

Kronik Hastalığı Olan Bireylerin Kronik Hastalık Bakımını Değerlendirme Durumları ile Tedaviye Uyumu Arasındaki İlişki

The Relationship between the Patient Assessment of Chronic Illness Care and the Compliance with the Treatment of Individuals with Chronic Illness

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ÖZ

Amaç: Kronik hastalığı olan bireylere verilen bakımın hasta bakış açısıyla değerlendirilmesi ve hastaların tedaviye uyumlarının değerlendirilmesi önemlidir. Bu çalışmada, kronik hastalığı olan bireylerin kronik hastalık bakımını değerlendirme durumları ile tedaviye uyumu arasındaki ilişkinin incelenmesi amaçlanmıştır.

Yöntem: Tanımlayıcı-ilişkisel nitelikte olan araştırma, Haziran-Eylül 2022 tarihleri arasında gerçekleştirilmiştir. Çalışmanın örneklemini ise kronik hastalığı olan 228 hasta oluşturmuştur. Veriler, Hasta Tanımlama Formu, Kronik Hastalık Bakımı Değerlendirme Ölçeği ve Morisky-8 Maddeli İlaç Uyumu Formu ile toplanmıştır.

Bulgular: Çalışmada, hastaların bakım değerlendirilmesinin genel toplam puan ortalaması 3.46 ± 0.57 , tedaviye uyum puan ortalaması ise 3.81 ± 1.95 olarak tespit edilmiştir. Hastaların, kronik hastalık bakımını değerlendirme ölçeğinin bakıma katılımı, karar verme desteği ve problem çözme alt boyutları ile tedaviye uyum puan ortalamaları arasında pozitif yönde anlamlı bir ilişki olduğu belirlenmiştir.

Sonuç: Hastaların kronik hastalık bakımından memnuniyetlerinin orta düzeyde ve tedaviye uyumlarının da düşük düzeyde olduğu belirlenmiştir. Hastaların kronik hastalık bakımından memnuniyet durumlarının hasta katılımı, problem çözme ve karar verme alt boyutları arttıkça tedaviye uyumunda artma olduğu saptanmıştır.

Anahtar Kelimeler: Bakım, Kronik hastalık, Tedaviye uyum.

ABSTRACT

Objective: It is important to evaluate the care given to individuals with chronic diseases from the perspective of the patient and to evaluate the compliance of the patients with the treatment. In this study, it was aimed to examine the relationship between the evaluation of chronic disease care of individuals with chronic disease and their adherence to treatment.

Methods: The descriptive-relational research was carried out between June and September 2022. The sample of the study consisted of 228 patients with chronic diseases. Data were collected with Patient Identification Form, Chronic Disease Care Assessment and Morisky-8-Item Compliance Form.

Results: In the study, the overall total mean score of the care evaluation of the patients was determined as 3.46 ± 0.57 , and the mean score of adherence to treatment was 3.81 ± 1.95 . It was determined that there was a positive and significant relationship between the patients' participation in care, decision support and problem solving sub-dimensions of the chronic disease care assessment scale and the mean scores of treatment adherence.

Conclusion: The identified patients' satisfaction level concerning chronic disease was moderate, and their compliance with the treatment was low. The results indicated that as the patient activation, problem-solving and decision-making sub-dimensions of the patient's satisfaction with the chronic disease increased, their treatment adherence raised.

Key words: Care, Chronic disease, Treatment adherence.

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1. INTRODUCTION

Chronic illnesses are long-term diseases that slow down normal physiological functions, cause progressive and irreversible changes, limit daily life activities, negatively affect patients' quality of life, usually have a complicated process, and require continuous medical treatment, care and support (1). The incidence of chronic diseases is increasing gradually our country and in the world with the prolongation of life expectancy. According to 2018 data from the World Health Organization (WHO), chronic diseases caused the death of 41 million people worldwide (71% of all deaths). It has been reported that chronic illnesses in Turkey cause 392 thousand of deaths and 88% of all deaths (2). The Turkish Statistical Institute (TUIK) informed that among the causes of death in 2018, cardiovascular diseases ranked first at 38.4%, cancers ranked second at 19.7%, and respiratory system diseases at 12.5% (3). In chronic diseases, it is important to ensure the continuity of care management of patients due to the high morbidity and mortality (4-6).

