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The study of MS patients' life style referred to MS Association [Tehran City, 2008]

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ABSTRACT

Multiple sclerosis [M.S] is one of the common autoimmune diseases that effects on central nervous system. It is unpredictable and cause to changes in life style. M.S progresses to inability. There is a close relation between health and life style, so that we can prevent from rate of disease attacks. Therefore recognition life style in MS patients is very important. The objective of this study was to determine of MS patient's life style referred to MS Association in Tehran City in 2008. This research was a descriptive and analytical study. In this study2oo men and women who were suffering from M.S disease were selected. Study instrument was questionnaire and method was interviews. Data were obtained through easy; the data were analyzed with descriptive statistical and inferential statistical methods. Findings showed there were significant relation between educational level, supportive resources, number of relapse and self-care dimension in life style. Also, relation between marriage status, family income and nutrition dimension in life style was significant. According to the results of this study, life style in some dimensions [e.g. Physical activity, exercise. Sleep and rest patterns and adaptation with stress] were undesirable. These no healthy behaviors can effect on severity and relapse of disease and ultimately these effect on quality of life in these patients. Therefore, change and modification and improvement in life style in these patients seem to be essential that we can access to it with holistic educational programs.

Keywords: MS Disease, MS patients, life style, multiple sclerosis

INTRODUCTION

Multiple sclerosis is one of the common illnesses in autoimmune system affecting central neural system.MS has three symptoms: inflammation, the destruction of myelin and scar [1].The cause of illness is not identified, but it seems that the activation of immune mechanisms against myelin antigen is involved [2]. The first symptoms such as anxiety, weakness, imbalance, visual impairedness and mental changes such as depression, despair and ability decrease in solving problems usually occur at the age of 20 to 40 [3].

More than 400,000 people in north America, about 500,000 people in Europe and 2.5 million people throughout the world suffer from this illness [4].Its outbreak is about 15 to 30 in 10,000 people in Iran. Based on the specialists of multiple sclerosis in Iran, 5000 new people are annually added to this group of patients. This center reported the number of patients to be 25000 in 2003 and 30,000 in 2004 [5].

This illness threatens patient's independence and ability for effective presence in society and family and leads them to feel incompetent and uncertain .The patient becomes dubious about his health [6].

This illness often occurs during the ages when one expects to be healthy. Due to the illness and unpredictability of multiple sclerosis period, a number of patients may find themselves unable to plan for the future [7].Many factors such as genetics, life style, environmental factors and economic and social factors can affect human beings health [8].life style, referring to routine and casual daily life which people accepted, can affect peoples' health [9]. To sustain and promote his health and prevent diseases, one chooses life style and performs some activity, such as appropriate diet, sleep and rest, activity, sport, body weight control, not smoking or drinking alcohol and immunization [10].Based on the studies performed in the US, 53 percent of deaths are related to life style, 21 percent related to environmental factors, 16 percent related to heredity, and 10 percent related to the way the health care is offered [11].

It is quoted from America's Heart Association that life style has determining effects on one's health, and every one can have physical and mental well-being by picking a proper daily schedule [12].

Epidemiological studies show that risk factors about life style such as smoking and using alcohol or coffee can affect MS [13].

Behavioral changes and modern life model pave the way for chronic diseases and cause reduction in lifetime, inability, familial difficulties and increase in health care expenses. Therefore, much attention must be paid to life style to control and prevent such diseases [14].The importance of life style is because it is effective in life quality and preventing disease [15].Due to the importance of the nurse's role, society's hygiene in hygiene education, behavior changes, disease prevention, helping people gain appropriate health, importance of life style in self-care and health and disease prevention, and based on the above mentioned issues and concerning increasing number of MS Patients in the world, high rate of deaths which impose physical, mental and economic numerous problems on people, family and society, it is vital to consider life condition on methods of self-care. On the other hand, it is possible to control some side effects or postpone relapse through improving life style. Before any planning in this regard, it is, therefore, necessary to perform studies on such patients' life style. This study is thus performed to scrutinize life style of multiple sclerosis patients. After collecting data, practical approaches will be offered to improve life style in order to control the disease and its probable side effects.

