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Hopelessness and Motivational Interviewing in Depression Patients with Suicidal Ideation

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ABSTRACT

Objective: Depression and hopelessness leading to suicide is a serious problem worldwide. It has been reported that hopelessness, which is stated to be important in the prevention of suicidal behavior, can be reduced with specific methods. The aim of this study is to determine the effect of motivational interviewing on hopelessness in patients with depression who are at risk of suicide.

Methods: The research has the characteristics of experimental research. The research sample consisted of 89 depressive patients, 43 of whom were in the experimental group and 46 were in the control group. Patients with a score of 6 and above by applying the Beck Suicidal Ideation Scale to the patients were included in the study sample. Then, "Personal Information Form" and "Beck Hopelessness Scale" were applied to the patients. Motivational interview was applied to the patients in the experimental group.

Results: The vast majority (47.2%) of the patients in the study reported that they attempted suicide. A positive correlation was found between the Beck Scale for Suicidal Ideation and the Beck Hopelessness Scale mean scores. It was observed that the mean Beck Hopelessness Scale scores of the experimental group, who applied motivational interviewing, decreased significantly in the post-test (8.53 ± 2.14) compared to the pre-test (11.58 ± 3.23) ($P < .001$).

Conclusion: The findings of the study showed that motivational interviewing can be used in coping with hopelessness in patients with depression at the risk of suicide. It is recommended for psychiatric nurses to utilize motivational interviewing in order to reduce hopelessness.

Keywords: Depression, suicide risk, hopelessness, motivational interviewing, psychiatric nursing

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INTRODUCTION

Depression is one of the psychiatric disorders that cause hopelessness. Most of the patients diagnosed with depression apply to the physician with complaints of unhappiness and hopelessness. Among all the symptoms of depression, the situation that is closely related to hopelessness is suicidal ideation.[1] Hopelessness was stated by Beck et al[2] (1985) as a motivational/cognitive state characterized by the presence of negative expectations about the future. Hopelessness is defined as a person's tendency to have a negative perspective or a set of negative expectations for the future.[3] Individuals with a sense of hopelessness are generally characterized by having a negative view of the future, believing that

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nothing will go right for them, their problems cannot be solved, they cannot achieve what they are trying to do, and their important goals cannot be achieved.[4]

Hopelessness plays a central role in the 2 main cognitive theories of depression: Beck's original cognitive theory[5] and the hopelessness theory of depression.[6] Both theories have been tested empirically. In the original Beck's cognitive theory, hopelessness was a part of life.[7] Beck et al[8] (1990) suggested that patients' conceptualization of their condition as untenable leads them to believe that suicide is the only appropriate way to deal with seemingly insoluble problems. They also suggested that a person with depression would remain stable and not suicidal, unless they developed irrational beliefs and feelings of hopelessness.[9] Abramson et al[6] (1978) defined hopelessness as a factor mediating the relationship between a stressful event and the onset of depression.[10] In the hopelessness theory, vulnerable people tend to attribute negative life events to stable and global causes, thus they perceive that they are "flawed, worthless, or incomplete," and this predisposes them to the suicidal ideation.[11] In a study, it was determined that patients with depressive disorder show a persistent experience of hopelessness, the intensity of which varies within and between patients, the degree of hopelessness tends to increase during depression and weakens after recovery.[7]

There are studies showing that hopelessness is a situation that increases the possibility of suicide.[12-14] It was reported that hopelessness has a strong connection with suicidal ideation and is an important factor leading individuals to commit suicide.[15] In a study conducted in our country, it was stated that there is a relationship between the level of hopelessness and suicide attempt and depression.[16]

Motivational interviewing is a humanistic, person-centered approach designed to help individuals resolve indecision and enable them to plan for change. This person-centered approach aims to make changes in the behavior and lifestyle of the individual by helping the individual identify the personal obstacles to change and specific ways to overcome these difficulties.[17] In the literature, it was stated that the motivational interviewing technique is effective in various lifestyle problems.[18,19] Motivational interviewing requires using certain interviewing skills to facilitate the transition of the person from the stages of change to the desired health behavior through actions, such as dealing with the patient, focusing the work on a specific behavior, revealing the person's motivation for change, developing a change plan, and strengthening commitment to change.[20]

