The Comparison of General Health, Quality of Life and Social Protection in Healthy People and Patients with Chronic Pain

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ABSTRACT: The present research was performed with the aim of the comparison of general health, quality of life and social protection in healthy people and patients with chronic pain. The research was causative-comparative. The population included all patients with chronic pain referred to Chalus hospital From October to December 2016. 85 healthy people and 85 patients with chronic pain as the statistical sample were selected in the sampling method in available. Measuring instruments were as follows: General Healthy Questionnaire, World Health Organization Quality of Life Questionnaire and Multidimensional Scale of Perceived Social Support. Multivariate analysis test of variance or MANOVA was used to analyze data. The results showed that public health, quality of life and social support, chronic pain patients and healthy controls were different and the patients with chronic pain, general health, quality of life and social support were less than healthy individuals.

Keywords: Public Health, Quality Of Life, Social Support, Chronic Pain.

INTRODUCTION

Pain is the most common health problems that we encounter in life. It also affects as a powerful factor in the quality of life in different dimensions. Pain is the most common complaint of patients and treatment of it is among the oldest human therapy (Yazdi Ravandi et al., 2016). The word of pain is used for the description of non-cancer pain and refractory to treatment that lasts beyond the period that is expected to improve (Ahadi et al., 2011). Chronic pain is a degenerative condition as a person suffering is faced with not only mental pressure from pain but also with many other pressing factors affected the different parts of his life (Gatchel & Kathryn, 2008).

The patients with chronic pain respond in various ways to pain and chronic pain is not always associated with adjustment disorder, while some patients have been relatively well compatible with their pain, others show various problems in the physical and psychological performance (Asgharimoqaddam & Golk, 2005). Pain is an unpleasant sensory or emotional experience associated with actual or potential harm that has both sensory and emotional. Sensory dimension of pain refers to the severity of pain and emotional dimension of pain refers to the unhappiness which the person experiences. The notion that pain leads to frustration, worry, depression and anxiety is quite evident especially if the pain is chronic in nature (Mazaheri, 2015). Nearly from every three patients with chronic pain, one patient encounters with the reduction of the quality related to health and high levels from psychological distress (Rosenzweig et al., 2010). In other words, mental health of these people also impairs in addition to physical

health. Numerous studies show health problems in the patients with chronic pain (Hassanvand Amouzadeh et al., 2012).

In addition, when chronic pain is not treated properly, the adverse effects affect all aspects of health-related quality of life in patients with pain and this may reduce all dimensions of the quality of life related to health that this is a common problem in these patients (Ornish et al., 1990). In general, pain as a very powerful stressor affects the quality of life in different dimensions (Souza et al., 2011). Yazdi Ravandi et al (2016) in a research with the purpose of the determination of the intensity and duration of pain on quality of life for people with chronic pain showed that the severity and duration of pain and quality of life and its dimensions were significantly correlated and indicated that the severity of the pain could predict the life quality and dimensions in the patients with chronic pain. Souza et al (2011) also showed that people who had more pain had lower quality of life.

One of the variables associated with the conditions of the patients with chronic pain is social protection. Newmann et al (1990) states that social protection has a direct impact on physical complaints of people and people with high social protection even in the event of an experience of traumatic event are less vulnerable to disease (Newmann et al., 1990). Some studies have shown that chronic pains undermine the capacity of family and social support of the patient (Mirzamani et al., 2005).

In order to help patients with chronic pain, it is essential that its impact on the whole life of the patient is examined so that complementary appropriate support and treatment programs can be designed to them. In this regard, the present research was performed with the aim of the comparison of the general health, quality of life and social protection in healthy people and patients with chronic pain.

MATERIALS AND METHODS

The research was causative-comparative. The population included all patients with chronic pain referred to Chalus hospital From October to December 2016. 85 healthy people and 85 patients with chronic pain as the statistical sample were selected in the sampling method in available. Measuring instruments were as follows:

General healthy questionnaire

A self-report questionnaire was designed by Goldberg (1972). The form of 28 questions of the questionnaire applies to all persons. The questionnaire has four sub-scales of somatic symptoms, anxiety and insomnia, social dysfunction and depression. The total score also gives an overall score. In this questionnaire, a higher score means less public health. The credit of the form 28-item of General Health Questionnaire by Palahang et al (1996) is reported 0.91.

World Health Organization Quality of Life Questionnaire

The questionnaire was made by the World Health Organization and by collaboration of 15 international centers in 1989. The original version has 100 questions, but the short version of it was presented due to difficulty of implementation. The short form of the questionnaire has 26 questions that the first two questions evaluate one's quality of life and overall health and24 another questions assess four main dimensions of the questionnaire that these four dimensions are: physical health, mental health, social relationships and living environment. The questionnaire is scored based on five-point Likert scale 1-5. The cutoff point which indicates a good quality of life is the score 40. Alpha coefficient of physical health, mental health, social relationships and environment in external studies is 0.87, 0.74, 0.55 and 0.74, respectively (Rafiee, 2009).

Multidimensional Scale of Perceived Social Support (MSPSS)

This tool was made by Zimet et al (1988) to measure perceived social support from family, friends and significant others in life. It included 12 items that every item in 5-item Likert-scale is from the score of one for "strongly disagree" to five for "strongly agree". All items are directly scored. Alipour et al (2016) reported the reliability of these tools to the entire support 0.94.

