



# Adaptation With the Chronic Disease and Expectations from Nurses

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**ABSTRACT** 

**Objective:** This study has been made to determine physical, social, and psychological adaptation levels and general adaptation levels of patients with chronic diseases who are under medical treatment at the hospital and to evaluate their expectations from nurses within the course of the said process.

**Materials and Methods:** This study is definitive and cross sectional. The sample of the research is composed of 240 patients who have been under inpatient medical treatment in internal diseases clinics in between March and May 2018. Data were collected with a Personal Information form and an Adaptation to Chronic Illness Scale (ACIS).

**Results:** As a result of the statistical analysis, the adaptation of the patients, included in the scope of the study, to the disease was determined to be  $83.03\pm10.58$ . The social adaptation level of women, physical adaptation level of high school and university graduates, general adaptation, physical adaptation, and social adaptation levels of individuals who have never stayed at hospital, psychological adaptation level of individuals who had information related to their disease, and physical adaptation level of individuals with normal body mass index (BMI) were determined to be at higher statistically significant levels (p<0.05, p<0.01).

**Conclusion:** In conclusion, the gender, level of education, experience of hospital stays, information status related to his/her disease, BMI, medical diagnosis, and expectation models of nurses were determined to affect adaptation to the chronic disease to an important extent, from physical, social, and psychological aspects.

Keywords: Adaptation, chronic diseases, nursing

Cite this article as: Karatepe H, Atik D, Özcan Yüce U. Adaptation With the Chronic Disease and Expectations from Nurses. Erciyes Med J 2020; 42(1): 18-24.

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Submitted 24.04.2019

Accepted 02.10.2019

Available Online Date 06.11.2019

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# **INTRODUCTION**

Chronic diseases are situations in which treatment is certainly impossible with medical interventions, which brings herewith some sort of changes with no recycling in biopsychosocial areas of the individual, which require periodical monitoring and support care to decrease the harms of the disease and increase the active participation of the person in his/her self-care, together with the lifelong surveillance, protection, and rehabilitation (1–3).

Every disease affects the life in physical, spiritual, and social dimensions and treats the integrity of body. As a result, an individual whose body adaptation is disturbed may have so many negative feelings. Chronic diseases are a type of diseases, the personal burden of which is as serious as the social burden. It is thought that 78% of all deaths until the year 2020 and 60% of the global diseases burden will be rooted from the chronic diseases (4).

This study was planned to determine the physical, social, and psychological adaptation levels and general adaptation levels of patients with chronic diseases undergoing medical treatment in the hospital and to evaluate their expectations from nurses in the process.

# **MATERIALS and METHODS**

Aim of the Study: This study has been made to determine physical, social, and psychological adaptation levels and general adaptation levels of patients with chronic diseases who are under medical treatment at the hospital and to evaluate their expectations from nurses within the course of the said process.

Type of the Study: This study is definitive and cross sectional.

Place and Time of the Study: This study was made in a state hospital, in between March and May of the year 2018.

Population and Sample of the Study: The population of the study is composed of patients who have been under inpatient medical treatment in internal diseases clinic of state hospitals and for whom any chronic disease diagnosis had been made at least 6 months before. The sample is composed of 240 patients, who were in conform-

