

Comparison of Coping Strategies of Cancer and MS Patients in Qaemshahr

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ABSTRACT: The purpose of the present study was to compare coping strategies. The research method is causative-comparative and the population included cancer patients and patients with MS which through referring to the health centers, these two kinds of disease selected 60 cancer patients and 60 MS patients as the statistical sample in the method of simple random sampling with the disease. To collect data, a questionnaire of coping with stress of Endler and Parker was used. For data analysis, descriptive statistics, mean, standard deviation, and graph and in inferential statistics, the study of the hypothesis was discussed using multivariate analysis for the variance. The findings showed that given the significance level ($Sig = 0.000$) was observed smaller than 0.05 error, however, we can say with the confidence 95%, there is a significant difference between the coping Strategies of cancer and MS patients.

Keywords: Coping Strategies, Cancer Patients, MS Patients in Qaemshahr.

INTRODUCTION

Cancer is among diseases which are associated with numerous stress and anxiety; cancer is asymmetric division of body cells so that cancer cells are divided from the normal mechanisms and the growth of the cells are separated. The exact cause of this phenomenon is unknown, but it is possible that genetic factors or items which results in disrupting in the activity of the cells have some difficulty in the cell nucleus including radioactive substances, toxic chemicals or radiation too much radiation such as sunlight. In a healthy organism, there is always a balance among the cell division, cell senescence and differentiation. There is a risk of cancer at different ages, but the risk of cancer rises with aging. Cancer is caused 13% of deaths. 6, 7 million people were died of cancer in 2007 according to the Public Health Association of America. Cancer is not just for humans and all multicellular animals and plants may also suffer from cancer. Cancer is a progressive disease. There are significant differences in the incidence and mortality from cancer worldwide (Kinsler, & Vegestein, 2008).

Multiple sclerosis (MS) is another disease which is emphasized. MS is a chronic and progressive neurological disease that causes to disrupt central nervous system. In this disease, the cell changes in the central nervous system - the brain and spinal cord in the proper transmission of nerve impulses create some disturbances and they create spots like ulcers. The stains destroy fatty myelin sheaths that cover the trail of nerve cell axons. Myelin is essential for synaptic transmission of nerve impulses and the destruction of myelin causes the symptoms which are sometimes temporary and in other cases, they are chronic and sometimes they gets worse (Hamiltoun & Roz, 1982). MS usually begins in early adulthood and affects women more than men. Although the disease is rarely fatal, this causes a range of unpleasant side effects and can be debilitating. Today, despite significant progress, the determination of the cause

and how to cure the disease is unknown. Also, causes of exacerbation and remission are not entirely clear, but it is a fact that this patience as well as any other chronic disease causes stresses (Turner et al, 2000, quoted by Mohammadi Rezveh & Afshar, 2008).

The studies have confirmed the impact of stress on immune function, particularly lymphocytes which repel antigens such as bacteria, viruses and other invaders (Stura, 1998). Research evidence confirms the fact that coping styles and elements play a decisive role in the preparation of the substance or prevention. Therefore, it can be said that coping styles through mechanisms such as stimulus control, identification of high-risk situations, reducing the exposure to setting up signs, problem-solving strategies, stress management and finally identifying the emotional factors influencing the propensity to consume and dealing with them result in reducing the drug use and finally the prevention (Brown, 2004). Also, according to the studies of Khatamsaz and Moarefvand (2014), the parents of children with cancer who had more education use less than coping strategies, seeking to avoidance, avoidance and accountability. The parents who had other children in addition to the child with cancer use more than thoughtful problem solving and less than restraint strategy. The research Han et al (2009) indicated that useful oppositions which most are used included maintenance and integration of the family and optimism to the future of the status and they were less used from the pattern against with stress. The studies on the parents of children with cancer outside of Iran have shown that parents for some time after being informed of the disease, their children use emotion-oriented coping strategies and after that, they tend to problem-oriented strategies so that they can finally use a combination of these two strategies.

However, in the present research, the purpose of the researcher is to determine the difference between coping strategies in cancer patients and the patients with MS because from the perspective of the present researcher, these two variables are different from each other. What was mentioned less in the earlier research, while the outcome of this research can offer applied guidelines and recommendations to physicians, therapists, research community etc.