Although significant advances have been made in the effective treatment and care of chronic diseases today, the desired goals of care management in patients have not been achieved (5,7). Regular medical follow-up and holistic care gain importance to reduce the negative course of chronic diseases that cannot be treated definitively and to improve the role and responsibility of the patient's care in care management. Sick individuals need to be constantly informed about the disease and treatment methods to provide the continuity of their care and the treatment and care process (5,8-10). It is also essential that the patients be cared for and treated by the same team during chronic disease treatment and care. The closeness of the patient to the treatment team and knowing and trusting them will also have a positive effect on the effectiveness of the treatment and the patient's compliance with the treatment (11-13). Reasons related to the care of chronic diseases, such as poor communication of patients with healthcare professionals, dissatisfaction with healthcare providers, patients not going to the hospital for regular check-ups, and poor quality of care may increase the patient's non-compliance with treatment. For this reason, a good level of satisfaction with chronic care will positively affect treatment compliance (6,13,14).

Successful, continuous, and effective chronic disease care also increases adherence to treatment. The constant increase in chronic disease numbers brings the importance of controlling these diseases to the agenda (2,10). Very few studies have been found on patients' care assessment and adherence to treatment, and it has been observed that positive results of patients' assessment of disease care have a positive effect on treatment compliance (2,10,13). It can be said that more studies are needed to reveal the importance of this situation. Therefore, this study aims to examine the relationship between the evaluation of chronic disease care of individuals with chronic disease and their compliance with treatment.

Research Questions

1. How do patients' demographic characteristics, disease care assessment status and adherence to treatment affect the mean scales?
2. What are the disease care assessment status and treatment compliance levels of individuals with chronic diseases?

3. What is the relationship between the evaluation of chronic disease care of individuals with chronic disease and their adherence to treatment?

2. MATERIALS AND METHODS

Study Type

This is a descriptive and correlational study.

Study Period and Place

The study was realized in in the internal clinics (internal medicine, chest diseases and cardiology clinics) of a training and research hospital in southeast Turkey between June and September 2022.

Study Population and Sample

The population of the study consisted of patients who were diagnosed with chronic disease in the hospital where the study was conducted. The study sample size was calculated by using G*Power 3.1.9.7 software. As a result of the power analysis, the sample size was calculated as 228 patients, with 0.2139 impact size, 95% power, and 0.05 margin of error. These values show that the sample size was at the desired level. The sample of the study consisted of patients aged 18 and over, who voluntarily agreed to participate in the research, were diagnosed with a chronic sickness for at least six months (defined by ICD-10 codes), had no hearing, vision, and mental problems, and had the cognitive ability to answer the questions. Patients with difficulties in understanding and communicating skills were determined as the exclusion criterion of the study.

Data Collection Tools

Patient Identification Form, Chronic Illness Care Assessment Form and Morisky-8 Itemized Drug Adherence Questionnaire Form were used to collect the data.

Patient Identification Form: It was formed by the researchers by reviewing the literature (5,7,13) consisted of 10 questions including age, gender, marital status, education level, income status, employment status, place of residence, chronic illness, comorbidity, and disease duration.