Characteristics	n	%	Characteristics	n	%
Gender			Chronic disease		
Female	134	55.8	DM	44	18.3
Male	106	44.2	НТ	36	15.0
Education level			Astma	22	9.2
Illiterate	70	29.2	COPD	21	8.8
Literate	21	8.7	CRF	20	8.3
Primary education	91	37.9	Cancer	17	7.1
Secondary education	41	17.1	CAD	14	5.8
Higher education	17	7.1	HT+DM	11	4.6
Marital status			Gonarthrosis	11	4.6
Married	202	84.1	Chronic bronchitis	11	4.6
Single	38	15.9	Osteoporosis	11	4.6
Occupation			ARF	7	2.9
Housewife	122	50.8	Heart failure	9	3.8
Employee	23	9.6	Goiter	3	1.3
Retired	24	10.0	Hepatitis	3	1.3
Officer	18	7.5	BMI (kg/m²)		
Freelance	40	16.7	<18.5	13	5.5
Other	13	5.4	18.5–24.9	118	49.5
Previously hospitalization status			25–29.9	64	26.9
Hospitalized	192	80.0	30–34.9	33	13.9
Not hospitalized	48	20.0	35–39.9	9	3.8
Smoking			>40	1	0.4
Yes	37	15.4	Information about the disease		
No	203	84.6	Informed 137		57.1
Expectations of patients from nurses			Uninformed 103		42.9
Unexpected	49	20.4	Information source (n=137)		
Interest, laughter	87	36.3	Nurse	17	12.5
Self satisfied	54	22.5	Doctor	118	86.1
Good care	29	12.1	Patient relatives	2	1.4
Information about applications	11	4.6	Finding sufficient information (n=137)		
Relief of pain	3	1.3	Sufficient	107	44.6
Good treatment practices	3	1.3	Insufficient	30	57.1
Problem solving	2	0.8			
Good education	2	0.8			

CRF: Chronic renal failure; ARF: Acute renal failure; HT: Hypertension; DM: Diabetes mellitus; COPD: Chronic obstructive pulmonary disease; CAD: Coronary artery disease; BMI: Body mass index. Continuous variables are represented as mean±standard deviation and categorical variables are represented as numbers in percentages

ity with the study criteria and who were determined with random sample selection. All patients among the inpatients; who were able to communicate, 18 or above, and accepted to be a part of the study, were involved in the study. Statistical power was found to be 100% in the post-hoc power analysis conducted to determine the adequacy of sample size.

Study Questions: Data of the study were collected to generate answers to the following questions:

- 1. How is the adaptation level of the patients with the chronic diseases?
- 2. What are the expectations of the individual with chronic disease from nurses?
- 3. Do clinical features affect the adaptation with chronic diseases?
- 4. Do personal characteristics affect the adaptation with chronic diseases?

Collection of Data: Data were collected with a Personal Information form and an Adaptation to Chronic Illness Scale (ACIS). The data of the study were obtained by researchers in a face-to-face interview method. In addition, records in patient files were used.

- 1. Personal Information Form: The form which was improved by the studier is composed of 13 questions totally. In the form, medical diagnosis, smoking habits, informational level related to the disease, body mass index (BMI), blood pressure and blood glucose levels, and some other biochemical values were examined together with some introductory questions such as age, gender, and profession. BMI, blood pressure, and blood glucose results were obtained in the scope of routine follow-up of patients and BMIs were calculated from the data in the patient files by researchers and clinical nurses without any charge. Additionally, expectations of patients from nurses and other health professionals were questioned in an open-ended way, answers were sorted out under groups.
- 2. Adaptation to Chronic Illness Scale (ACIS): The scale was developed by Atik and Karatepe (2016) and is a 5-point Likert scale. It includes totally 25 items under three sub dimensions namely physical adaptation, social adaptation, and psychological adaptation. Items 1, 9, 10, 13, 14, 15, 16, 18, 22, 23, and 24 measure physical adaptation (maximum 55, minimum 11 points), items 2, 3, 5, 7, 17, 19, and 25 measure social adaptation (maximum 35, minimum 7 points), items 4, 6, 8, 11, 12, 20, and 21 measure psychological adaptation (maximum 35, minimum 7 points). While calculating the scale points, total scale point is taken, and the scale point is calculated by dividing this with the number of items. Scale scoring is as follows: 1=I totally disagree, 2=I agree, 3=Undecided, 4=I agree, and 5=I completely agree. Items 5, 6, 12, 17, 19, 20, 24, and 25 are scored inversely. Total points taken from the scale is 125. The increase in the score means that the level of adaptation of patients with the disease is also increased. Cronbach's alpha value of the scale was found to be 0.88 (5).