The aim of this study is to show whether Motivational Interviewing (MI) has a significant and positive effect on reducing the hopelessness of depressed patients who apply to psychiatry and are at risk of suicide. The lack of studies in the national literature describing motivational interviewing and its effect on hopelessness makes the research powerful. The hypothesis of the research determined that "motivational interviews are effective in reducing the hopelessness level of patients with depression at risk of suicide."

MATERIAL AND METHODS

The research is the type of experimental research with a control group, pre-test, post-test, and repeated measures. This study was conducted with depression patients with high suicide risks who were admitted to a Training and Research Hospital's Psychiatry clinic/service and emergency service.

The criteria for inclusion in the study were being admitted to the psychiatry unit or emergency unit, being diagnosed with depression according to Diagnostic and Statistical Manual of Mental Disorders (DSM)-V, having a score of 6 and above on the Beck Scale for Suicidal Ideation (BSSI), being 18 years of age or older, being literate, speaking Turkish, being able to understand the study, and giving the informed consent.

The population of the study consists of depression patients who applied to a Training and Research Hospital Psychiatry service/outpatient clinic in Gaziantep between the dates of July 20, 2021, and November 20, 2021. The G Power program was used to calculate the sample size. Confidence interval was calculated as $\alpha = 0.05$, power of the test $(1 - \beta)$ was 0.95, a total of 84 patients, 42 of whom were in the experimental group, and 42 of them were in the control group.[21] The BSSI was administered to 126 patients diagnosed with depression, and the study was initiated with 93 patients (46 experimental and 47 control) who scored 6 or more. During the course of the study, 4 patients were excluded from the study (1 patient with a bipolar switch, 3 patients did not attend the appointments). The study was completed with 89 patients, 43 in the experimental group and 46 in the control group.

The patients diagnosed with depression were first applied to the Beck Scale for Suicidal Ideation, and the patients with a score of 6 and above were included in the research sample. Randomization method was used to determine the patients in the experimental and control groups. The patients did not have any other psychiatric diagnosis other than depression. In the randomization process, the order of arrival of the patients for the examination was taken into account, odd numbers were included in the experimental group, and even numbers were included in the control group.

Data Collection

Before the data were collected, the purpose of the study was explained to the participants, and written and verbal consents were obtained. The data were collected using the "Personal Information Form," the "Beck Scale for Suicidal Ideation," and the "Beck Hopelessness Scale."

Personal Information Form: This form consists of questions including the strains of socio-demography and illness.

Beck Scale for Suicidal Ideation: This scale investigating the concept of suicidal ideation was developed in 1979 by Beck et al. Its Turkish validity and reliability studies were made by Dilbaz et al[22] (1995) and Özçelik et al[23] (2015). The total score obtained from the scale is 0 (lowest) and 38 (highest), and a high score means that suicidal ideation is prominent and severe.[22,23] A score of 6 or more obtained from the scale in adults is considered to be the cut-off value for the presence of clinically significant suicidal tendency.[24] In the validity and reliability study conducted by Özçelik et al[23] (2015), the Cronbach alpha value was found to be 0.84. A score of 6 or more obtained from the scale in adults is considered to be the cut-off value for the presence of clinically significant suicidal tendency.[24]

The Beck Hopelessness Scale: It is a 20-item self-assessment type scale developed by Beck et al[25] (1974). In the scale, it is aimed to determine the degree of pessimism of the individual about the future. The questions are answered as "true or false" and reflect negative expectations. The score range of the scale is 0-20. Validity and reliability studies of the scale in our country were conducted.[16,26]

The BHS score can be divided into 4 severity levels as minimum (0-3), mild (4-8), moderate (9-14), and intense (15-20).[27]

Statistical Analysis

The data collected for the study were analyzed in Statistical Package for Social Sciences (IBM SPSS Corp., Armonk, NY, USA) 22 package program. The percentages, arithmetic means and standard deviations, Chi-square test, paired sample *t*-test, analysis of variance in repeated measures, and correlation and regression analysis were used in the evaluation of the data. The significance level was accepted as $P < .05$.

