

# Determination of Adherence to Treatment of Schizophrenia Patients in Turkey

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## Abstract

**Aim and purpose:** The purpose of this study is to determine the adherence to treatment of schizophrenic patients.

**Method:** This research was done as a descriptive. Research in eastern Turkey in a psychiatric clinic was conducted between September 2017 - February 2018 date. The study's universe constituted 1500 psychiatric patients who were treated in a psychiatric clinic. The sample size was determined as 196 with a power analysis. The names of the patients were listed and selected by simple random sampling method. For the collection of data in the study, descriptive trait form and Morisky Therapy Compliance Scale were used.

**Results and Discussion:** In the study, 43.9% of the patients were in the age range of 29-39 years, 79.1% were male, 62.2% were secondary school graduates, 59.7 were single, 80.1% were not working, 68% family history of mental illness. In the study, the difference between the gender and Morisky adherence to treatment scale total score was statistically significant ( $p < 0.05$ ). In the study, it was found that the statistically significant difference was found between the education level of the patients and morisky adherence to treatment scale total score ( $p < 0.05$ ). It was determined that there was a statistically significant difference between the level of income perception of the patients and the scale total score of morisky treatment ( $p < 0.05$ ).

**Conclusion:** In the study, it was determined that adherence to treatment of schizophrenia patients is moderate. In addition to medication to increase adherence to treatment of patients, complementary and alternative methods, providing social and moral support, psychosocial skills training, giving therapies may be recommended.

**Keywords:** Adherence to treatment; Patient; Schizophrenia

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## Introduction

Schizophrenia is a chronic disease characterized by emotional, thought, perceptual and behavioral disorders that usually begin at a young age. Schizophrenia causes psychosocial disorder and disability [1]. The incidence of life-long occurrence of schizophrenia in all populations is 1% and is higher in men than in women [2]. According to World Health Organization (WHO) data, there are more than 26 million schizophrenia patients worldwide. The high number of patients with schizophrenia suggests a public health problem [3,4]. The incidence of schizophrenia in Turkey was determined to be 0.89% [5].

Drug therapy alone is not sufficient in the treatment of schizophrenia [6]. Thus psychosocial skills training, cognitive therapies, music therapy, art therapy and yoga are applied in addition to patient medication [7]. Treatment of schizophrenia is aimed at reducing the symptoms of the underlying illness and allowing the community to maintain life activities independently [8]. Schizophrenia can heal up to 25% with appropriate treatment. 50% of the patients can recover moderately and fulfill their daily life activities independently [9]. Kavak et al. reported that relaxation exercises and music therapy resulted in a decrease in the depression level of schizophrenic patients and improved adherence to treatment [10]. Kavak and Ekinci carried out studies

of schizophrenia patients with were found to be effective in adherence to treatment, and positive as complementary therapy [11].

It is known that both in Turkey and the world, adherence to treatment in patients with schizophrenia not a good level. Altun et al. based on the study of schizophrenia patients in Turkey were found to be at an intermediate level of adherence to treatment [12]. According to Byerly, Fisher, Carmody, & Rush, the recommended withdrawal rate for schizophrenia patients was 41% [13]. Although adherence to treatment is very important for patients with schizophrenia, the rate of treatment discontinuation after discharge from the hospital varies between 11-80% [14].

Patients of psychiatric nurses have an important role in ensuring compliance with treatment. Psychiatry provides nursing care by providing psychological, social support and empathy as well as nursing medication. The quality and effective care of the nurse is influenced positively by patient and patient relatives. This ensures that the patient feels good, treats him/her, and increases the level of compliance with the treatment. For this reason, it is expected that the results of this research will contribute to the literature of psychiatric nursing. The purpose of this study is to determine the adherence to treatment of schizophrenic patients.

## Material and Methods

### Type of study

This research was done as a descriptive.

### Population and sample of the study

The research conducted in the psychiatric clinic in Eastern Anatolia took place between September 2017 and February 2018. The study's universe constituted 1500 psychiatric patients who were treated in a psychiatric clinic. The sample size was determined as 196 with a power analysis to determine the sample of the researcher, 0.05 error level, 0.95 confidence interval, 0.6 effect size, and the ability to represent 0.95 universe. The names of the patients were listed and selected by simple random sampling method.