Patient Assessment of Chronic Illness Care (PACIC): The questionnaire was developed by Glasgow et al. (2005) based on Wagner's Chronic Care Model (15). The validity and reliability of the Turkish version of the scale were performed by Incirkus and Nahcivan (2011) (16). The scale consists of 20 items, including patient activation, decision-making, goal setting/guidance, problem-solving, and monitoring and coordination consist of 5 sub-dimensions in total. The scoring of the Likert-type scale is “never (1), rarely (2), sometimes (3), often (4), and always (5)”. The total scale score ranges between 1-5. An increase in the mean score on the scale indicates that patients with chronic illnesses are more satisfied with the received care and that chronic illness management is good. The Cronbach Alpha value of the scale was found to be 0.91 (16) and 0.86 in this study.

Eight-item Morisky Medication Adherence Scale (MMAS-8): The survey was developed by Donald E. Morisky and was validated by Morisky et al. in 1986 (17). The validity

and reliability of the Turkish version of the scale were performed by different researchers in different diseases such as COPD and asthma, hypertension, and bipolar disorder (18-20). The scale consists of 8 items. The higher the score, the higher the adherence to drug therapy. On the scale, 0-6 points are evaluated as low compliance, 6-8 points as medium, and 8 points as complete compliance. The Cronbach Alpha value of the scale was found to be 0.61 (17) and 0.68 in this study.

Data Collection Procedure

The researchers collected the data by face-to-face interview technique. Each interview lasted approximately 10-15 minutes.

Data Analysis

SPSS 25.0 (Statistical Package for Social Science) statistical package program was used to analyze the data. Data were evaluated with descriptive statistics, Kruskal-Wallis, independent groups t-test, One-Way Variance (ANOVA), LSD Post Hoc test, and Pearson analysis. A p-value of <0.05 was accepted as statistically significant.

3. RESULTS

The findings of the study revealed that the mean age of the patients was 53.42 ± 15.86 , 57.0% were female, 82.9% were married, 32.5% were illiterate, 66.7% had medium income, 67.5% were unemployed, 54.8% lived in the city, 29.8% had diabetes, 79.4% had no other chronic illness other than the existing disease, 34.6% had a disease duration of 6-10 years (Table 1).

Table 1. Distribution of Patients by Descriptive Characteristics (n:228)

The Characteristics of the Patients	Number (n)	%
Age	$\bar{X} \pm SD$ 53.42±15.86	
Gender		
Female	130	57.0
Male	98	43.0
Marital Status		
Married	189	82.9
Single	39	17.1
Educational background		
Illiterate	74	32.5
Literate	66	28.9
Elementary-Middle School	58	25.4
High school or higher	30	13.2
Income status		
High	18	7.9
Middle	152	66.7
Low	58	25.4
Employment status		
Employed	74	32.5
Unemployed	154	67.5

Table 1. Distribution of Patients by Descriptive Characteristics (n:228) (continue)

The Characteristics of the Patients	Number (n)	%
Residence		
City	125	54.8
Town	64	28.1
Village	39	17.1
Chronic illness condition		
Diabetes	68	29.8
Hypertension	49	21.5
COPD- Asthma	64	28.1
Chronic kidney failure	25	11.0
Cardiac disease	22	9.6
Concomitant chronic disease (at least one)		
Yes	47	20.6
No	181	79.4
Duration of the disease		
1-5 years	70	30.7
6-10 years	79	34.6
11-15 years	47	20.6
16 years or more	32	14.0

SD: Standard deviation; \bar{X} = Mean; Min: Minimum; Max: Maximum

In this study, the mean scores of the PACIC subscales; patient activation 3.74 ± 0.75 , decision support 3.76 ± 0.68 , goal setting 3.37 ± 0.70 , problem-solving 3.62 ± 0.75 , follow-up/coordination 3.07 ± 0.79 , PACIC summary score was determined as 3.46 ± 0.57 , and Morisky 8-item adherence scale mean score 3.81 ± 1.95 . (Table 2).