RESULTS

The present research was performed among two groups which include 85 patients with chronic pain and equivalent to 85 healthy subjects. The mean age of the patients with chronic pain was 41.12 with standard deviation 7.22 and the mean age of the healthy people was 40.33 with standard deviation 9.19; 68.11% was the patients with chronic pain and 61.3 was the healthy married people; 39.21% of the patients with chronic pain and 46.18% of the healthy people had the bachelors' degree or higher.

The study of the assumptions of analysis of variance (MANOVA)

The design of the present research that is ex post facto and data collected are at the interval scale; also, the comparison of the variables is performed in more than two groups; therefore, the best way to analyze the data is to use parametric analysis of variance (MANOVA) which the assumptions or default application will be examined in the following.

Table 1. The results of Kolmogorov - Smirnov test for normality of data distribution.

The dependent variables	z	Sig.
1. Public health	1.11	0.13
2. Quality of Life	1.23	0.08
3. Social protection	1.01	0.16

As it can be seen in the Table above; the values of z of Kolmogorov - Smirnov test are not statistically significant ($P \geq 0.05$). Therefore, data distribution is normal and parametric test of the analysis of variance (MANOVA) can be used.

Table 2. Levene test for studying equal variance.

Variable	F	df_1	df_2	Sig.
1. Public health	0.83	1	168	0.34
2. Quality of Life	1.07	1	168	0.27
3. Social protection	1.46	1	168	0.19

Levene test is performed for the assumption of equal variances. As the results of Table show that the significant level of Fs calculated is more than $P \geq 0.05$ indicating the difference of the variances is not statistically significant and the assumption of the equal variances is based; therefore, multivariate analysis of variance test results can be reported.

Table 3. Descriptive indicators of social protection, public health and quality of life of chronic pain patients and healthy people.

Variable	group	Mean	SD
Social support	Chronic pain patients	15.21	2.09
	Healthy people	19.38	2.43
Quality of Life	Chronic pain patients	103.65	12.23
	Healthy people	122.09	10.19
General health	Chronic pain patients	34.45	5.41
	Healthy people	49.16	4.18

In the above Table, the mean and standard deviation of social protection standard, public health and quality of life of chronic pain patients and healthy people are provided; as it can be seen, there can be seen some differences in the mean of the social protection, public health and quality of life of chronic pain patients and healthy individuals that multivariate analysis of variance test results are reported to study the significances of the differences observed.

Table 4. Wilks Lambda test results of the difference of social protection, public health and quality of life of chronic pain patients and healthy people.

Type of test	Value	F	Freedom degree of hypothesis	df	Sig.
Pillay effect	0.903	298.26	3	166	0.001
Wilks Lambda	0.161	298.26	3	166	0.001
Hoteling effect	6.46	298.26	3	166	0.001
Roots	0.64	298.26	3	166	0.001

According to the results of the above Table, the difference in the social protection, public health and quality of life of chronic pain patients and healthy people is statistically with $F_{(3, 166)} = 298$, Wilks Lambda = 0.161 ($P<0.01$). Therefore, it can be concluded that the social protection, public health and quality of life of chronic pain patients and healthy people are different and the chronic pain patients have less social support, quality of life and general health than healthy people.

DISCUSSION AND CONCLUSION

The present research was performed with the aim of the comparison of the general health, quality of life and social protection in healthy people and patients with chronic pain. The results showed that the public health, quality of life and social support, chronic pain patients and healthy controls were different and the patients with chronic pain, general health, quality of life and social support were less than healthy individuals. The research of Hassanvand Amouzadeh et al (2012) indicates health problems in the patients with chronic pain and this showed that these patients had less physical and psychological health.

The studies of Yazdi Ravandi et al (2016) and Souza et al (2011) also showed that people with chronic pain had low quality of life and the more the pain is, the lower the quality of lie will be too. Severe and chronic pains affect the conditions, psychological, social and environmental patients most and cause many problems such as physical disability of the disease, such as sleep problems, appetite, constipation, irritability, decreased libido, lack of physical activity and the low tolerance of the patient. Also, this can reduce physical and social activities in the patients and this can affect social and job relations of the person and this can create disturbance in mental and physical health (Heydarnejad et al., 2012).

In addition to the aforementioned problems, multiple doctor visits, medications, mood in times of pain, not being able to do some activities provides total circumstances which are not suitable and satisfactory for the individual and this reduces the quality of life in the individual. On the other hand, the patients need to support people and whatever this support increases, they experience better and more appropriate conditions and they experience higher-pressure situations whatever this reduces. Tabatabee Vakili and Qareh Aqachi (2007) showed in their study that social support could increase people's resilience and increased the ability to cope with stressful situations on the individuals.

On the other hand, some studies have shown that chronic pains undermine the capacity of family and social support of the patient (Mirzamani et al., 2005) and this can make the patient's condition more difficult and stressful.

In general, the patients with chronic pain in terms of the public health, quality of life and social support were lower than in healthy individuals and this requires that appropriate programs be considered to help improve the conditions of these patients.

Conflict of Interest
The authors declare no conflict of interest.

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