MATERIALS AND METHODS

The research method is causative-comparative and the population included cancer patients and patients with MS in Qaemshahr which through referring to the health centers, these two kinds of disease selected 60 cancer patients and 60 MS patients as the statistical sample in the method of simple random sampling with the disease. To collect data, a questionnaire of coping with stress of Endler and Parker was used.

Inclusion criteria for the study

- The confirmation of the expert on having cancer or disease of Multiple Sclerosis
- non-compulsion in the presence of the research (volunteer)

Exclusion criteria from the study

During the study, every participant will be able to study abroad, and does not respond to questions (moral considerations).

Instrument for collecting data

Coping questionnaire with mental stress of Endler & Parker (CISS): this instrument was made first by Endler & Parker (1994) in 1990 and was applied in Iran by Akbarzadeh, translation and normalization and for coping styles with teen stress in Tehran in 2011 (Sarmad et al., 2009). The test includes 48 statements which the response to each of the statement has been determined in Linkert method from never (1) to very high (5). Coping test with crisis includes some of the main aspects of oppositional behavior including problem-oriented (focusing on the problem and its solution); emotion-focused (focusing on the emotions of issue); and avoidance) in which the escape mechanisms is used). Most individual coping style, according to the score obtained in this test will be marked. This means that in each of these behaviors, high score is obtained on the scale. Three problem-oriented, emotion-oriented and avoidance measures can be considered as a coping style. According to the findings and judgment of experts and psychologists, test developers, especially clinical psychologists, it is concluded that the test enjoys a good narrative to measure coping style with stress. The validity of the above scale in the study of Qoreishi (Sarmad et al., 2009) is justified. In the present study, the correlation between coping styles and stress and high levels of professional identity is obtained 0.001. Endler & Parker reported Cronbach's alpha coefficient for problem-focused coping, 0.92, emotional-oriented styles 0.82, and the avoidance styles 0.85 for boy adolescents indicating the validity of the scale (Afrasiabi & Akbarzadeh, 2004). In Iran, alpha scales of subscales of coping strategies and emotion-focused coping

and avoidant coping scale were reported 0.75, 0.82 and 0.73, respectively (Shokri, 2006). The results of the findings of Endler and Parker and several domestic researches indicate the reliability of the test desired (Soltani, 2003). In the research of Nikrahan et al (2011), the reliability coefficient for each style of problem-oriented, emotion-oriented and avoidance is obtained 0.87, 0.78 and 0.68.

Ethical considerations

During this study, information about individuals was surreptitiously examined and not any physical or emotional threat for the participants and no fee were imposed upon them and also all checklists were completed anonymously. In addition, he was explained that had the right to withdraw at any time to continue answering questions according to his will.

RESULTS

In the present causative-comparative study, 120 people participated that 60 people were cancer patients and 60 MS patients. Of these, 57 people (47.5) were men and 63 people (52.5) were women. 47 people (39.2) were single and 73 people (60.8) were married. In examination of the educational status of the population, 10 people (8.3) were under Diploma, 41 people (34.2) Diploma, 13 people (10.8) Associate Degree, 45 people (37.5) were Bachelor and 11 people (9.2) people were higher than Bachelor.

To evaluate the hypothesis, significantly normal distribution of scores in terms is being tested. For this purpose, Kolmogorov-Smirnov test is used. The test is used for determining whether a sample of a population follows the special distribution or not. Test hypotheses include:

H₀: Data distribution is normal.

H₁: Data distribution is normal.

Table 1. Normality test of sample comments of the research.

Scale	K-s	Sign.	The result of the test
Coping strategies	0.832	0.492	Normal

The result of the test show that since the significance level is more than 0.05 (Sig>0.05), therefore, all variables have the normal distribution and parametric tests such as t test can be used to investigate the hypothesis.

Table 2. A summary of the results of t test of the two independent groups to compare coping strategies in cancer and MS patients.

