

Örgütsel Davranış Araştırmaları Dergisi

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# COMPARISON OF DEPRESSION LEVEL IN PATIENTS WITH AND WITHOUT HYPERTENSION IN AMIR AL-MOMENIN HOSPITAL OF ZABOL

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## ABSTRACT

Background and Aim: Hypertension is one of the most prevalent and most important health threats, and is a common asymptomatic disease that causes irreparable complications, especially in the elderly. Therefore, the present study was conducted to determine the level of depression in patients with and without hypertension in Amiralmomenin Hospital of Zabol. Materials and Methods: This is a causal-comparative study. The statistical population of this study is people with high blood pressure. The subjects were selected randomly and the sample size in this study was 120. At the beginning of the completion of the questionnaire, the research goals were explained for the study group. In this study, Beck Depression Inventory was used to survey 60 patients with high blood pressure (30 women and 30 men) who completed the questionnaires and 60 family members and relatives of the same patient The questionnaires were completed.

Results: The findings showed that there was a significant difference between the two groups in terms of depression (p = 0.001, df = 58, T = 11.39), and patients with hypertension suffered more depression. Conclusion: The results of our research indicate that depression in people with hypertension is higher in comparison with healthy people, and most of them have psychological problems.

Keyword: Depression, Blood Pressure, Hypertension

### **INTRODUCTION**

Hypertension is one of the most prevalent and most important health threats, and nearly one quarter of all deaths in the elderly are due to high blood pressure or its complications. Chronic blood pressure is a common and asymptomatic disease that is caused by general or functional disorders and is called primary blood pressure (Fauci et al., 2005). Diagnosis of coronary artery disease, including blood pressure, in addition to raising physical problems, causes a significant disorder in patients' mental state. One of these disorders is anxiety, depression and uncertainty about the future (Ebadi et al., 2011).

As the age increases, systolic blood pressure increases, but diastolic blood pressure remains constant, which is due to tightening of the arterial walls. Hypertension is more common with age in women. Twenty-one systolic and diastolic pressure of 10 millimeters will double the mortality rate due to stroke and cardiac events. If high blood pressure is not appropriate, 50 percent of patients are congestive heart failure and 33 percent due to stroke ~10% due to complications of kidney failure (Zipes et al., 2005). Arterial hypertension is likely to be one of the most important health problems and a common disease, asymptomatic in developed

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countries. This symptom is usually easy to treat and often results in death complications if left untreated. The uncheckedness of this disease can reduce its early diagnosis and also the fact that genetic-social and nutritional factors are different in different societies, and this can be effective in the pattern of high arterial hypertension. On the other hand, understanding the pattern of high blood pressure in the arteries and recognizing high risk groups and controlling factors that affect it can lead to timely recognition and treatment of this fatal disease and also screening for its risks. High blood pressure, called hyperthyroid medicine (Jebel Ameli et al., 2010). It requires high blood pressure (up to 140 mm systolic and 90 mm diastolic) and continuous (usually within several weeks or months). High risk factors, high blood pressure, heredity, high birth weight, inadequate nutrition, alcohol consumption, low physical activity are psychosocial and environmental factors. (Jebel Ameli et al., 2010) In the United States, the prevalence of hypertension in the age range of 40-50 years is 20-25%. And in the ages of 60-50 years, it is about 40% and over 80 years of 60% higher. High blood pressure is 20 to 10 years old without symptoms, and only regular screenings and alert people can reveal its diagnosis. In Iran, the prevalence of high blood pressure is based on statistics that extracted from the heart project is 23.2% of the population aged 35 to 65, which is 25.1% in men and 21.5% in women (Jebel Ameli et al., 2010).

Blood pressure can have adverse effects on mental health, in addition to undesirable physical effects, such as atherosclerosis, stroke, and renal failure.



The prevalence of clinical depression in Iran is higher than in some other countries, and the probability of being female (30.5%) is depression more than men (16.7%) (Kaviani et al., 2002). According to the World Health Organization, about 12% of the population of the various countries suffer from degrees of depression. Some scholars also believe that about 30 percent of people, especially in the West, develop depression during their lifetime (World Health Organization, 2008).

This disorder is associated with changes in the lifestyle of the individual by decreasing physical activity, increasing smoking and increasing appetite or weight gain, self-causing other chronic diseases, causing problems in optimizing the control of other chronic diseases (Kheirabadi et al., 2011).

A special and limited diet of sodium, a loss of a delicious taste of food and coercion to follow it, a feeling of being isolated from others, a sense of being sick, and avoiding getting out of the house due to frequent urination due to diuretics and impairment of the image. Self-medication after taking aldosterone antagonists such as spironolactone, insomnia, fatigue and erectile dysfunction due to side effects of low blood pressure medications such as beta blockers, secondary depression due to decreased thyroid function after amiodarone use, limitation of pleasure activity Because of fear of physical damage and bleeding after taking anticoagulants



In the study of Watkins et al., Anxiety was considered as an important factor in the mortality of cardiovascular patients, especially when accompanied by another disorder, such as depression (Ebadi, 2011). Therefore, considering that anxiety and depression are a factor in the direction Nose and increase the harmful cardiac outcomes in high blood pressure patients, and failure to pay attention to them can reduce the chance of success and improve other cardiovascular risk factors. It seems that screening for depression and anxiety in cardiovascular patients in different environments such as hospital, office, clinic and rehabilitation centers. To allow negative screening of negative emotional disorders and their timely treatment in this group of patients. Because their timely and appropriate treatment can improve the outcomes of high blood pressure can be a reason for awareness raising and screening approaches in these patients (Ebadi, 2011).

