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# The relationship between mindfulness and depression in people with kidney failure

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**ABSTRACT:** Mindfulness is a cognitive process in which the mindful person, without judgment and with acceptance, focuses on experiencing the feelings and events that are currently happening in or around him. The aim of this study was to investigate the relationship between mindfulness and depression in kidney patients. For this purpose, a sample of 100 patients with renal failure referred to the Center for Special Diseases and Amir Al-Momenin Hospital in Zabol in the first six months of 2016 were selected. The Kentucky Mindfulness Skills and Beck Depression Inventory tools were used to collect information. The results showed that mindfulness has a negative and significant relationship with depression (p = 0.01). Also, the components of mindfulness each have a separate negative and significant relationship with depression. These results show that increasing mindfulness in people reduces their depression.

**Keywords:** Mindfulness, Depression, Kidney failure.

### INTRODUCTION

The body and the mind as two aspects of human existence always affect each other and the condition of one of them can determine the condition of the other. Physical illnesses and mental disorders affect each other from different dimensions (Zadok et al., 2015).

Today, health promotion is emerging as a new horizon in the health care system, and the focus on illness and treatment is shifting over time to well-being and care. Health promotion means maximizing the potential of individuals. Therefore, chronic patients, despite having physical limitations, should be able to understand health in other dimensions, including mental, psychological and social aspects. Therefore, the totality of individuals in care should be considered and only the physical dimension should not be considered in the care of these patients. These patients usually experience a wide range of negative emotions, including anxiety, anger, and depression. Patients with chronic physical and incurable diseases due to the difficult and frustrating condition of the disease suffer from many mental disorders and problems, the most important and most common of which are anxiety and depression (Omidnia, 2010) and self-respect and self-respect. The disease is located; especially when the disease leads to a reduction of maps, valuable activities and changes in social relationships and the patient's previous activities become difficult or impossible due to the disease. (Ibid.)

In fact, depression is one of the most common mood disorders that is mainly associated with social and psychological factors caused by environmental events, so that about 10% of people have experienced at least one period of depression during a year of life. There are about 121 million people in the world and in our country, ratios between 4.2% and 37% for the general prevalence of this disorder in the general population. Depression is one of the most common psychiatric illnesses in the literature. 450 BC, Hippocrates defined it as melancholy. Some see depression as a natural reaction to life, and some see it as a disease. In addition to the genetic aspects, depression has often been associated with social and psychological factors resulting from environmental events. Its prevalence is about 15% during life and reaches 25% in women (Shamshiri et al., 2006). Depression is a mood disorder in which a person feels sad, unhappy and discouraged and is unable to feel joy and happiness. Regardless of race, class and social status, depression can occur in any person. Its special symptoms are dissatisfaction, loss of energy and

interests, low self-esteem, feelings of sadness and guilt, changes in appetite and sleep pattern (Zarepour et al., 2012).

Mindfulness involves a transient, judgmental awareness of what is happening now. Mindful people perceive internal and external realities freely and without distortion and have a great ability to face a wide range of thoughts, emotions, and experiences, both pleasant and unpleasant. Factors of mindfulness include observing, describing, acting with awareness, not judging and not reacting to internal experiences (Gholami, 2012).

Mindfulness means paying attention to the present in specific, purposeful, and judgmental ways. Mindfulness means being in the moment with whatever it is now, without judgment and without commenting on what is happening; It means the experience of pure reality without explanation. The basis of mindfulness is derived from Buddhist meditation exercises that increase the capacity for consistent and intelligent attention and awareness (which is beyond thought). Meditation and mindfulness exercises lead to an increase in the ability of self-awareness and self-acceptance in patients. Mindfulness is not a method or technique, although many different methods and techniques have been used in doing so. Mindfulness can be described as a way of "being" or a way of "understanding" that requires understanding personal feelings (Kaviani et al., 2008).

Mindfulness is a receptive awareness without judging current events. Awareness that is created by focusing on the goal, in the current moment, without inference moment by moment. Mindful people perceive internal and external realities freely and without distortion, and have a great ability to deal with a wide range of thoughts, emotions, and experiences (both pleasant and unpleasant). Mindfulness is positively associated with peace of mind and psychological health, while self-awareness is associated with low levels of psychological well-being. Mindfulness can be considered as the ability to self-regulate attention and direct it to the task. Accordingly, thoughtful regulation of attention is a central part of mindfulness. Mindfulness, stimulus observation Internal and external ions, as they happen, are without any judgment and prejudice, and in fact it is a skill that allows people to receive events in the present less than the amount that is distressing (Akbari et al., 2013).