MATERIALS AND METHODS

The present study is a cross-sectional one. Based on an introductory study, the number of samples required was calculated to be 188 persons. Considering samples possible loss, 200 of MS patients visiting Iran MS association in 2008 were selected and analyzed by using sampling method. Qualifications to enter the study were: 1-patient's MS confirmation by an expert doctor in the association, 2-age limit of 15 to 50, 3-having medical records in MS Association, and 4-not being in acute phase of disease.

Self-made questionnaire was the means to gather information and included two parts. The first part consists of demographic features and information about the disease. Demographic features representing individual features of research units include 10 questions, and the second part of the information includes 3 questions. The second part of the questionnaire analyzed different aspects of life style including six parts: self-care [3 questions], nutrition [23 questions], physical activity and sport [5 questions], smoking [1 question], sleep and rest model [6 questions] and methods coping with stress [4 questions].

To gather data, the researcher visited Iran MS Association every day. After informing qualified patients about the research and obtaining permission and consent, the researcher completed research devices through interview. Life style maximum score in self-care was nine which was based on the one hundred percent of the gained points evaluated in three categories: inappropriate or less than fifty percent [1 to 1.5], relatively appropriateor between fifty to seventy five percent [1.6 to 2.25] and appropriate or above seventy five percent [2.26 to 3].

Lifestyle maximum score about nutrition was 63 which were based on the one hundred percent of the gained scores evaluated in three categories: inappropriate or less than fifty percent [19 to 41], relatively appropriate or between fifty to seventy five percent [41.1 to 52] and appropriate or above seventy five percent [52.1 to 63]. Lifestyle maximum score about physical activity and sport was 10 which were based on the one hundred percent of the gained scored evaluated in three categories: inappropriate or less than fifty percent [3 to 6.5], relatively appropriate or between fifty to seventy five percent [6.6 to 8.2] and appropriate or above seventy five percent [8.3 to 10].

Lifestyle score about smoking included one question which was evaluated as following: those people smoking cigarette, shish, pipe, pipe with a long stem or other materials are considered inappropriate, and those who did not smoke are considered as appropriate lifestyle category. Life style maximum score about sleep model was 18 which

was based on the one hundred percent of the gained scores evaluated in three categories: inappropriate or less than fifty percent [6 to 12], relatively appropriate or between fifty to seventy five percent [12.1 to 15] and appropriate or above seventy five percent [15.1 to 18].Life style maximum score about methods coping with stress was 12 which was based on the one hundred percent of the gained scores evaluated in three categories: inappropriate or less than fifty percent[4 to 8], relatively appropriate or between fifty to seventy five percent [8.1 to 10]and appropriate or above seventy five percent [10 to 12].

Content validity method was used to determine the validity of the questionnaires. In so doing, questionnaire was prepared using studying books, periodicals and pieces of advice from tow faculty members. Then, it was analyzed and evaluated by fourteen faculty members of Tehran and Iran Medical Sciences. To determine stability, retest method was used. Twice in two weeks, questionnaires were distributed to and completed by fifteen patients suffering from MS who visited Iran MS Association and were qualified to enter the study. Questions stability was analyzed using Pearson coefficient method. On two occasions, the efficiency of the questions was ninety five percent. To analyze data and to conclude, SPSS version 11.5 and descriptive and analytical test was used.

Findings:

In this study, the age range of study units was between 15 to 50.32 percent were between 40 to 49 [age average was 35 with the deviation standard of 8.85]. 64.5 percent of the samples were women. 50.5 percent were married. 99.5 percent were literate, and 41.5 percent were diploma graduate. 63 percent were employed, and 38.5 percent had relatively sufficient income. 71 percent had supportive sources.94 percent had social insurance and 17.5 percent had supplementary insurance. Most of the samples [89 percent] had no record of suffering from other diseases; 87 percent has no history of MS in their families; in 41 percent MS duration was over 10 years; 52 percent experienced relapse over the last six months; 46.2 percent experienced just one relapse over the last six months and most of them suffered respectively from fatigue disorder [75.5 percent], imbalance disorder [70.5 percent] and weakness and cramps [70 percent]. Most of the study units [63.5 percent] were aware of how to medicate and self-care, and 81 percent consulted in case of problems. 75 percent consulted their own doctor in case of problems.