#### **Ethical Aspect**

In the progression of the study, scientific principles as well as the ethical principles of the Helsinki declaration were held. In this context, the principles of informed consent, autonomy, secrecy, and the protection of secrecy, fairness, and no harm were taken into consideration. Necessary written permissions were obtained from the public hospital where the study was conducted. In order to conduct the study, the written permission and approval of the Ethics Committee were received (05/03/2018-5835). Before the application, patients were explained the aim, plan, and benefits of the study. Informed consent was obtained from the patients.

#### **Statistical Analysis**

Data were analyzed in the statistical package program. Continuous variables are represented as mean±standard deviation (SD) and categorical variables are represented as numbers in percentages. For categorical variables, independent samples t test, one way ANOVA, and Pearson correlation analysis were used. A p value of < 0.05 was considered statistically significant. The suitability of the data for normal distribution was assessed using the "single sample Kolmogorov-Smirnov test". It was determined by the "homogeneity of variance test" whether the data were homogeneously dispersed. A "Tukey analysis" was conducted to determine from where the differences between the groups originated.

**Table 2.** Characteristics of patients (continuous variables) (n=240)

Characteristics	Mean±SD		
Age (mean) (MinMax.)	60.11±16.24 (18–91)		
Total cholesterol (mg/dl)	160.62±33.57		
Systolic BP (mmHg)	119.36±18.59		
Diastolic BP (mmHg)	71.95±13.59		
FBG (mg/dl)	182.91±92.78		
HbA1c (%)	8.12±3.56		
HDL (mg/dl)	43.69±16.74		
LDL (mg/dl)	82.00±26.71		
Triglyceride (mg/dl)	136.60±71.01		
Pulse (min)	81.88±11.08		

Min: Minimum; Max: Maximum; SD: Standard deviation; FBG: Fasting blood glucose; LDL: Low-density lipoprotein; HDL: High density lipoprotein; BP: Blood

Table 3. ACIS point averages

	MinMax.	Mean±SD
ACIS total	56–111	83.03±10.58
Physical adaptation	24–55	38.87±6.13
Social adaptation	12-47	21.29±5.24
Psychological adaptation	12–35	22.86±3.20

ACIS: Adaptation to Chronic Illness Scale; Min: Minimum; Max: Maximum; SD: Standard deviation

#### RESULTS

The socio demographic and clinical characteristics of the patients are given in Table 1.

When personal characteristics of the patients involved in the study were examined, most of them are determined to be women (55.8%), married (84.1%), graduated from primary school (37.9%), and housewife (50.8%), and 15.4% of them were determined to have a smoking habit. When clinical properties of the patients were examined, it is found that 80% of the patients have already had an history of hospital stay, most of them was followed at the hospital for diabetes mellitus (18.3%) and high blood pressure (15%), nearly half of them had their BMI value at normal limits (49.5%), and 57.1% of them had information related to their disease. The information source of 86.1% of the ones having information related to their disease was determined to be the physician; the information level of 57.1% of these patients was determined to be insufficient. When the first expectations of the patients from nurses were questioned, 36.3% answered as attention and smiling face and, at the same time, 22.5% answered that they were satisfied, 22% did not mention any expectation.

The age average of patients was determined to be 60.11±16.24 and average of their fasting blood glucose and HbA1c values were determined to be above normal limits (Tables 1, 2).

The adaptation levels of individuals to the chronic disease are shown in Table 3.

As a result of the statistical analysis, the adaptation of the patients, included in the scope of the study, to the disease was determined to be  $83.03\pm10.58$  (Table 3).

Point averages of the adaptation level of the patients to the chronic disease according to their personal and clinical characteristics are shown in Table 4.