A person who once held a responsibility or responsibilities in a social network, gradually needs the help of others to fulfill even the most basic needs related to self-care, and this is one of the most important factors that attack the core of human narcissism and cause Unpleasant moods and depression occur. Pain is one of the factors that causes depression. Chronic pain causes feelings of failure, followed by depression as a common consequence. So there is a connection between depression and physical illness. Depression also worsens physical illness (Informant, 2009). Although a variety of pharmacological and psychological therapies for depression have been studied and great strides have been made in developing treatment interventions, the problem of depression remains a strong diagnosis. Therefore, reviewing new treatment approaches to create more effective interventions in the field of prevention, treatment and prevention of recurrence of depression is one of the research priorities in this field (Gholami, 2012).

One of the new approaches in this field is mindfulness. Therefore, considering the above, the question arises as to what is the relationship between mindfulness variables and depression in Mitella patients with renal failure. Therefore, the aim of this study was to investigate the relationship between mindfulness variables and depression in Mitella patients with renal failure.

#### Research background

In a study by Habibi et al. (2013) entitled "The effectiveness of mindfulness therapy on improving the quality of life of drug abusers (opium): improving physical and psychological health" concluded that mindfulness group therapy training program can be part of population intervention programs Drug abusers and improve their quality of life.

Masoumian et al. (2013) in the study "The effect of mindfulness-based stress reduction therapy on the quality of life of patients with chronic low back pain" concluded that the results of the Human-Whitney test indicated that mindfulness-based stress reduction therapy It increased the quality of life in the experimental group compared to the control group. According to the research findings, mindfulness-based stress reduction therapy leads to improved quality of life and the application of coping strategies with pain in patients with chronic low back pain.

In a study by Khaleghipour and Zargar (2012) entitled "The effectiveness of mindfulness-based cognitive therapy on depression and life expectancy of mothers of mentally retarded children" concluded that mindfulness-based interventions can reduce depression and increase hope in mothers of mentally retarded children. Therefore, the implementation of these programs in all rehabilitation centers for children with mental disabilities of the Welfare Organization to prevent psychological trauma of mothers can be effective.

Jahangirpour (2012) in the study "The effect of group mindfulness training on anxiety, depression, hostility and electrocardiographic changes (EEG) in people with coronary artery disease" concluded that group mindfulness training has a significant effect on reducing depression, hostility and anxiety In men with coronary heart disease.

In the study of Kaviani et al. (2008) entitled "The effect of mindfulness-based cognitive therapy on the quality of life of depressed (non-clinical) people", the findings show that mindfulness-based cognitive therapy increases quality

of life and reduces depression. Mindfulness-based cognitive therapy exercises seem to affect the cognitive system and information processing by increasing people's awareness of the present through techniques such as attention to breath and body, and attention to the here and now.

In a study by Stavrola et al. (2014) entitled "Psychological aspects of chronic renal failure", they concluded that the incidence of chronic renal failure and treatment methods such as hemodialysis and kidney transplantation, leading to changes in lifestyle, health status and It plays a social role that all these factors affect the quality of life of patients in some way and the complexity and chronic nature of the disease affect the quality of life of patients with chronic kidney failure and their health and reduce life expectancy. Therefore, the role of the nephrology nurse is very important for the implementation of effective nursing interventions and psychological support during their treatment.

Eljutson et al. (2010) in a study examined "face-based cognitive behavioral therapy and online mindfulness exercises for patients with irritable bowel syndrome." The experimental group reported a 42% reduction in initial symptoms, while the patients in the control group reported a 12% reduction in initial symptoms at the end of the course. The results showed that cognitive-behavioral therapy based on exposure and mindfulness given through the Internet can be effective in treating patients with irritable bowel syndrome, relieve general symptoms and increase quality of life.

Morone et al. (2008) in "Effects of mindfulness meditation in the elderly with chronic pain" found that mindfulness training has positive effects on pain, attention and sleep issues. The results of their study also showed that mindfulness training promotes the development of psychological well-being in individuals, which has an immediate effect on mood and long-term effects on quality of life. In fact, they found that increased mindfulness was associated with increased psychological well-being and physical well-being.

Skelman (2004) in his study "Prevention of Adult Depression" randomly divided 231 University of Pennsylvania students into experimental and control groups and trained them in mindfulness-based cognitive therapy to prevent anxiety and depression. After a one-year follow-up period, participants in the training course had significantly less anxiety, depression, and dysfunctional attitudes than the control group.

#### Research Methods

In terms of the purpose of the research, it is an applied descriptive-correlational type. All patients with renal failure referred to the Center for Special Diseases and Amir Al-Momenin Hospital in Zabol in the first six months of 2016. According to the research method, 100 people from the statistical population Using voluntary sampling method, selection and research will be done on them. The selected individuals will fill in the desired questionnaires in accordance with the specific conditions of each questionnaire.