Table 2. The Mean Scores of the Patients' PACIC and MMAS-8 Scales

Scale and Subscales	Number of items	Min.-Max. Points	$\bar{X} \pm SD$
Patient Activation items 1–4	3	1.00-5.00	3.74 ± 0.75
Decision Support (items 4–6)	3	1.67-5.00	3.76 ± 0.68
Goal Setting (items 7–11)	5	1.20-5.00	3.37 ± 0.70
Problem-Solving (items 12–15)	4	1.50-5.00	3.62 ± 0.75
Follow-up/Coordination (items 16–20)	5	1.00-5.00	3.07 ± 0.79
PACIC Summary Score (20 items)	20	2.25-5.00	3.46 ± 0.57
MMAS-8 Total	8	0-8	3.81 ± 1.95

PACIC: Patient Assessment of Chronic Illness Care; MMAS-8: Eight-item Morisky Medication Adherence Scale

It was determined that the difference between the patient activation and problem-solving sub-dimension score average of the satisfaction scale about chronic disease according to the education level of the statistically significant. The LSD Post Hoc test was performed to understand which education level of the patients caused this difference. The results illustrated that it was higher in illiterate patients than in those who graduated from primary, secondary, and high school ($p < 0.05$). The satisfaction scale concerning chronic disease according to patients' employment status demonstrated that the difference between decision-making and the problem-solving sub-dimension mean score was statistically significant. The analysis of the satisfaction scale concerning chronic disease according to the patient's employment status revealed that the difference between decision-making and the problem-solving sub-dimension mean score was statistically significant. The findings of the satisfaction scale of patients about

total chronic disease according to other comorbidities indicated that the difference between goal setting and the problem-solving sub-dimension mean score was statistically significant ($p<0.05$). The difference between the medication adherence mean scores regarding the education level of the patients was statistically significant. The results of the LSD Post Hoc test performed to understand which education level of the patients caused this difference showed that those who graduated from primary-secondary school were lower than those who graduated from high school and above ($p<0.05$) (Table 3).

Study findings revealed a positive correlation between patients' PACIC decision making, participation, problem solving sub-dimensions, and their MMAS-8 total score averages. ($p<0.05$) (Table 4).

4. DISCUSSION

The chronic disease care assessment plays a significant role in evaluating the care provided from the patient perspective. Therefore, the evaluation of chronic disease care of patients is substantial (21). The result of this study displayed that the level of satisfaction with the chronic care services provided to the patients was moderate, and it also demonstrated that the highest obtained score was the decision support sub-dimension. The lowest score was the follow-up and coordination sub-dimension from the CBDS sub-dimensions. While the results were similar to the findings of the study (8-10,21), some studies reported that the satisfaction level of the patients was low (1,2,6,9,12,21-26). It can be said that reasons such as providing care services by health professionals with insufficient clinical knowledge and skills affect the level of satisfaction with the care.

Determined that the patient's compliance with treatment was not good. By Demirbağ and Timur (2012) with elderly and chronically ill people, they found that 85.5% of the patients did not use their medications regularly, and 61.1% of patients did not receive any information about their medications (27). In the literature review for patients diagnosed with different chronic diseases, it was observed that patients diagnosed with diabetes had a low adherence level to drug therapy (28,29). On the other hand, the current study findings showed that the patients diagnosed with hypertension had a moderate compliance level with drug therapy (30-33). In many studies, it has been observed that the compliance of patients with treatment is not good. The study finding is consistent with the results in the literature.

Patient activation and problem-solving sub-dimensions in the assessment of chronic disease care were affected by the level of education, and the mean scores decreased as the level of education increased. In studies examining mixed or specific patient groups in the literature, it was found that the level of education affects the assessment of chronic care, and the mean score of chronic care assessment increases as the level of education increases (2,10,12,24,26,34). The difference in our study findings is that the patients with low education levels are good at necessary care and compliance. In addition, the mean age of our study (53.42 ± 15.86) may have affected the patient satisfaction with the care evaluation status because the patients were more mature or the nurses and doctors showed respect to the patients.