Groups	Number	Mean	SD	T value	df	Sign.
Coping strategies	MS patient	60	148.78	23.77	11.010	118
	Cancer patient	60	103.85	20.84		

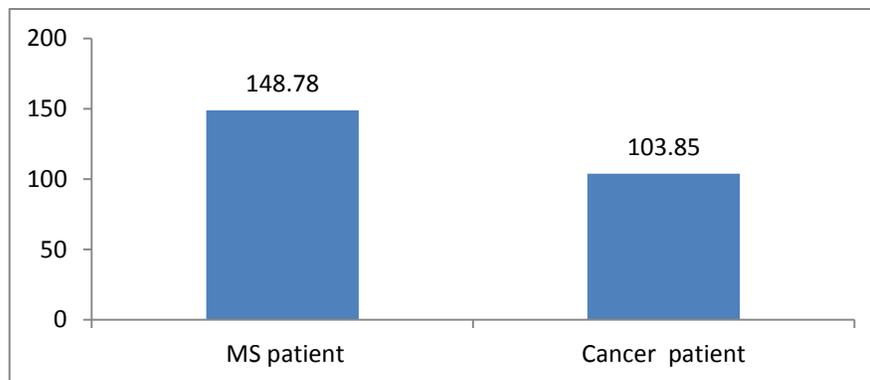


Figure 1. Histogram mean scores of coping strategies in cancer patients and patients with MS.

The findings of the Table and graph above show that coping strategies in patients with MS (148.78) are more than coping strategies in cancer patients (103.85). Independent t-test has shown significant coping strategies of these two groups because the significance level (Sig = 0.000) is observed smaller than error 0.05. Therefore, the zero hypothesis is rejected with the confidence 95% indicating the lack of the difference and the research hypothesis is confirmed. In other words, there is a significant difference between coping strategies in cancer patients and patients with MS.

DISCUSSION AND CONCLUSION

The findings of the research showed that since the significance level (Sig = 0.000) was observed smaller than the error 0.05, therefore, with 95% of the confidence, it can be said that there is a significant difference between coping strategies in cancer patients and patients with MS. It seems that cancer patients and patients with MS use each of the different strategies to cope. Through the findings of Gage-Bouchard et al (2013), Hoekstra-Weebers et al (2011), Liu Yu and Chunmei (2010), Rodrigo (2012) conducted a research on 40 patients with MS that each of them studied the effect of cognitive therapy behavior on reducing anxiety and depression in patients with MS, 14 depressed patients with MS and major depressive disorder under 16 sessions (one session per week) psychotherapy and pharmacotherapy. A

descriptive study of 50 patients with MS which was discussed on the mental state of the patients is consistent and compatible. In explaining the theory, it can be said that as defined by Lazarus and Folkman (1984), coping is a set of behavioral and cognitive activities and processes to prevent, manage, or reduce stress. The researchers know coping conscious effort to meet with the stressful demands. In this coping, the behavioral responses learned reduce stress by limiting the importance of dangerous or uncomfortable situations (stressful demands). Although coping strategies include many activities, most of them represent an attempt to improve a difficult situation, such as designing maps and practical action (problem-focused coping), or to adjust emotional distress, such as another search for emotional support or reducing the extremely difficult situation in terms of cognition (emotion-focused coping). In general, coping style refers to cognitive and behavioral efforts to prevent, manage and reduce stress and in accordance with what this study showed, cancer patients and the ones with multiple sclerosis do not show the same strategy to deal with the stress caused by the disease.

Therefore, it can be said that the mere disease and observation of the disease in the patient person do not mean that is certainly reduced by one way to the stress rate and it is necessary that the factors such as education, marital status and more be effective while curing whether in psychological method and drug therapy one and it is suggested that they be studied in next cases because the limitations like the researchers were forced to multiply and distribute in the present research and they are because of the lack of some of answer sheets and because of no exact answering of some questions to test subjects. The lack of confidence in the accuracy of the answers to the questionnaire by participants for reasons of accuracy and speed in responding to clients that were caused not to answer some of the questions and above all, the time limit research scholar was forced to waive a lot of reviews.

Conflict of Interest

The authors declare no conflict of interest.

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