The research tools include questionnaires of mindfulness and depression. By referring to the Center for Special Diseases and Amir Al-Momenin Hospital in Zabol and installing an announcement about the desired research, the volunteers referred to a psychologist and announced their readiness. Then, at an appropriate time, the volunteers were called to the psychologist's office and performed the tests. The text of the announcement was that psychological tests to measure mindfulness, and the degree of depression, along with the announcement of the result will be performed privately and anonymously in the psychologist's office, and this information will be used anonymously in psychological research. After this step, after selecting the sample, the questionnaires were distributed among the samples and they were asked to carefully complete the existing questionnaires. It took about 15 minutes for each person to complete the questionnaires. The performed tests were scored according to the relevant instructions and the obtained data were analyzed using SPSS statistical software.

# Research Findings

The first hypothesis

There is a significant relationship between mindfulness and depression in patients with kidney disease.

Minimum	maximum	standard deviation	mean	number	
63/00	151/00	19/22	111/05	100	Mindfulness
30/00	58/00	5/99	44/75	100	Depression

Table 1 shows the results of descriptive statistics including mean, standard deviation, minimum score, maximum score for the variables of mindfulness and depression. The sample size previously stated is 100 patients with kidney disease. According to this table, the mean of mindfulness and depression are 111.05 and 44.75, respectively, and the standard deviation of these variables is 19.22 and 5.99, respectively.

Table 2. examines the correlation between mindfulness and depression variables

sig	r	n	
0/000	-0/694	100	Mindfulness
0/000	-0/094		Depression

In Table 2, Pearson correlation coefficient between mindfulness and depression questionnaires is reported - 0.694 with a significance level of 0.000. In other words, at the 99% significance level, there is a significant relationship between mindfulness and depression. It is also a type of negative relationship that can be said that there is a negative and inverse relationship between mindfulness and depression, that is, with increasing each mindfulness, depression decreases, and vice versa, with decreasing mindfulness, depression increases.

# The second hypothesis

There is a significant relationship between observation variable and depression in patients with renal failure.

Table 3. Descriptive indicators of observation and depression variables					
Minimum	maximum	standard deviation	mean	number	_
63/00	151/00	19/22	111/05	100	Mindfulness
30/00	58/00	5/99	44/75	100	Denression

Table 3 shows the results of descriptive statistics including mean, standard deviation, minimum score, maximum score for observation variables and depression. The sample size previously stated is 100 patients with kidney disease. According to this table, the mean of observation and depression are 17.36 and 44.75, respectively.

Table 4. A study of the correlation between observational variables and depression

sig	r	n	
0/000	-0/694	100	Mindfulness
0/000	-0/094		Depression

In Table 4, Pearson correlation coefficient between observation and depression variables is reported to be -0.224 with a significance level of 0.015. In other words, at the 95% significance level, there is a significant relationship between observation and depression. In addition, it is a type of negative relationship that can be said that there is a negative and inverse relationship between the observer variable and depression, that is, with increasing observation, depression decreases and vice versa, with decreasing mindfulness, depression increases.

#### The third hypothesis

There is a significant relationship between unlabeled description variable and depression in patients with renal insufficiency.

Table 5. Descriptive Indicators Descriptive variables and depression

Minimum	maximum	standard deviation	mean	number	
63/00	151/00	19/22	111/05	100	Mindfulness
30/00	58/00	5/99	44/75	100	Depression

Table 5 reports on mean, standard deviation, minimum score, maximum score for descriptive variables and depression. The sample size previously mentioned is 100 patients with kidney disease. According to this table, the mean of observation and depression are 5127 and 44.75, respectively.

Table 6. examines the correlation between descriptive variables and depression

sig	r	n	
0/000	-0/694	100	Mindfulness
0/000	-0/094	100	Depression

In Table 6, Pearson correlation coefficient between descriptive and depression questionnaires has been reported -0.474 with a significance level of 0.000. That is, at the 99% significance level, there is a significant relationship between descriptiveness and depression. It is also a type of negative relationship that can be said that there is a negative and inverse relationship between descriptiveness and depression, that is, with increasing descriptive score, depression decreases and vice versa, with decreasing, depression increases.

## The fourth hypothesis

There is a significant relationship between performance variable with awareness (concentration) and depression in patients with renal failure.

Table 7. Descriptive indicators of concentration and depression variables

Minimum	maximum	standard deviation	mean	number	
63/00	151/00	19/22	111/05	100	Mindfulness
30/00	58/00	5/99	44/75	100	Depression

In Table 8, Pearson correlation coefficient between concentration and depression variables is reported -0.466 with a significance level of 0.000. In other words, there is a significant relationship between concentration and depression at the 99% significance level. It is also a type of negative relationship that can be said that there is a negative and inverse relationship between concentration and depression, that is, with its increase, depression decreases, and vice versa, with its decrease, depression increases.

## Fifth Hypothesis

There is a significant relationship between non-judgmental admission variable and depression in patients with renal failure.