Table 3. Comparison of the Mean Scores of the PACIC and MMAS-8 Scales According to the Characteristics of the Patients (n:228)

The Characteristics of the Patients	PACIC summary score and subscales (X±SS)						MMAS-8 total (X±SS)
	Patient Activation	Decision Support	Goal Setting	Problem Solving	Follow-Up/ Coordination	PACIC Summary Score	
Gender							
Female	3.74±0.74	3.79±0.67	3.39±0.65	3.63±0.74	3.06±0.81	3.47±0.56	3.76±1.89
Male	3.75±0.76	3.73±0.69	3.35±0.77	3.60±0.76	3.10±0.77	3.45±0.58	3.87±2.04
Test and Significance	t=-0.17 p=0.86	t=0.65 p=0.51	t=0.38 p=0.70	t=0.34 p=0.73	t=-0.36 p=0.71	t=0.16 p=0.86	t=-0.44 p=0.65
Marital Status							
Married	3.76±0.74	3.78±0.63	3.36±0.70	3.64±0.78	3.09±0.82	3.47±0.57	3.87±1.99
Single	3.65±0.78	3.70±0.88	3.43±0.72	3.53±0.61	3.02±0.64	3.42±0.55	3.51±1.73
Test and Significance	t=0.82 p=0.41	t=0.55 p=0.58	t=-0.53 p=0.53	t=0.95 p=0.34	t=0.46 p=0.64	t=0.49 p=0.62	t=1.04 p=0.29
Educational background							
Illiterate	3.91±0.66	3.90±0.69	3.45±0.69	3.81±0.74	3.23±0.75	3.61±0.55	3.95±1.80
Literate	3.68±0.65	3.76±0.66	3.30±0.58	3.51±0.74	2.96±0.72	3.38±0.48	3.87±1.90
Elementary-Middle School	3.56±0.88	3.63±0.65	3.35±0.79	3.58±0.74	3.06±0.74	3.39±0.58	3.22±1.91
High school or higher	3.83±0.81	3.72±0.71	3.40±0.81	3.45±0.77	2.98±1.05	3.42±0.71	4.43±2.28
Test and Significance Difference	F=2.70 p=0.04 *a-c	F=1.76 p=0.15	F=0.58 p=0.62	F=2.70 p=0.04 *a-d	F=1.62 p=0.18	F=2.36 p=0.07	F=2.99 p=0.03 *c-d
Income status							
High	3.77±0.66	3.70±0.62	3.18±0.79	3.56±0.77	3.14±0.87	3.41±0.64	4.05±2.15
Middle	3.74±0.78	3.77±0.69	3.44±0.70	3.60±0.73	3.12±0.82	3.49±0.58	3.68±1.91
Low	3.74±0.69	3.78±0.68	3.26±0.66	3.67±0.81	2.94±0.67	3.41±0.50	4.06±1.99
Test and Significance	KW=0.04 p=0.97	KW=0.09 p=0.95	KW=2.47 p=0.29	KW=0.05 p=0.97	KW=1.16 p=0.55	KW=0.44 p=0.80	KW=2.07 p=0.35
Employment status							
Employed	3.69±0.66	3.61±0.69	3.34±0.65	3.37±0.75	3.11±0.74	3.38±0.57	3.55±2.00
Unemployed	3.77±0.79	3.84±0.66	3.39±0.73	3.74±0.73	3.06±0.81	3.50±0.57	3.93±1.92
Test and Significance	t=-0.76 p=0.44	t=-2.35 p=0.01	t=-0.54 p=0.58	t=-3.50 p=0.00	t=0.44 p=0.65	t=-0.49 p=0.13	t=-0.38 p=0.16
Residence							
City	3.77±0.80	3.74±0.67	3.37±0.72	3.61±0.73	3.02±0.79	3.44±0.58	3.92±1.90
Town	3.64±0.67	3.69±0.70	3.43±0.67	3.55±0.81	3.15±0.85	3.46±0.57	3.75±2.03
Village	3.82±0.68	3.95±0.65	3.31±0.71	3.76±0.72	3.13±0.67	3.53±0.51	3.53±1.98
Test and Significance	F=0.87 p=0.41	F=1.91 p=0.15	F=0.34 p=0.70	F=0.94 p=0.39	F=0.72 p=0.48	F=0.32 p=0.72	F=0.63 p=0.53