### Inclusion criteria

- 18 years and older
- Being open to communication and business cooperation

### Exclusion criteria

- Being in the period of acute exacerbation
- Dementia and/or other organic mental disorder
- Finding mental retardation determined by clinical interview

### Data collection

The datas were collected between September 2017 and February 2018. The descriptive characteristics form Morisky Therapy Compliance Scale, which was constructed by searching the literature by the researcher, was used to collect the datas. The

patients were interviewed individually in the interview room with the patients in the psychiatric department, and the questions were filled by the researcher in the direction of the answers. An interview lasts 5-10 minutes on average.

## Instruments

### Personal information form

The form was developed by the researcher in accordance with the literature and consists of 7 questions (age, gender, marital status, educational status, income level perception, working status, family history of family mental illness) including socio-demographic characteristics of the patients.

### Morisky care compliance scale

The scale was first developed by Morisky, Green, and Levine in 1986. The validity of the reliability of the scale was determined by Yilmaz [15]. The Cronbach Alpha fold of your scale ranges from 0.64 to 0.96. The scale consists of four questions measuring drug compliance. The questions are answered as "yes/no" [16]. Drug compliance is considered high if all of the questions are called "no", drug compliance is considered moderate 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 coefficient of the scale was 0.79.

### Limitations of the research

The study has no limitations.

### Data analysis

In the analysis of the data; percentile distribution, arithmetic mean, independent t test, Kruskall Wallis. In the analysis of the data, the spss 22 package program was used.

### Ethical considerations

Ethical approval and legal permission has been obtained from the institution to conduct the research. Prior to the investigation, the purpose of the investigation of the illness was explained and verbal permissions were taken from the patients. The illness has been described as having the right to leave confidential information, to use it elsewhere, and to leave without work.

## Results

In the study, 43.9% of the patients were in the age range of 29-39 years, 79.1% were male, 62.2% were secondary school graduates, 59.7 were single, 80.1% were not working, 68% found no family history of mental illness (**Table 1**).

In the study, the difference between the gender and morisky adherence to treatment scale total score was statistically significant ( $p < 0.05$ ). It seems that adherence to treatment is higher in women. In the study, it was found that the statistically significant difference was found between the education level of the patients and morisky adherence to treatment scale total score ( $p < 0.05$ ). As the educational status of patients increases, adherence to treatment also increases. It was determined that

**Table 1** Comparison of adherence to treatment according to patient's descriptive characteristics (n=196).

| Morisky Adherence To Treatment Scale |     |      |             |            |                |
|--------------------------------------|-----|------|-------------|------------|----------------|
| Parameters                           | n   | %    | Mean        | Test Value | Significance   |
| <b>Ages Groups</b>                   |     |      |             |            |                |
| 18-28                                | 27  | 13.8 | 8.07 ± 0.87 | KW=3.770   | p=0.287        |
| 29-39                                | 86  | 43.9 | 8.32 ± 0.81 |            |                |
| 40-50                                | 56  | 28.6 | 8.44 ± 0.76 |            |                |
| 51 and Over                          | 27  | 13.6 | 8.37 ± 0.83 |            |                |
| <b>Sex</b>                           |     |      |             |            |                |
| Male                                 | 155 | 79.1 | 8.25 ± 0.84 | t=-2.717   | p=0.002        |
| Female                               | 41  | 20.9 | 8.63 ± 0.62 |            |                |
| <b>Education Level</b>               |     |      |             |            |                |
| literate                             | 13  | 6.6  | 7.76 ± 0.92 | KW=7.149   | <b>p=0.047</b> |
| Primary School                       | 51  | 21.0 | 8.27 ± 0.80 |            |                |
| Secondary School                     | 122 | 62.2 | 8.40 ± 0.81 |            |                |
| College                              | 10  | 5.1  | 8.40 ± 0.51 |            |                |
| <b>Marital Status</b>                |     |      |             |            |                |
| Married                              | 79  | 40.3 | 8.29 ± 0.80 | t=-0.571   | p=0.569        |
| Single                               | 117 | 59.7 | 8.35 ± 0.82 |            |                |
| <b>Working Status</b>                |     |      |             |            |                |
| Working                              | 39  | 19.9 | 8.46 ± 0.75 | t=1.113    | p=0.267        |
| Not Working                          | 157 | 80.1 | 8.29 ± 0.82 |            |                |
| <b>Income status</b>                 |     |      |             |            |                |
| Poor                                 | 32  | 16.3 | 7.83 ± 0.14 | KW=21.894  | p= 0.000       |
| Moderate                             | 146 | 74.5 | 8.67 ± 0.06 |            |                |
| Good                                 | 18  | 9.2  | 8.77 ± 0.15 |            |                |
| <b>Mental Illness in Family</b>      |     |      |             |            |                |
| Yes                                  | 69  | 35.2 | 8.37 ± 0.78 | t=0.571    | p=0.563        |
| None                                 | 127 | 64.8 | 8.30 ± 0.83 |            |                |

