

## Assesment of the Mental (Psychological) Healthiness at MS Patient

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**Abstract:** The most common kind of weakness caused by the demyelinated that an increase in lack of sensitivity (non-stimulus) physical disorders and central neural system involvement and causes different physical, psychological problems, relation disorder and social and family behavior for those who are neurological disease is MS in which Myelin membrane is needy. Due to lack of research in Mazandaran on the Psychological healthiness of the MS patients and there are discrepancies on the results of the research on the given subject in the world, the study aims at determining the psychological healthiness of the MS patients and its relation to the field variables in Mazandaran. The present study is of descriptive type and the samples were the MS patients who were the members of the MS association of Mazandaran. The sample consisted of 134 MS patients which were under study and had record documents of the MS who were chosen among 700 MS patients randomly. The data gathering tool was a questionnaire which consisted of field information and standard questionnaire of GHQ with 28 questions which were field by the patients. The research findings showed that 17/9 has severe physical problems, 38/8 has severe social problems, 11/2 has high depression and 14/9 has high anxiety. Based on the result of the study shefe statistical test showed a significant relation between psychological health and education level ( $f=6/63$ , critical  $f=2/68$ ) but the variance analysis showed no relation between MS and earning level. It should be also noted that research findings showed a significant relation (based on the independent t statistical test) between psychological health in 4 aspects with MS ( $t=5/06$ ,  $p=0/05$ ,  $df=132$  and critical  $t=1/96$ ). Regarding the disorders in MS patients psychological health and physical, social, anxiety and depression problems in some patients, it is suggested that we use counseling and psychologically stimulating program to help these patients.

**Key words:** Psychological healthiness • Patients • MS

### INTRODUCTION

MS is a chronic and debilitative kind of disease which material of the brain in which the central and peripheral nervous system involves the white Myelin will be injured. White material demyelination causes nervous system disorders and side-effects [1,2]. We can not find any specific reason for its appearance, but a number of certain environmental, infectious, genetic, safety, factors and viruses, poisons and metabolism of materials such as nitric oxide can serve as its emergence factors [3].

The average age for the people who suffers from the disease is at their 30s and 40s and 60% of the patients are the women. It is not common in childhood period and the number of cases are widespread in warmer areas [4]. The symptoms of the disease are caused after the disorders seen in the nervous system transferring which carry the messages and different sensory and kinesthetic orders involving Nurt Optic, diplopia, reduction of the

face skin sensitivity, Bell paralysis, vertigo, vomiting, Nistagmos, Otaxi, hand biting, sensory and kinesthetic disorders, the painful touch of the skin, the bladder function disorders like urine delay, the urgent need to pass the urine, constipation [3, 4].

The diagnosis process of the MS are based on the imaging process like CT scan, MRI and clinical criteria. The head MRI 85% of the MS patients showed some disorders [1]. There is no specific cure, the main objective in the MS curing is stopping the progressing inability of the acute attacking of the recurring, healing and chronic progressing MS and for this reason some drugs like Corticostroids and 2 kinds of einterferon B named Avanex and betaseron are used [5].

There is no doubt that in MS patients there were physical health records and they once experienced their being healthy, stand on their feet, worked and solved their own problems, but suddenly realized that some parts of their ability were lost and it changed to weakness over

time and it was enough for them to be depressed. In other words, they lost their ability and get secluded from the society, because they can't work like the others, therefore they become reserved and shy and go down deep into a series of thinking and imagination and found themselves unable, crippled, alone, depressed and agitated. These symptoms accentuate their sickness process, in fact those who suffer from the MS have physical changes but more important than that is the emotional and mental changes. His soul is affected by his body and annoys him [6].

Mental health in MS patients run into disorders for the wide white material involvement in sub-cortical and central areas and in severe cases the consciousness ability is hurt, but in MS epidemiology the emotional shock and stress are involved. Other mental symptoms such as unnatural intoxication, anxiety, epileptic attacks, depression, suicide can be seen in MS patients and the most common type of disorder in MS patients is depression [7].

MS patients will be anxious due to unknown disease process, different destructive symptoms, lack of proper knowledge and different individual changes. And the excitement changes are observed as depression due to frontal lobe [8]. 2/5 million people in the world are affected by this disease and in Iran there are about 20000 of which 700 are in Mozandaran and the number of people who are affected annually in a population of 100000 is between 1/5 and 11.

