DOI: 10.5455/annalsmedres.2018.05.092 2018;25(3)416-9

# The effect of hope on the treatment adherence of schizophrenia patients

Funda Kavak<sup>1</sup>, Emine Yilmaz<sup>2</sup>

<sup>1</sup>Inonu University Nursing Faculty, Department of Psychiatric Nursing, Malatya, Turkey <sup>2</sup>Bingol University, Faculty of Nursing, Department of Psychiatric Nursing, Bingol, Turkey

Copyright © 2018 by authors and Annals of Medical Resarch Publishing Inc.

#### **Abstract**

Aim: This study was conducted to determine the effects of hope on treatment adherence in schizophrenia patients.

Material and Methods: Between January 2018 and May 2018, 250 adult patients were diagnosed with schizophrenia at a mental health and illness hospital. The study included 105 patients who were in remission without sampling and who were open to communication and collaboration and who agreed to participate in the study. In the data collection, the Descriptive Properties Form, the Herth Hope Scale and the Morisky Treatment Adherence Scale were used by the researchers. In the analysis of data, percentage distribution, arithmetic mean, independent samples t-test, Mann Whitney U test, Kruskal Wallis, ANOVA, and Correlation models were used.

**Results:** In the study, it was found that 60.95% of schizophrenia patients had low treatment adherence. Herth hope scale total score average was 39.20±8.49 in the patients who participated in the study. In the present study, there was a statistically positive correlation between the Herth hope scale subscale and the total score average and the total score average of the Morisky treatment compliance scale (p<.05).

**Conclusions:** As a result of the research, it was determined that schizophrenia patients are incompatible with treatment and hope levels are low. As the hope of schizophrenia patients increases, their adherence to treatment is also increasing. Increasing the awareness of the psychiatric nurses to the concept of hope can help the patient to act as a supportive internal force.

Keywords: Patient; Schizophrenia; Adherence To Treatment; Hope.

## INTRODUCTION

Schizophrenia is a chronic psychological disorder that disrupts the ability to assess reality, leads to thought, emotion, perception, cognitive field disorders, causes functional disability, causes not only the individual but also the family and social environment of the person (1,2). Schizophrenia is common in all societies and socioeconomic environments. The incidence of illness in the society is approximately 1% (3).

The basic principles of treatment in schizophrenia patients are to establish a safe environment and to administer medication that provides relief. However, since symptoms of the disease are severe and require long-term treatment, additional methods of drug treatment are used in treatment (4,5). Psychosocial approaches used in addition to drug treatment and rehabilitation increase the effectiveness of treatment.

The long-term treatment of schizophrenia is poor compared to other mental disorders, the lack of effective

treatment, and stigmatization of patients by society, psychological, and social problems cause them to experience (6,7). Psychological problems cause the self-esteem to diminish and despair over time. Coşkun & Şahin-Altun found that the level of hope was moderate in schizophrenia patients (2). In schizophrenia patients, it is necessary to increase their hopes to improve the effectiveness of the treatment, to increase the quality of life and self-esteem of the patients, and to be able to tackle the problems with the patients (7,8).

Hope is a positive feeling that makes the individual acts and feels good. Hope increases the motivation of individuals, prevents feelings of despair and pessimism, and provides positive energy to achieve goals related to the future. Being hopeful in patients with schizophrenia allows the patient to improve quality of life and maintain his/her life better (8,9). Lysaker et al. studied in schizophrenia patients, and they determined that hope increased the effectiveness of treatment by increasing the awareness of patients (10). Lysaker et al. found that the social

Received: 18.05.2018 Accepted: 02.06.2018 Available online: 08.06.2018

Corresponding Author: Funda KAVAK, Inonu University Nursing Faculty, Department of Psychiatric Nursing, Malatya, Turkey E-mail: funda-kavak@hotmail.com

functionality of schizophrenia patients with hopelessness and their adherence to treatment decreases (11). Hope provides a positive response to treatment and adaptation to treatment in schizophrenia patients.

Compliance with treatment is the patient's complete, timely and recommended use of medications, and the drug does not stop taking (12). Schizophrenia patients', the disease symptoms do not heal; because of the duration of hospitalization in the hospital is a common condition of noncompliance treatment (1,12). Patients, who do not comply with good treatment, duration of stay is shortened and repeated hospitalization is observed. For this reason, it is important that schizophrenia patients adapt to treatment during the recovery process (1,12). Yilmaz & Okanlı found that the level of compliance with treatment was low in schizophrenic patients (1). Şahin-Altun et al. found that medication compliance was moderate in patients with schizophrenia (12).

