS clinical manifestations. This finding show that OCD is not related to MS, but the high comorbidity of OCD is inconsistent with such reasoning. On the other hand, mental manifestations of some subcortical neurological can be seen before the onset of motor manifestations (such as depression incidence in the progression of Parkinson disease) (Sadouk and Sadouk, 2000) and such relation may be existed between obsession and MS disease.

As can be seen out of the results of the present study, no significant relationship was seen between the prevalence of obsessive-compulsive disorder in both genders which is compatible with the studies performed by Seyfi (2009), Kaplan (2003), Zorzoun (2001) and the one conducted in Stanford University in 2007.

As mentioned before, observing symptoms such as obsession and compulsion, which can be relayed to cortical-subcortical ways involvement and some self-safety mechanisms have been proposed for them, can be expected in patients with MS who are affected to self-safety disease and mainly are involved in white matter and subcortical ways, particularly owing to the fact that the dramatic frequency of anxiety symptoms in these patients has been reported consistently. Accordingly, regarding the efforts towards the elimination of above-mentioned restrictions, doing more research in this field would be valuable.

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