**Table 2** Distribution of adherence to treatment of patients (n=196).

| Adherence to Treatment | n   | %     |
|------------------------|-----|-------|
| Low Compliance         | 43  | 21.9  |
| Moderate Compliance    | 108 | 55.1  |
| High Compliance        | 45  | 23.0  |
| Total                  | 196 | 100.0 |

there was a statistically significant difference between the level of income perception of the patients and the scale total score of morisky treatment ( $p < 0.05$ ). It was determined that adherence to treatment of patients who perceived income level was higher (**Table 1**).

In the study, 55.1% of the patients were found to have a moderate level of adherence to treatment. It was determined that adherence to treatment of patients was moderate in the direction of this data (**Table 2**).

## Discussion

The findings of the study to determine the adherence to treatment of schizophrenia patients have been discussed in the light of the literature.

It was determined that the majority of the schizophrenic patients were male, the education level was middle school, the income level was moderate or not. According to Lally et al. the incidence

of schizophrenia in men is higher than in women. [2]. Binbay et al. found that men had a higher risk of developing schizophrenia than women [5]. The results of the study are in parallel with the literature. the large number of men in the study of schizophrenia can be connected to Turkey's cultural properties. Since marriage of women is important in Turkish culture, there are not many hospitalizations to prevent the stigmatization of the woman before marriage. For this reason, the number of female schizophrenia is not clearly known.

In the study, the difference between the mean score of morisky treatment adaptation scale and total score of schizophrenic patients was statistically significant ( $p < 0.05$ ). It has been determined that compliance with treatment is higher in women. Karslıoğlu et al. reported that functioning is worse and harder in male schizophrenic patients. [17]. It can be explained by low compliance with treatment in male patients with decreased function. The results of the study are in parallel with the literature.

In the study, the difference between the education level of patients and morisky adherence to treatment scale total score was statistically significant ( $p < 0.05$ ). As education level of patients increases, adherence to treatment increases. Özkan et al. found that adherence to treatment increases as the level of education of the patients increases [18]. The high level of education of the patients can increase the awareness about the disease and affect the compliance of the treatment positively.

In the study, it was determined that there was a statistically significant difference between the level of income perception of the patients and the total score of the compliance scale ( $p < 0.05$ ). When income levels are high, adherence to treatment is higher. The reason that schizophrenia patients with high income level can access different methods in addition to drug treatment can be considered as the reason for this result.

In the study, it was determined that the compliance of patients with schizophrenia is moderate. Wykes et al. found that the compliance of patients with treatment was moderate [19]. Aylaz and Kılınc found that adherence to treatment of psychiatric patients are moderate [20]. Karakaş et al. found that the compliance of patients with schizophrenia was moderate [21]. Şahin-Altuntaş et al. found that adherence to treatment of psychiatric patients was moderate [12].

Research conducted supports the results of the research. The moderate level of patients' compliance with treatment means

that there is a need for adherence to treatment training. It can be said that the training to be given to the patient and the family will increase the compliance of the treatment.

## Conclusions and Recommendations

In conclusion, the fact that schizophrenia is a chronic disease, the long duration of treatment, the exacerbation of the exacerbation of the disease, and the decrease of the trust of the patient. In our study, adherence to treatment was moderate and when we looked at the literature, it seems that drug treatment alone is not enough. In addition to medication treatment, trainings such as social and spiritual support, psychoeducation, cognitive behavioral therapy, individual skills training, motivational interviewing, and rehabilitation can be suggested to increase coherence, which is the treatment. While psychiatric nurses provide care and education to the patient, patient and patient caregivers may also be recommended to include caregiving and education to improve adherence to treatment.

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