Psychiatric nurses who are in the mental health team have problems in raising the patients' nurse and in keeping their treatment compliance. The nurse should increase the compliance of the patient with the treatment by communicating with the patient, hoping to the patient together with the patient's family. The concept of hope is important in the field of psychiatric nursing, and there are limited studies on psychiatric disorders related to this topic. The results of this research are expected to contribute to the literature.

This study was conducted to determine the effect of hope treatment adaptation in patients with schizophrenia. In the research, the answer to the following question is sought:

-Does hope affect treatment adherence in schizophrenia patients?

### **MATERIAL and METHODS**

#### Type of Research

The research was done as a descriptive.

#### The Sampling of the Study

Between January 2018 and May 2018, the sample of the research conducted in a mental health and illness hospital consisted of 250 patients diagnosed with schizophrenia according to DSM-V who admitted to the hospital between these dates. In the study, 105 patients who were in the remission period and who were open to communication and collaboration and who agreed to participate in the study were included in the study.

For the collection data, "Descriptive Characteristics Form, Herth Hope Scale and Morisky Therapy Compliance Scale" were used by the researcher.

## **Data Collection Tools**

#### **Descriptive Characteristics Form**

The form consists of 8 questions including age, gender, marital status, level of education, social security, working status, duration of illness, and information about the presence of family history of mental illness in the family.

#### **Herth Hope Scale**

Hope scale was developed by Herth in 1991 (13). Turkish validity and reliability of the scale was adapted by Aslan et al. in 2006 (14). The scale consists of 3 sub-dimensions and contains 30 questions. Scores taken from the scale ranges from 0 to 90. The high score from the scale indicates that the hope is high. In this study, the Cronbach alpha coefficient of the scale was found to be 0.91.

#### **Morisky Treatment Compliance Scale**

Scale was developed in 1986 by Morisky et al. (15). Turkish validity and reliability was made by Yılmaz (16). The scale consists of four questions measuring drug compliance. The questions are answered as "yes / no". Drug compliance is considered low if all of the questions are called "no", drug compliance is considered low if one or two questions are answered "yes", and drug compliance is considered low if three or four questions are answered yes. In this study, the Cronbach alpha scale of the scale was found to be 0.89.

#### **Data Collection**

The data were collected by the researcher at face-to-face interviews in the interview rooms at the service. Questions were read and marked by the researcher. Questions that patients do not understand were answered without comment. The collection of data lasted approximately 15-20 minutes.

#### **Evaluation of Data**

Percentage distribution, mean, correlation analysis were used in the evaluation of the data. In the analysis of the data, SPSS 22.0 package program was used and the significance was determined as p <.05.

#### **Ethics of Research**

Ethical approval and permission for study were obtained from the scientific ethics committee of the university. Prior to the investigation, the purpose of research was explained to the relatives of the patients, and verbal approvals were taken. Participation in the survey was voluntary.

## **RESULTS**

It was found that 30.47% of schizophrenic patients participated in the study were in the age group of 29-39, 76.19% were males, 80.95% were single, 47.61% were primary school graduates, 85.71% had social security, 91.42% did not work, 55.23% of the patients had been ill for 12-17 years and 76.19% of them had no family history of mental illness (Table 1).

In the study, it was determined that 60.95% of schizophrenia patients had low level of treatment compliance (Table 2). The mean score of the patients with the Herth Hope Scale was  $39.20 \pm 8.49$ . When the scale total score average is taken into consideration, it is seen that the hope levels of schizophrenia patients are low (Table 3).

In the study, it was determined that there was a statistically positive correlation between the mean score of the subscale of Herth Hope Scale of the schizophrenic patients and the total score average of Morisky Treatment Compliance Scale (p <.05). As patients' hopes increase, treatment compliance increases (Table 4).

In the study, it was determined that there was a statistically positive correlation between the mean score of the subscale of Herth Hope Scale of the schizophrenic patients and the total score average of Morisky Treatment Compliance Scale (p <.05). As patients' hopes increase, treatment compliance increases (Table 4).