Table3. Comparison of the Mean Scores of the PACIC and MMAS-8 Scales According to the Characteristics of the Patients (n:228) (continue)

Chronic illness condition							
Diabetes	3.67±0.84	3.76±0.71	3.38±0.82	3.52±0.76	3.17±0.88	3.46±0.68	3.85±1.72
Hypertension	3.80±0.71	3.65±0.70	3.37±0.66	3.55±0.68	3.16±0.78	3.46±0.53	3.93±1.87
COPD- Asthma	3.85±0.68	3.86±0.64	3.32±0.57	3.77±0.85	2.90±0.64	3.47±0.47	3.68±2.21
Chronic kidney failure	3.69±0.56	3.70±0.74	3.36±0.85	3.55±0.59	3.19±0.88	3.45±0.62	3.72±2.13
Cardiac disease	3.60±0.90	3.80±0.55	3.56±0.57	3.71±0.71	2.97±0.78	3.48±0.49	3.86±1.98
Test and Significance	KW=2.61 p=0.62	KW=2.95 p=0.56	KW=1.79 p=0.77	KW=4.39 p=0.35	KW=3.67 p=0.45	KW=0.51 p=0.97	KW=0.74 p=0.94
Concomitant chronic disease (at least one)							
Yes	3.94±0.89	3.88±0.63	3.60±0.72	3.87±0.72	3.20±0.91	3.65±0.63	3.95±1.85
No	3.69±0.70	3.73±0.69	3.32±0.69	3.55±0.75	3.04±0.75	3.41±0.54	3.77±1.98
Test and Significance	t=2.00 p=0.04	t=1.32 p=0.18	t=2.52 p=0.01	t=2.64 p=0.00	t=1.24 p=0.21	t=2.55 p=0.01	t=0.57 p=0.56
Duration of the disease							
1-5 years	3.71±0.71	3.80±0.75	3.35±0.76	3.61±0.78	3.07±0.84	3.45±0.61	3.74±2.01
6-10 years	3.71±0.78	3.71±0.66	3.37±0.63	3.54±0.81	3.08±0.81	3.43±0.56	3.68±2.02
11-15 years	3.79±0.76	3.82±0.56	3.47±0.61	3.68±0.62	3.12±0.73	3.53±0.50	4.06±1.98
16 years or more	3.83±0.74	3.72±0.74	3.31±0.87	3.73±0.71	3.00±0.72	3.46±0.59	3.90±1.63
Test and Significance	F=0.28 p=0.83	F=0.37 p=0.77	F=0.42 p=0.73	F=0.64 p=0.58	F=0.14 p=0.93	F=0.26 p=0.84	F=0.42 p=0.73

Table 4. Investigation of the Relationship Between the Mean Scores of the Patients' PACIC and MMAS-8 Scales

	PACIC summary score and subscales					
	(X+SS)					
	Patient Activation	Decision Support	Goal Setting	Problem Solving	Follow-Up/Coordination	PACIC Summary Score
MMAS-8 total	r= 0.129	r= 0.173	r= 0.018	r= 0.144	r= -0.071	r= 0.076
(X+SS)	p=0.05	p=0.00	p=0.78	p=0.02	p=0.28	p=0.25

PACIC: Patient Assessment of Chronic Illness Care; MMAS-8: Eight-item Morisky Medication Adherence Scale

It was determined that the non-working patients had a higher mean score for the decision-making and problem-solving sub-dimensions in the assessment of chronic disease care, and the difference was significant. Contrary to our findings in this study, the results indicated that working status did not affect satisfaction concerning chronic disease (2,10,26). In our study findings, the higher average score of decision-making and problem-solving in the care services provided to non-working patients can be explained by their willingness to make decisions about their care.