Due to the long-time curing process and the severe physical and mental effects and frequent consulting for controlling and curing the disease, being in hospital, the high cost of hospitals and the drugs, inability to work and earning money and meeting living needs and standards and stress, patients are faced with major disorders, therefore regarding the above-mentioned factors we decided to examine the mental conditions of the patients (based on anxiety, depression, aggression and suicide) and we hope that we could move forward to increasing the mental health condition of the MS patients.

## MATERIALS AND METHODS

The present study is of descriptive type and the samples were the MS patients who were the members of the MS association of Mozandran and all the members were the MS patients who were confirmed to have MS with exact clinical diagnosis tools such as 2 episodes of neurological role and visible clinical symptoms in more than one spot CNS and showing the damage with

laboratory tests of imposed potentialities, neurological studies CT or MRI by the help of neurological experts.

The sample consisted of 134 MS patients which were under study and had record documents of the MS who were chosen among 700 MS patients randomly. The data gathering tool was a questionnaire which consisted of two parts. The first section which had 7 questions measured the characteristics of the individual features of the samples, and the second section involved the general health issue (GHQ) which was conducted by Goldberg for the first time in 1972. The aim of this questionnaire was to diagnose the non-psychotic psychological disorders which were planned for different situations and environments.

The GHQ-28 has got four scales and grades which ranges from Physical signs (questions 1 to 7), anxiety and insomnia (questions 8 to 14), social behavior disorders (questions 15 to 21) and depression (questions 22 to 28) which has the highest grade of 28 and 84 both in Goldberg and Likert method.

The sampling was done randomly that the researcher chose 134 by having talks with the authorities and distributing the questionnaires among those chosen out of 700 (both men and women) which were filled and gathered at the association center and for those who were unable to fill the form we ask the staffs the MS centers of Mozandaran to help us. In order to analyze the data, we used descriptive statistics such as frequency distribution, percentage, mean and frequency table and inferential statistics of independent t-tests, variance analysis, shefe-test, t-test and Chi2.

## RESULTS

The current research showed that 70/1 of the examined samples were women and 21/6 of the samples had 1 child and based on the education degree 39/6 had diploma, 32/1 had university degree. Regarding the house ownership 64/2 had their own houses and 60/4 of the samples didn't have jobs and 24/6 had official jobs and 44/8 had earning potentials below 200,000 Tomans (200 dollars).

Table1: The frequency and percentage distribution based on the individual features

Index variables	Frequency	Percentage
Female	94	70/1
One-child family	29	21/6
Education degree (diploma)	53	39/6
Owned house	86	64/2
unemployed	81	60/4
Earning potentials under 200000 Tomans	60	44/8

Table 2: The frequency distribution and frequency percentage of the MS patients' mental health in Mozandaran

Number	Issue	Frequency	Percentage	Calculated X <sup>2</sup>	Probability level	Degree of freedom	Critical X <sup>2</sup>
1	They have a lot of problem	44	32/8				
2	They have common problems	78	58/2	48/77	0/05	Df=2	0/103
3	They are mentally healthy	12	9				

The findings showed that there was a significant difference between the X<sup>2</sup> and the physical problems of MS patients. (Calculated X<sup>2</sup>=25/8, df=2, x<sup>2</sup>=5/9).

The result also showed that, based on the x<sup>2</sup>, there was a relation between social problems and MS. (calculated X<sup>2</sup>=25/8, df=2, critical X<sup>2</sup>=5.9).

The Chi<sup>2</sup> test also showed that there is a significant relation between the depression and the MS (x<sup>2</sup>= 138/05 critical X<sup>2</sup>= 7/81, DF=3) and it is also showed a significant relation between anxiety and the MS (x<sup>2</sup>= 69/40 critical X<sup>2</sup>= 7/81, DF=2). The findings showed that %17/9 MS patients have severe physical problems and %38/8 have severe social relations problem, %11/2 have high depression and %14/9 were hyper anxious.

**Graph 1:** The bar graph presenting the frequency percentage of related physical, social problem, depression and anxiety of the MS patients.

The shefe test findings also showed that there was a significant relation between the education degrees and mental health of the MS patients (calculated t= 6/63, critical t= 2/68).

Based on the dependant-T statistical test, there was not a significant difference between MS patients of both men and women for their mental health. (Calculated t= 1/72, critical t= 1/96).