When point averages of the adaptation levels of individuals, staying at hospital because of a chronic disease, to the chronic disease according to their characteristics were examined, it was determined that the social adaptation level of women, physical adaptation level of high school and university graduates, general adaptation, physical adaptation and social adaptation levels of individuals who have never stayed at hospital, psychological adaptation level of individuals who had information related to their disease, and physical adaptation level of individuals with normal BMI were determined to be at higher statistically significant levels (p<0.05, p<0.01). It was determined that physical, social, and general adaptation levels of patients according to their medical diagnosis differed in a significant way, statistically (p<0.01), and ACIS point averages of individuals with general cardiac insufficiency were found to be higher. Social and psychological adaptation levels of patients according to their expectations from nurses were determined to be significantly different, statistically (p<0.01); social adaptation levels of individuals asking nurses to inform them on the implementations were found to be higher; individuals expecting from nurses to find solutions of the problems were determined to be satisfied and psychological adaptations of individuals with no expectations were found to be higher (Table 4).

# **DISCUSSION**

Efficient management of chronic diseases, whose importance is ever increasing nowadays, is assumed to be maintained with an active patient who has been taken to the center of his/her health care. And achievement of this goal will be possible with a patient who has been supplied with information, support, ability, motivation, and confidence. Accordingly, adaptation to the chronic disease is a very important issue from the perspective of both the patient and the health professionals.

When clinical characteristics of patients were examined in our study, it was determined that those were followed at the hospital mostly for diabetes mellitus and high blood pressure being primary diseases and that more than half of the patients were found to have information related to their disease. Similar to the finding of our study, Dede et al. (2016) determined 28.8% of patients as having diabetes and 29.5% as having high blood pressure (6). In the study of Dundar et al. (2013), they have mentioned that half of the patients with diagnosis of diabetes had enough information related to their diseases (7).

In our study, information source of most of the patients having information related to their disease was determined to be the physician and only 12.5% of them answered as nurse for their information source and more than half of them mentioned that the level of information supplied by the health team related to their treatment process was insufficient. Similar to the finding of our study, study of Akgul Baskale et al. (2015) mentioned that 82.5% of patients

are supplied with information by their physicians and 39.2% was supplied by the nurses (8). As a result of another study, 82% of the patients took information related to the treatment from the physician and the ratio of the ones taking information from nurses was 4% (9). On the other hand, Kvale and Bondevik (2010) mentioned that patients felt themselves confident when nurses had information related to the disease (10). In studies of Kartal et al. (2008), where they examined factors affecting adaptation to the treatment for individual with type-2 diabetes, patients mentioned that they expected members of the health team, in charge of their treatment, care, and training consultancy, to be equipped with special information and ability related to the said area and to inform them on their diseases (11). In the study of Rich et al. (1995), adaptation of patients with cardiac insufficiency to the disease management and their treatments were determined to increase after the information and training were supplied to them related to the disease (12). As is seen, the main purpose of maintaining adaptation to a chronic disease should be the motivation of patient by the health team with a relation of information, ability, and confidence. Nurses, having information related to the disease process and supplying information to the patients, will increase the trust in the nurses and accordingly this may contribute to the adaptation to the disease.

When expectations of patients from the nurses are asked without any influence, it was found that they expected attention and smiling faces the most; second important majority was satisfaction, and third important majority had no expectations. According to Akgul Baskale et al. (2015), it was found in a study made in Israel that there were expectations from nurses such as patience, kindness, understanding of psychological and social interests of the patient, trustworthiness, having information related to pain management, chemotherapy, radiation and surgical treatment, having ability of making diagnosis, and being reachable via telephone when needed (8). Akgul Baskale et al. (2015) mentioned expectations of patients from nurses as follows: showing understanding (79.2%), showing respect (75.8%), a better communication (65.0%), a better care (61.7%), and an emotional support (60.0%) (8). In the study of Cerit (2016), satisfaction of patients from the perspective of nurses was found to be above the average (13). In the study of Sendir et al. (2012), it was determined that the patients were very satisfied related to nursing (14). The studies of the literature and findings of our study have shown that the reason for expectations of patients from nurses being attention and smiling faces rather than their professional information and skills might be that they assumed the competence of nurses as limited.

It was found that the general adaptation of patients, within the scope of our study, to the disease was above the medium level and that the social adaptation of women to the chronic disease was better compared to the same in men. Similarly, Janowski et al. (2012) mentioned, as a result of their study by which they searched for gender differences in adaptation with psoriasis which is a chronic disease, that the anxiety of women related to the disease was lower compared to the same of men and that their adaptation rooted from the social support was higher (15). This situation is thought to be related to the fact that control perceptions of women patients related to the disease was higher compared to men as it was the case in the study of Yorulmaz et al. (16).