In PDD, high doses of 5-ALA cause apoptosis, not necrosis, in cancer cells. Apoptosis and death rates in cells increase in parallel with the concentration (22). In addition, in our study, it was confirmed that caspase 3/7 activity and apoptosis-death rate gradually increased in cancer cells after 1000 and 1500 µM 5-ALA administration. The highest apoptosis-death rate was seen in 1500 µM 5-ALA. These results suggest that an increase in 5-ALA-induced ROS generation induces apoptotic cell death in cancer cells.

In the evaluation of chronic disease care of another comorbid disease, the mean scores of the sub-dimensions of goal setting and problem solving were found to be higher and the difference between them was significant. Contrary to our study result, it was found in a study that the presence of other comorbidities did not affect the evaluation of chronic disease care (24). In our research, conditions such as having more than one chronic disease, the patient's frequent hospital visits, and diverse care for each disease may have affected the high level of satisfaction with health care.

It was found that the mean treatment compliance score of the patients who graduated from high school and above was higher and the difference between them was significant. Similar to our study, Turhan et al. (2014) study, which evaluated the drug compliance of 94.9% of patients with at least one chronic disease, found that those with higher educational status had regular drug compliance (35). In studies evaluating drug compliance for hypertension patients, it was found that there was no significant difference between education level and drug compliance (33,36). In our study, it can be thought that the characteristics of patients with high education levels, such as having knowledge about the disease and its treatment, understanding the importance of treatment, and taking into account the nurses' suggestions, affect treatment compliance positively.

This study showed that as the mean scores of the patient activation, decision-making, and problem-solving sub-dimensions of the patient's satisfaction with the chronic care they received increased, the patient's treatment compliance increased. Similar studies have observed that the level of patient care satisfaction regarding chronic disease care positively affects treatment adherence (2,13). Our study finding is similar to the studies conducted. It has been

shown that patients were affirmative about the thought of participating in their care on patient involvement, decision-making, and problem-solving, which in turn affects treatment adherence.

5. CONCLUSION

Found that the patient's satisfaction level with chronic disease was moderate, and their compliance with the drug was low. The outcomes demonstrated that the patients had the highest satisfaction score in the decision-making sub-dimension and the lowest satisfaction score in the follow-up/coordination sub-dimensions. This result shows that patients with chronic diseases should be monitored/coordinated for self-care. The findings indicated that as patients' participation in chronic disease care, decision-making support, and problem-solving satisfaction increase, there is an increase in drug compliance. This result revealed the importance of satisfaction in terms of chronic disease in ensuring drug compliance. The literature review showed that few studies investigated care assessment and medication adherence in patients with chronic conditions. Therefore, it is thought that the results of this study will contribute to nursing science. In addition, it may be recommended that nurses plan training for patients in order to increase the satisfaction with care and to ensure drug compliance for patients who cannot receive adequate care. To evaluate patients' satisfaction with the care they receive and drug compliance, studies on using these two variables together in specific sample groups can be recommended. Since nurses take an active role in all care processes of patients, nurses' awareness to evaluate patients' care and medication compliance can be increased.

Ethical Considerations

This study was planned according to the Helsinki Principles. Ethics committee approval dated 29.12.2021 and numbered 27346 was obtained from University's Non-Interventional Clinical Research Ethics Committee. The necessary institutional consent was obtained from the hospital where the study was conducted. After giving the required information to the patients, an informed consent form was signed by each patient who agreed to attend in the study.

Conflict of Interest

The authors have no conflicts of interest to.

Limitations of The Study

This study is limited only to patients with the chronic disease treated at the hospital where the study was conducted.

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