Research Process

The study was conducted with patients who were diagnosed with depression after a psychiatric evaluation by an outpatient clinic physician. Patients diagnosed with depression were directed to the researcher by a single physician. After signing the informed consent form, the BSSI was administered to the patients (n = 126). Patients with a score of 6 or more on this scale were considered to be at risk of suicide and included in the study (n = 93). Afterward, the Personal Information Form and Beck Hopelessness Scale (BHS) were applied to the patients at risk of suicide. After the first interview, a total of 3 motivational interviewing sessions were conducted with the patients included in the experimental group on the specified days each week. Motivational interviewing sessions were conducted by the researcher in the psychiatry clinic interview room of the hospital. In the first interview and the last interview, the BHS was filled in and the evaluation was made. Throughout the study, patients in the experimental and control groups continued to receive their routine treatments. During this period, no intervention was applied to the control group other than their routine treatments (Figure 1).

The Process of Motivational Interviewing

Motivational interviews were conducted by the researcher. The researcher received motivational interview training before the study. A program consisting of 3 motivational interviewing sessions, using motivational interviewing principles, was applied to improve hope in individuals with depression in the intervention group. The objectives of each meeting were briefly outlined below.

- In the first interview, it was aimed to determine the resistance of patients to change.
- In the second interview, it was aimed to understand the symptoms of disease and the benefits of treatment and to examine the state of hopelessness.
- In the third interview, it was aimed to discuss the strategies for the prevention of hopelessness.

Ethical Principles of the Research

Before starting the research, written and verbal permission was obtained from the center where the research is conducted and presented to the Gaziantep University Clinical Research Ethics Committee of a University and approved (Date: July 7, 2021, decision no: 2021/245). Before starting to collect research data to protect the rights of individuals in the scope of the research, informed consent was obtained by explaining the purpose and process of the research.

RESULTS

When the socio-demographic characteristics of the patients included in the study were analyzed (Table 1), it was observed that the majority of the patients were female (61.8%). 51.7% of the patients were in