Table 1. Descriptive Characteristics of Patients			
Descriptive Characteristics	n	%	
Age			
18-28	30	28.57	
29-39	32	30.47	
40-50	28	26.66	
51-61	15	14.28	
Sex			
Female	25	23.80	
Male	80	76.19	
Marital Status			
Married	20	19.04	
Single	85	80.95	
Level of Education			
Literate	35	33.33	
Primary	50	47.61	
College	15	14.28	
Higher Educa-tion	5	4.76	
Social Security			
Yes	90	85.71	
No	15	14.28	
Working Status			
Yes	9	8.57	
No	96	91.42	
Duration of illness			
0-5 year	7	6.66	
6-11 years	29	27.61	
12-17 years	58	55.23	
18-23 years	11	10.47	
Family History of Mental Illness			
Yes	25	23.80	
No	80	76.19	

Table 2. Treatment Compliance Distributions of Patients			
Treatment Compliance	n	%	
Low Treatment Compliance	64	60.95	
Moderate Treatment Compliance	32	30.47	
High Treatment Compliance	9	8.57	

Table 3. Patients' Herth Hope Scale S Averages	Sub-Dimension a	and Total Score
Herth Hope Scale	Min-Max	Mean±SD
Future	0-30	11.73±3.20
Positive readiness and expectation	0-30	12.55±3.12
The links between himself and his surround-ings	0-30	14.92±2.17
TOTAL	0-90	39.20±8.49

Point Average and Morisky Treatment Compliance Scale Total Score Average				
	Morisky Treatment Compliance Scale Total Score			
Next	r	0.756		
	р	.001		
Positive readiness and expectation	r	0.834		
The links between himself and his surroundings	р	.000		
Positive readiness and expectation	r	0.765		
	р	.000		
Herth Hope Scale Total Score	r	0.893		
	р	.000		

### **LIMITATION of STUDY**

Although there are many factors such as insight, social support and cognitive processes that affect adherence to treatment in patients with schizophrenia, only looking at the level of hope is the limitation of the study.

#### DISCUSSION

Hopefulness there are significant effects on physical and psychiatric diseases. Studies show that hope reduces anxiety and depression, makes you feel better, and increases your coping strategies (17,18). Hope increases positive coping mechanisms in schizophrenic patients and increases treatment compliance by influencing treatment effectiveness positively. The findings of this study aims to determine the effect of hope treatment adjustment in patients with schizophrenia have been discussed in the light of the literature.

It was determined that 60.95% of patients with schizophrenia had lower treatment compliance. Yilmaz & Okanlı found that the patients were disability compliant in schizophrenia patients. (1). Olfson et al. found that treatment compliance for schizophrenia patients was low (19). Perkins noted that treatment incompatibility is common in schizophrenic patients. (20). Şahin-Altuntas et al. found that the compliance of patients with schizophrenia was moderate (12). Colom et al. found that treatment compliance is low in psychiatric disorders. (21). Wykes et al. determined that the treatment compliance of the patients was moderate (22). It has been thought that this difference in the results of the research may be due to the fact that the disease symptoms of the patients in the regions where the research is done are heavy or light. Stigmatization in schizophrenia patients, poor psychological self-healing, long treatment duration, and immediate relief of disease symptoms may reduce treatment compliance.

In the study, it was determined that the average score of patients' Herth Hope Scale was 39.20 ± 8.49. Considering the total point average of the scale, it is seen that the patients' hope is low. Olçun & Şahin-Altun determined that the patients' hope was moderate in schizophrenia patients (2). Coşkun & Şahin-Altun found that the patients' hope was moderate in their study of schizophrenia patients (9). It can be thought that the social support perceived by the patients is low, the stigmatization is excessive, the symptom of the disease is more severe, and the long-term presence of the disease is considered to be the reason for the low hope level.

It has been determined that there is a statistically positive correlation between the mean score of the total score of Herth Hope Scale of schizophrenia patients participating in the study and Morisky Treatment Compliance Scale total score. While patients' hopes increase, treatment compliance also increases. Lysaker et al. has increased the awareness of patients and increased the effectiveness of the treatment in the study of schizophrenia (10) Lysaker et al. found that patients with schizophrenia who had high hopes had better treatment adjustment (11). Patient's positive thinking about disease progression and healing increases hopes for the future. Patients with schizophrenia who are high in hope are in agreement with the treatment and the treatment is responding positively. The results of the research are similar to the literature.

#### CONCLUSION

As a result of the research, schizophrenia patients were found to be noncompliance with treatment and their hope levels were low. As the hopes of schizophrenia patients increase, treatment adaptation also increases. In line with these results; psychiatric nurses may be advised that patients have initiatives to improve their compliance with treatment and inpatient hope grafting. Increasing the awareness of the psychiatric nurses to the concept of hope can help the patient to act as a supportive internal force.

Competing interests: The authors declare that they have no competing interest.

Financial Disclosure: There are no financial supports Ethical approval: Ethical approval and permission was obtained from the scientific ethics committee of the university.