#### MATERIALS AND METHOD

This is a causal-comparative study that seeks to compare the effects of depression in patients with and without hypertension in Amir al-momenin Hospital in Zabol. The statistical population of this study included people with high blood pressure, who, after referral to the office or referral to the emergency department, were transferred to the intensive care unit of the heart and the heart department. They were selected by random sampling by referring to these sections on a daily basis in a sample of 30 individuals. First, the list of names of all those who identify a cardiologist (cardiologist), who has high blood pressure and hospitalized in the above sections, was prepared, and then from this list, the number was selected randomly, with it They were interviewed and after explaining the research goals and satisfying them, those who had the criteria for entering the research were selected and invited to participate in the research. The sample size in this research is 120. At the beginning of the completion of the questionnaire, the research objectives were described for the study group. In this study, Beck Depression Inventory was used to collect 60 high-blood pressure patients (30 women and 30 men) to complete the questionnaires. Sixty family members and colleagues with the same level of illiteracy as their peers after completing the research goals for each family member and their complete satisfaction, questionnaires were completed.

Beck Depression Inventory was used to collect information. The questionnaire consists of 21 groups of depression symptoms, each of which consists of 5-4 options. Beck test is for people over 13 years old and has at least 6 appropriate literacy classes. The interviewer selects each option for the authorities, and selects the references to each of them according to their status. The subject must carefully read the sentences of each group, line the number of the sentence that spells out more than a few other sentences of his current state.

These sentences measure the most mild to severe disturbance in that aspect. In each case, the subject can score between 0-3 (0 indicates the absence of symptoms of depression and 3 indicates the severity of the disorder in that aspect). To score this test, the scores that the subject draws around their circle, we compute the sum of the scores. The sum of scores can fluctuate between 0-63 (Rajabi et al., 2011). In this scale, 9 to 9 is a sign of normal depression, 10-14 is a sign of depression, a score of 15-20 is mild depression, 30-21 is a sign of moderate depression and a 30-up score is a sign of severe depression (Begg et al., 2007). By examining the researches using this tool, Beck and his colleagues found that their coefficient of validity was varied from 0.84 to 0.86 in terms of the interval between running times and the type of population tested



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using the test method. Beck and colleagues again regained the coefficient of test-retest reliability in one-week interval of 0.93 in 1996.

In order to collect the data, the researcher then came up with questionnaires and coordinated with the authorities to the heart wards of Amir al-momenin Hospital. After communicating with patients with high blood pressure, they gave a brief description of the research and its purpose, and they were asked to complete the questionnaires. For each patient, the family of patients was interviewed and after completing the research goals, the questionnaires were completed. The questionnaires were filled in with spss16 software and completed by the index Descriptive statistics and variance analysis with respect to confidence coefficient 95% for all variables were analyzed.

# FINDINGS

The findings showed that there is a significant difference between the two groups in terms of depression (p = 0.001, df = 58, t = 11.39), and patients with hypertension suffer from more depression.



Table	1: Differences	s in depression	scores between	two grou	ns of natients
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	Depr	ession	Variables	
df	SD	Х	Number	Statistical index
58	6.16	9.13	60	Healthy
58	9.69	33.03	60	Patient
	11	.39	Т	
	0.0	001	Р	

In other words, there is a significant difference between the two groups of patients with high blood pressure and normal people in terms of depression.

## DISCUSSION

According to the research findings, there is a significant difference between mean scores of depression in males and females in patients with high and unchanged hypertension in Zabol. The results of this study are consistent with the following findings. The relative frequency of depression in hypertensive patients was 63%. Depression in all three levels of this study was 9% mild, moderate and severe in the hypertensive group significantly more than the non-affected group. Rob Keane and colleagues showed that the relative prevalence of depression in patients with hypertension is three times that of non-hypertensive patients, and patients with depression are less likely to use antihypertensive drugs (Rabkin et al., 1983).

Iraqchi and colleagues reported a high incidence of depression in this group of patients (48.6%). (Araghchian et al., 2010) There are other studies that support the relationship between hypertension and depression (Dimsdale, 1988). In a 20-year follow up study, patients with depressive symptoms were more likely to develop hypertension over time than non-depressed people (Jonas, Lando, 2000). These findings suggest that the relationship between depression and hypertension can be a multi-agent two-way relationship, some of which play a predisposing role and some supportive role, and the exact recognition of these factors with the goal of interventional planning also require more studies or stronger methodologies. The most

commonly reported cases of depression in people with high blood pressure were antihypertensive drugs. In the present study, the consumption of more than one Antihypertensive drug was associated with a significant increase in the relative frequency of depression.

In a study, it has been shown that the prevalence of depression among consumers of more than one antihypertensive drug was significantly higher than those who were treated with antihypertensive monotherapy (Johansen et al., 2011). A group of researchers reported that depression itself causes a decrease in blood pressure, but antidepressants are hypertension (Lichtman et al., 2008). On the other hand, it has been shown in a study that some antihypertensive drugs, such as beta-blockers, are responsible for depression (Ried et al., 2005).

### CONCLUSION

The findings of this study emphasize the importance of considering the psychological conditions in patients with hypertension and according to the results, hypertensive patients are at risk of depression and the probability of simultaneous occurrence of these two diseases in life expectancy. Considering the high prevalence of depression in this study and other studies, screening of depression and psychiatric counseling in people with hypertension should be considered more seriously. Also, family support can partly reduce this psychological state in patients with hypertension.

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