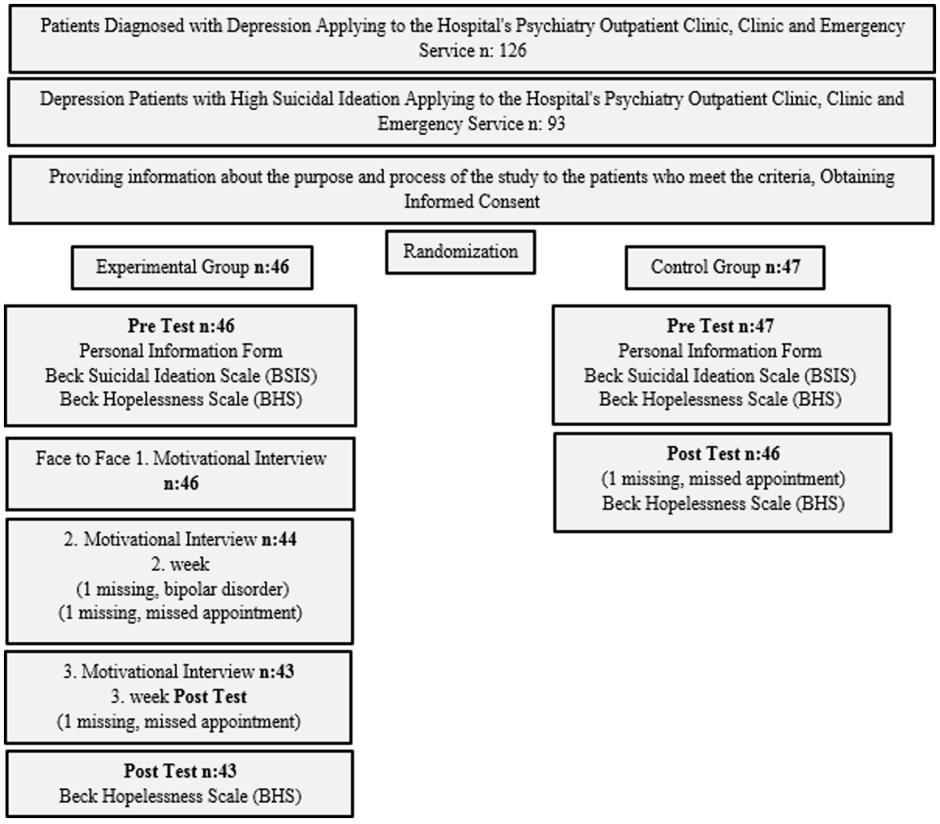

Figure 1. Research flow chart.

Table 1. The Comparison of Patients by the Socio-demographic Characteristics

Characteristics		Group: Experimental n	Experimental %	Control n	Control %	Total n	Total %	Test and *P* Values
Gender	Female	29	67.4	26	56.5	55	61.8	$X^2 = 1.123$
	Male	14	32.6	20	43.5	34	38.2	$P = .289$
Age	18-35	16	37.2	13	28.3	29	32.6	$X^2 = 0.993$
	36-50	20	46.5	26	56.5	46	51.7	$P = .609$
	51-65	7	16.3	7	15.2	14	15.7	
Educational level	Primary school	16	37.2	17	37.0	33	37.1	$X^2 = 0.016$
	Middle-high school	22	51.2	24	52.2	46	51.7	$P = .992$
	University	5	11.6	5	10.9	10	11.2	
Marital status	Married	26	60.5	26	56.5	52	58.4	$X^2 = 0.142$
	Single/widow	17	39.5	20	43.5	37	41.6	$P = .706$
Income level	More than expenses	2	4.7	7	15.2	9	10.1	$X^2 = 2.791$
	Equal to expenses	22	51.2	22	47.8	44	49.4	$P = .248$
	Less than expenses	19	44.2	17	37.0	36	40.4	
Professional status	Housewife	11	25.6	8	17.4	19	21.3	$X^2 = 1.774$
	Officer worker	15	34.9	19	41.3	34	38.2	$P = .879$
	Free	5	11.6	5	10.9	10	11.2	
	Retired	5	11.6	4	8.7	9	10.1	
	Unemployed	4	9.3	7	15.2	11	12.4	
	Student	3	7.0	3	6.5	6	6.7	
Reasons for hopelessness	Ill-treatment/violence	10	23.3	3	6.5	13	14.6	$X^2 = 10.071$
	Accident	6	14.0	3	6.5	9	10.1	$P = .122$
	Chronic physical illness	6	14.0	8	17.4	14	15.7	
	Harassment/rape	3	7.0	5	10.9	8	9.0	
	Loss/death	4	9.3	5	10.9	9	10.1	
	Financial loss	2	4.7	9	19.6	11	12.4	
	Mental illness	12	27.9	13	28.3	25	28.1	
Suicide attempt	Existent	21	48.8	21	45.7	42	47.2	$X^2 = 0.090$
	Nonexistent	22	51.2	25	54.3	47	52.8	$P = .764$
Total		43	100.0	46	100.0	89	100.0	

the age range of 36-50 years, and the majority (51.7%) had middle/high school level of education. 58.4% of the patients were married, and 49.4% of them had income level equal to expenses. 21.3% of the patients were housewives, and 38.2% of them were officers/workers. Among the reasons pushing patients to hopelessness, the highest rate was determined as the mental illness (28.1%). This rate is followed by chronic physical illness (15.7%), ill-treatment/violence (14.6%), and financial loss (12.4%). The vast majority of patients (47.2%) reported that they attempted suicide. In terms of socio-demographic characteristics, both groups were found to be homogeneous ($P > .05$).