#### REFERENCES

- Yılmaz E, Okanlı A. The effect of internalized stigma on the adherence to treatment in patients with schizophrenia. Arch Psychiatr Nurs 2015;29(5):297-301.
- Olçun Z, Altun Ö. The correlation between schizophrenic patients' level of internalized stigma and their level of hope. Arch Psychiatr Nurs 2017;31(4):332-7.
- Kavak F, Ekinci M. Kendi evlerinde yaşayan ve korumalı evlerde yaşayan şizofreni hastalarının yaşam niteliklerinin ve işlevsel iyileşme düzeylerinin karşılaştırılması. Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi 2014;3(1):588-98

- Myers B, Fakier N, Louw J. Stigma, treatment beliefs, and subtance abuse treatment use in historically disadvantaged communities. Afr Psychiatry (Johannesbg) 2009;12(3):218-22
- Tsang HW, Fung KM, Chung RC. Self-stigma and stages of change as predictors of treatment adherence of indivuduals with schizofrenia. Psychiatric Res 2010;180(1):10-5.
- Karakaş SA, Okanlı A, Yılmaz E. The Effect of internalized stigma on the self esteem in patients with schizophrenia. Arch Psychiatric Nurs 2016;30(6):648-52.
- Kavak F, Ünal S, Yılmaz E. Effects of relaxation exercises and music therapy on the psychological symptoms and depression levels of patients with schizophrenia. Arch Psychiatric Nurs 2016;30(5):508-12.
- Aslan Ö, Sekmen K, Kömürcü Ş, Özet A. Kanserli hastalarda umut. Cumhuriyet Üniversitesi Hemşirelik Yüksekokulu Dergisi 2007;11(2):18-24.
- Coşkun E, Şahin-Altun Ö. The relationship between the hope levels of patients with schizophrenia and functional recovery. Arch Psychiatr Nursing 2018;32(1):98-102.
- Lysaker PH, Campbell K, Johannesen JK. Hope, awareness of illness, coping in schizophrenia spectrum disorders: Evidence of an interaction. J Nerv and Ment Dis 2005;193(5):287-92.
- Lysaker PH, Roe D, Yanos PT. Toward understanding the insight paradox: internalized stigma moderates the association between insight and social functioning, hope, and self-esteem among people with schizophrenia spectrum disorders. Schizophrenia Bull 2007;33(1):192-9.
- Altun ÖŞ, Karakaş SA, Olçun Z, Polat H. An investigation of the relationship between schizophrenic patients' strength of religious faith and adherence to treatment. Arch Psychiatr Nurs 2017;32(1):62-5.
- 13. Herth, K. Development and refinement of an instrument to measure hope. Sch Inq Nurs Pract 1991;5(1):39-6.
- 14. Aslan Ö, Sekman K, Vural H. Öğrenci hemşirelerde umut. Hospital Life 2006;1(2):61-3.
- 15. Morisky DE, Green LW, Levine DM. Concurrent and predictive validity of a self-reported measure of mdication adherence. Med Care 1986;24(1):67-74.
- Yılmaz S. Psikiyatri Hastalarında İlaç Yan Etkileri ve İlaç Uyumu. Sağlık Bilimleri Enstitüsü, Psikiyatri Hemşireliği Anabilim Dalı. Yüksek Lisans Tezi, İstanbul: İstanbul Üniversitesi, 2004.
- Heszen-Niejodek I, Gottschalk LA, Januszek M. Anxiety and hope during the course of three different medical illnesses: A longitudinal study. Psychother Psychosom 1999;68(6):304-12
- 18. Schrank B, Stanghellini G, Slade M. Hope in psychiatry: a review of the literature. Acta Psychiatr Scand 2008;118(6):421-33.
- Olfson M, Mechanic D, Hansell S, Boyer CA, Walkup J, Weiden PJ. Predicting medication noncompliance after hospital discharge among patients with schizophrenia. Psychiatr Serv 2000;51(2):216-22.
- 20. Perkins DO. Predictors of noncompliance in patients with schizophrenia. J Clin Psychiatry 2002;63(12):1121-8.
- Colom F, Vieta E, Martinez-Aran A, Reinares M, Benabarre A, Gasto C. Clinical factors associated with treatment noncompliance in euthymic bipolar patients. J Clin Psychiatry 2000;61(8):549-55.
- Wykes T, Steel C, Everitt B, Tarrier N. Cognitive behavior therapy for schizophrenia: effect sizes, clinical models, and methodological rigor. Schizophr Bull 2008;34(3):523-37.