Table 9. Descriptive indicators of acceptance and depression variables

sig	r	n	
0/000	-0/694	100	Mindfulness
0/000	-0/694	100	Depression

Table 9 shows the results of descriptive statistics including mean, standard deviation, minimum score, maximum score for observation variables and depression. The sample size previously stated is 100 patients with kidney disease. According to this table, the mean of acceptance and depression variables are 33.33 and 44.75, respectively.

Table 10. examines the correlation between acceptance and depression variables

Minimum	maximum	standard deviation	mean	number	
63/00	151/00	19/22	111/05	100	Mindfulness
30/00	58/00	5/99	44/75	100	Depression

Table 10 shows Pearson correlation coefficient between acceptance and depression variables -0.363 with a significance level of 0.000. In other words, there is a significant relationship between acceptance and depression at the level of 99% significance. In addition, it is a type of negative relationship that can be said that there is a negative and inverse relationship between the acceptance variable and depression, ie with increasing the acceptance variable, depression decreases and vice versa, with decreasing, depression increases.

## Discussion and conclusion

The results of research hypotheses show a positive and significant relationship at the level of 99% significance between the variables of mindfulness of observation, descriptiveness, concentration, acceptance and depression. Due to the negative relationship, there is an inverse relationship between mindfulness and depression. In other words, with increasing mindfulness, depression decreases and vice versa. These results are based on the findings of Dehestani (2015), Khaleghipour and Zargar (2014), Farhadi et al. (2013), Jahangirpour (2012), Kaviani et al. (2008) and Skelman (2004) who examined the effect of mindfulness-based therapies on group depression. Different experiments are performed, it is consistent. It is also consistent with a study by Crane et al. (2010) who found in a review study that mindfulness-based approaches prevent depression and reduce stress among school teachers.

In explaining these findings, it can be said that mindfulness means paying attention to the present in a specific, purposeful and non-judgmental way. Mindfulness means being in the moment with everything that is now, without judging or commenting on what is happening; It means experiencing pure reality that increases the capacity for consistent and intelligent attention and awareness. Meditation and mindfulness exercises lead to increasing the ability of self-awareness and self-acceptance in patients (Kaviani et al., 2008).

Mindfulness-based therapies through regular meditation exercises increase a person's moment-by-moment awareness of their feelings and affections, and through this they learn that by becoming aware of their negative emotional thoughts, they will judge these thoughts non-judgmentally. Express receptively and calmly. This method

helps to create, maintain and promote coping styles, reduce stress, mood disorders and even improve the function of the patient's immune system (Habibi and Hanasabzadeh Esfahani, 2014). They can also be effective in increasing the coping skills of both the symptoms of depression and the symptoms of fear, anxiety and psychological worry (Dehestani, 2015). Also, the findings of this study are consistent with what is stated in the theory of Tizdel et al. According to this theory, our mind interprets the events that take place and causes reactions and feelings of stability. In people who are prone to depression, the mind is constantly focused on distressing and negative thoughts, which in turn leads to more persistence of depression (Tizdel et al., 2000). It can also be said that mindfulness modulates emotions without judgment and increases awareness of mental and physical emotions and helps to clearly see and accept emotions and physical phenomena as they occur (Neif, 2003). Therefore, it can modify Patients' mental health scores play an important role in justifying the fact that research has shown that mindfulness therapy helps to moderate negative behaviors and negative thoughts and leads to positive health-related behaviors. Therapy increases the presence of the mind, attention and awareness of the physical and mental emotions, and leads to a feeling of trust in life, deep compassion, and real acceptance of life events (Meith, 2008). Because one of the important aspects of mindfulness therapy is that people learn to deal with negative emotions and thoughts and experience mental events in a positive way (Boehmiger, 2012).

Mindfulness therapy helps to regulate negative behaviors and negative thoughts and promotes positive health-related behaviors. In other words, it can be said that the treatment of the presence of the mind increases a person's attention and awareness of physical and psychological feelings and leads to a feeling of trust in life, deep compassion, and real acceptance of life events (Mack, 2008). Because one of the important aspects of mindfulness therapy is that people learn to deal with negative emotions and thoughts and experience mental events in a positive way (Kazemini, 2011). Tizdel states that the non-judgmental view of thoughts that is encouraged in the conscious mind contrasts with the rumination patterns that characterize negative emotional events. When a person turns his attention to present-day aspects such as breathing, his rumination decreases (Wright et al., 2009). Mindfulness, through breathing and the use of body parts, awareness of events, awareness of the body, voice, thoughts and acceptance of thoughts without judging and judging about them, leads to a change of specific emotional meanings and realizes that thoughts before They are simple thoughts that are a reflection of reality, and these negative and anxious thoughts are not necessarily correct (Kazemini et al., 2011).

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