Table 1 indicates different aspects of life style in the study samples. There was a significant relation between self-care and education [$p<0.001$], having supportive sources [$p=0.031$] and relapse [$p=0.017$] among study units. There was also a significant relationship between life style about nutrition and marital status [$p=0.015$] and family income [$p<0.001$] among study units.

There was no significant relationship between demographic, sport and smoking aspect. There was a significant relationship between life style about sleep and rest and family income [$p=0.019$], having social insurance [$p=0.017$] and number of relapses [$p=0.014$].There was, moreover, a significant relationship between life style about methods to cope with stress and patient education [$p=0.003$], occupation [$p=0.026$], family income [$p=0.003$] and supportive sources [$p=0.013$] among study units.

Table1.Absolute and relative frequency of different aspects of life style in the study units visiting Tehran MS Association in 2008

Aspect of life style	Inappropriate		Relatively Appropriate		Appropriate	
	Frequency	percent	Frequency	Percent	Frequency	percent
Self-care	60	30	63	31.5	77	38.5
Nutrition	23	11.5	156	78	21	10.5
Sport & Activity	123	61.5	52	20	25	12.5
Smoking	34	17	-	-	186	83
Sleep & rest	90	43	76	38	34	17
Coping with stress	101	50.5	62	31	37	18.5

DISCUSSION AND CONCLUSION

The World Health Organization believes the term “life style “to be based on definite and definable behavior which is made out of reaction between individual traits, social relation reaction, environmental conditions and socio-economic condition. The definition of who declares that behavioral patterns are continuously coping with environmental and social changes. To improve health and enable people to change their behavior and life style, it is necessary not only to focus on the people but also to consider social conditions. The World Health Organization believes that there is no ideal life style, and there are some effective factors on life style which are unique for every person [16].

In this study, the life style of 200 patients was analyzed. The result of the study showed that 38.5 percent of the study units had appropriate situation in life style about self-care. Tolijamo [2001] believes that following self-care

and its handling is of high importance in patients with chronic illness, and such people have to be able to care about themselves [17].

Over two-third of the study units [78 percent] had relatively appropriate condition in life style about nutrition. Quoting from Pine Ani [2006], Masoudi writes that dieting is very useful in this illness clinical control. With diet, some effects such as constipation, weight gain, urinary tract infection, difficulty swallowing, mal-nutrition, pressure sores and fatigue are easy to control [7].

Most of the study units [61.5] had inappropriate condition in life style sports. Based on a study by Motel et al [2008], MS symptoms have a close relationship whit little physical activity [18].

Most of the study units [83 percent] had an appropriate condition in life style smoking. Based on a study by Heydari [2006], Smoking can affect general health. Smokers are more exposed to diseases comparing other people of the society. Recent studies show that MS symptoms appear more frequently in smokers [19].

45 percent of the study units had inappropriate lifestyle sleep and rest. Due to anxiety or physical symptoms of the illness, many MS patients are dissatisfied with their nightly sleep [20].In a study by Habibi [2006], it is shown that 37.5 percent of the study units suffered from sleep disorder [21].

Most [50.5 percent] of the study units had inappropriate condition in life style methods to cope with stress. A large number of scholars believe that stress plays a vital role in provoking MS attacks. It has been seen that many patients have MS attacks after their stress attack. Severe stress can cause inflammatory processes, and this can represent stress effect on intensifying or starting MS attacks [22]. Ina study by McCabe&etal, it is shown that in coping styles MS patients are situated in lower levers than healthy people [22]. Visschedk& etal concluded that compliance training with physical injuries and behavior therapy could improve patients 'life quality and psychological condition [24]. In 2006, a study was done by Nejat&etal on life quality of the patients suffering from multiple Sclerosis compared with healthy people in Tehran. The result of the study showed that life quality in such patients is in a lower rate than healthy people and necessitated planning and effective interventions such as rehab training and employment of such patients [25].

The findings of the study show patients 'bad habits and behaviors in food habits, and nutrition, physical activity, sleep and rest, and ways to cope with stress.

This issue highlights the importance of attention and focus on health education role to teach the patients the appropriate life style and behavioral habits. It both prevents relapse in the patients and functions as an preventive factor in healthy people.

Since this study is allocated to a limited number of patients in a certain place, this decreases the generalization of the findings to the whole patient's society. Therefore, it is recommended that this study be done in other provinces.

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