As seen in Table 2, the mean BSSI score was 19.08 ± 4.80, and the mean BHS score was 11.51 ± 3.14. When the relationship between the scales was evaluated, a significant positive correlation was found ($P < .05$).

Table 2. The Beck Scale for Suicidal Ideation and the Beck Hopelessness Scale Mean Scores and Their Relationship

	X ± SD	Min-Max
BSSI	19.08 ± 4.80	8-29
BHS	11.51 ± 3.14	6-18
BSSI-BHS*	$r = 0.235$, $P = .026$	

*Correlation analysis.
BSSI, Beck Scale for Suicidal Ideation; BHS, Beck Hopelessness Scale; SD, standard deviation.

Table 3 shows the comparison of the experimental group's pre-test and post-test BHS score averages within the group. It was observed that the mean BHS scores of the experimental group decreased significantly in the post-test (8.53 ± 2.14) compared to the pre-test (11.58 ± 3.23) ($P < .001$).

Table 4 shows the comparison of the control group's pre-test and post-test BHS score averages within the group. As a result of the statistical analysis, no significant difference was found in the post-test compared to the pre-test ($P > .05$).

In Table 5, results of the regression analysis including the motivational interview before and after the experimental group are given.

Table 3. The Intra-Group Comparison of Pre-Test and Post-Test Beck Hopelessness Scale Mean Scores of the Experimental Group

	BHS n	BHS X ± SD	Test*	Significance
Pre-test	43	11.58 ± 3.23	t = 8.894	***P* = .001**
Post-test	43	8.53 ± 2.14		

*Paired *t*-test (before-after).
BHS, Beck Hopelessness Scale; SD, standard deviation.

Table 4. The Intra-Group Comparison of the Pre-Test and Post-Test Beck Hopelessness Scale Mean Scores of the Control Group

	BHS			
	n	X ± SD	Test*	Significance
Pre-test	46	11.45 ± 3.08	$t=0.762$	$P=.450$
Post-test	46	11.19 ± 2.62		

*Paired *t*-test (before-after).
BHS, Beck Hopelessness Scale; SD, standard deviation.

In our study, it was determined that each MI changed BHS scores by 2.998. According to the model we established, motivational interviews significantly predicted hopelessness level at a rate of 52%. This situation coincides with the general analysis of variance result.

DISCUSSION

Hopelessness is defined as negative expectations about the future that make individuals believe that suicide is the only strategy to cope with the problems.[28,29] It is thought that hopelessness reflects a cognitive style consisting of negative expectations about the future and the person's helplessness to improve hopes for the future.[30]

In studies, it was stated that the purpose of motivational interviewing was to increase the motivation to live of those who intend to commit suicide and that increasing the motivation to live would reduce the rate of engaging in life-threatening behaviors and increase the rate of engaging in life-sustaining behaviors.[31,32] Although it has been reported that motivational interviews can be applied effectively in clinical crises and suicidal patients,[33] no study specific to hopelessness has been found.

The causes of hopelessness often include long-term illnesses and physical ailments that limit the individual's movement. Other social factors include loss, living with stigma, unemployment, family conflicts, and financial problems.[34] In a study, it was shown that hopelessness is experienced due to unemployment, family conflicts, extreme poverty, and health problems.[34,35] In this study, physical and mental health problems, domestic conflict/violence, and financial difficulties were shown as reasons for hopelessness at high rates. These situations create a lot of burdens in the lives of individuals and make it difficult for them to cope with stress. It can be said that there is hopelessness in the background of people whose suicidal ideation or continuous self-harm experiences are common.[34]