Based on the findings of this study, there was a significant relation between mental health and MS patients regarding the sample single t-test (t= 5/06, α=0/05, DF=132, critical t=1/96) and Chi<sup>2</sup> (x<sup>2</sup>= 48/77 critical X<sup>2</sup>= 0/103, DF=2).

## DISCUSSION

Considering the findings of the research, the dependant-T statistical test showed no significant difference between men and women suffering from MS for their mental health.

Regarding this fact, the researches done by Janardhan *et al.*, (2003) on men and women showed no significant difference (p=0/26) [9].

In another study done by Alaraji in Baghdad, Iraq, on 300 MS patients, he didn't find any significant difference between MS and gender (p>0/05) [10]. the same study

was done on 589 by Patten *et al.*, (2005) led to the same result as there was no significant relation between mental health and the gender (p>0/05) [11].

The evaluation of the various education degree of the patients with the Shefe test showed that those who were illiterate or could just read and Write had lower mental health compared to the other three groups that is the more educated the patients were the healthier they were mentally.

According to this fact, the study conducted by Patten *et al.* (2005) on 589 MS patients in (2005) which was done in Canada showed a significant difference between MS patients and the education level (p>0/05) [11].

Another study done by Okbasi *et al.*, (2004) also showed significant difference between MS patients and the education level (p<0/001) [12].

The result of present study showed that based on the Chi<sup>2</sup> test there was a relation between MS and anxiety level. Regarding this case, the study done by Janses *et al.* (2005) showed that there was a relation between MS and its effects and the anxiety level (p=0/002) [13].

Moreover, the study conducted by Pandaya *et al.* (2005) and Osbone *et al.*, (2006) revealed the fact that not only MS patients had a higher level of anxiety but also there was a significant relation between the severity of MS and anxiety level (p=0/002) [14, 17].

Based on the Ghi<sup>2</sup> statistical test, there was a significant relation between MS patients and the physical problems. Therefore, the researches done in the field, by Janardhan *et al.* (2002) on 60 MS patients showed a significant relation between MS and physical problems (p<0/001) [9] and is also revealed in Fornier and Janses studies in 2004 (p<0/05) [13,15]. In another research by Karlin *et al.* in 2002 in Netherlands founded a significant relation between the severity of MS and physical problems like fatigue (p<0/0001) [16].

Regarding the results of the study and the Chi<sup>2</sup> test, there was a significant relation between MS and social problems. Considering this problem, the result of the study conducted by Osborn *et al.*, (2006) in America showed a relation between MS and social problems (p<0/05) [17]. Patten *et al.*, (2005) in Canada on 589 patients showed a relation between Ms and social problems (p<0/05) [11].

There were also significant relations between MS and social problems in the researches done by Zayad (2005) and Katon (2004).

There was also a significant relation between MS patients and depression based on the results of the Chi2 test.

The result of the study done by Janses *et al.*, (2004) showed a relation between MS and its effects and depression level and in (2005) the research done by Paten *et al.* reported the spreading of the depression in the patients in the hospital and out of the hospital [13, 14].

Chwastik *et al.*, (2002) in a research showed there was a significant relation between MS patients and depression which was about % 41/8 [20].

The findings of the research showed that most important problems that the MS patients had in Mozandaran was related to the social problems which was about % 38/8. the study done by the Chwastick *et al.*, (2002) stated that the depression was more than the other problems (41/8).

In the researches done by Zayad *et al.*, (2005) and Katon (2004) the most important problem of the MS patients was that of physical problems [18, 19]. Which was not relevant to the present research, it is assumed that because the patients who consulted doctors and came to the association were not inclined to talk about their problems and also did not like to report about their physical problems and tried to have less contact with the others, therefore, their physical problems was more significant.

In this respect, the study done by Janardhan *et al.*, (2002) in Boston, America, showed a significant relation between MS and mental health ( $p=0/006$ ) [9].

In the verification of the research theory, the study done by Janses *et al.*, (2004) revealed the fact that those who had MS problems had higher level of tension, severe feeling of depression and low mental health [13].

The result of the study done by Jdimian *et al.*, (2006) on 183 suffering from MS in Turkey showed that there is a relation between MS and mental health ( $p<0/05$ ) [21,22]. Finally, the result of the study conducted by Zayad *et al.*, (2005) and Pandya *et al* (2005) (14) and Katon (2004) showed a relation between MS and mental health and ( $p<0/05$ ) confirmed the research hypothesis [18,19].

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