When the patients' feelings of hopelessness increase and their goal-directed behaviors become inhibited, they may give up their coping efforts.[36] Higher levels of hopelessness may make patients less responsive to psychological treatments.[27] Both depression and hopelessness about the future are defined as strong risk factors for suicidal ideation and behavior.[37] In a study, it was determined that hopelessness levels increased in the high-risk patients who continued to exhibit suicidal thoughts 1 month after their hospitalization.[38] In the literature, it was reported that people with suicidal ideation,[39] suicide attempt,[40,41] and death by suicide had higher levels of hopelessness.[42] In this study, a positive and significant relationship was determined between hopelessness and suicidal thoughts. In a study, it was reported that the correlation between depression and suicide disappears when the feeling of hopelessness disappears.[43] Suicide may be seen by some as a solution but a hopeless solution. It is essentially a passive way of seeking help. The severe indecision of suicide patients about living or dying may partly explain why MI can be an effective method for changing suicidal behavior.[44] Arousing hope in people can be a way to prevent suicide.

Since hopelessness can negatively affect individuals' thoughts, feelings, and perceptions of themselves and others, it should be managed using various strategies.[34] Interventions in practice may focus on hope to examine or reduce the negative effects of suicide.[45] When problems arise, intense levels of hopelessness can foster the thoughts of suicide and a tendency to give up, thus hindering effective coping. Therefore, strategies should be developed to monitor and reduce hopeless attitudes.

Not all depressed patients are equally hopeless. Beck et al[8] (1990) suggested using a score between 9 and 10 as the cut-off point for BHS. The majority of the participants in this study exceeded this value (11.51 ± 3.14). The severity of hopelessness was moderate to severe. This suggests that the cut-off point may be lower for Turkish society.

In this study, which focused on hopelessness in patients with depression at risk of suicide, after the motivational interviewing process with the experimental group, it was observed that the hopelessness score averages and severity of the patients decreased. In the control group, who were not included in the motivational interviewing process, the mean scores of hopelessness did not change, and an increase in the severity of hopelessness was noted. This is an indication that motivational interviewing can be used to cope with hopelessness in the patients with depression at the risk of suicide. In another study, it was stated that motivational interviewing has a significant positive effect on alleviating suicidal ideation.[44] Since high levels of hopelessness are associated with maladaptive coping responses, motivational interviewing can help reduce feelings of hopelessness by contributing to breaking this destructive cycle and improving the patients' ability to manage their distress and unlocking their strengths.

In one study, it was emphasized that emotional hopelessness can lead to suicide attempts and that the meaning of life lies at the root of self-harm.[29] An maladaptive coping style and thus unsuccessful coping with hopelessness may result in suicidal ideation.[45] Due to the close relationship between hopelessness and suicidal tendencies in depressed patients, it is important to evaluate and monitor

Table 5. Pretest Effect on BHS Score After Motivational Interviews

	Unstandardized Coefficients		Standardized Coefficients				
Model*	*B*	Std.Error	Beta	*R*	R^2	*t*	Sig.
Constant	2.998	0.862	-	0.721	0.520	3.479	.001
Pre-test (BHS)	0.478	0.072	0.721			6.666	.000

* Regression analysis.
BHS, Beck Hopelessness Scale.

pessimistic views. Nurses often encounter patients who feel worthless in clinical settings. During the communication processes with depressed patients, it can be easily observed whether they have suicidal thoughts or future goals and expectations from their behavior. During the treatment of depression, hopelessness levels should be actively evaluated. When working with the patients reporting moderate or intense hopelessness, it is important to be more supportive and to deal with suicidal ideation and maladaptive coping. For this purpose, standardizing the use of motivational interviews in practice may be effective in helping pessimistic and hopeless patients.

The limitations of the study are that it was applied to a small sample group. The strengths of the study can be listed as being the first study in the national literature to examine the effect of motivational interviewing on the hopelessness of patients with suicidal risk and to guide nurses working in the field of psychiatry in showing the ways to use motivational interviewing techniques.

Ethics Committee Approval: Ethics committee approval was received for this study from the ethics committee of Gaziantep University (Date: July 7, 2021, decision no: 2021/245).

Informed Consent: The sample group was informed about the study and their permission was obtained. All procedures were carried out in accordance with the ethical rules and the principles of the Declaration of Helsinki.

Peer-review: Externally peer-reviewed.

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