Studies show that the education level may be related to the adapta-

Variables	ACIS total	Physical adaptation	Social adaptation	Psychological adaptation
0. 1		y		
Gender	00 50 0 00	00 (5 5 50	01.04.5.01	00.14.0.17
Female	83.76±9.69	38.67±5.53	21.94±5.81	23.14±3.17
Male	82.10±11.58	39.12±6.84	20.47±4.29	22.50±3.22
<b>7.</b>	p=0.227	p=0.573	p = 0.030	p=0.125
Education level	04.40.44.04	06.00.645	04.04.506	22.22.2.22
Illiterate	81.12±11.21	36.80±6.15	21.34±7.36	22.98±2.62
Literate	85.38±11.03	39.80±4.67	21.33±4.02	24.23±4.44
Primary education	82.93±10.05	38.95±6.08	21.30±3.68	22.67±3.30
Secondary education	83.43±10.59	40.12±5.93	20.56±4.74	22.75±3.01
Higher education	87.52±9.16	42.76±5.97	22.76±4.42	22.00±3.33
	p=0.168	p = 0.002	p=0.712	p=0.233
Before hospitalization status				
Yes	81.61±9.96	38.19±6.05	20.62±3.98	22.79±3.19
No	88.68±11.18	41.56±5.77	23.97±8.12	23.14±3.24
	p>0.001	p = 0.001	p>0.001	p=0.501
Information about the disease				
Informed	83.27±4.26	36.63±2.11	21.36±2.33	25.27±1.84
Uninformed	83.16±12.24	38.32±6.81	22.02±6.71	22.81±2.81
	p=0.977	p=0.418	p=0.746	p = 0.006
Expectations of patients from nurses				
Unexpected	83.38±8.61	38.75±5.55	21.02±3.79	23.61±2.49
Interest, laughter	82.56±10.90	39.05±6.98	20.85±4.39	22.65±3.13
Self-satisfied	83.96±12.29	38.68±6.55	21.48±4.49	23.79±3.92
Good care	79.65±7.34	37.96±4.87	19.86±2.93	21.82±2.22
Information about applications	89.36±15.69	38.54±2.76	29.90±13.88	20.90±3.88
Relief of pain	85.00±0.00	47.00±0.00	17.00±0.00	21.00±0.00
Good treatment practices	87.00±0.00	43.00±0.000	23.00±0.00	21.00±0.00
Problem solving	81.00±0.00	35.00±0.00	22.00±0.00	24.00±0.00
Good education	77.00±0.00	39.00±0.00	19.00±0.00	19.00±0.00
	p=0.363	p=0.414	p>0.001	p = 0.009
BMI (kg/m²)				
<18.5	81.38±10.95	38.46±6.55	19.69±3.98	22.77±1.39
18.5–24.9	82.61±11.39	44.25±6.31	21.38±6.24	22.96±3.26
25–29.9	83.78±9.44	40.09±5.39	21.26±3.89	22.42±3.32
30–34.9	82.30±10.60	37.75±6.42	21.42±4.75	23.12±3.20
35–39.9	89.55±5.83	36.33±4.52	22.77±1.39	22.44±2.40
>40	83.00±0.00	35.00±0.00	24.00±0.00	24.00±0.00
	p=0.499	p = 0.029	p=0.817	p=0.853
Chronic disease				
DM	85.89±10.51	40.10±6.49	22.45±7.70	23.32±2.75
HT	87.30±9.74	42.25±6.04	21.72±4.03	23.33±3.39
Asthma	81.85±8.07	37.09±5.86	21.33±3.58	23.42±1.83
COPD	77.86±12.47	36.22±6.59	20.59±4.06	21.04±3.03
CRF	85.75±10.81	38.50±5.52	22.40±5.20	24.85±3.68
Cancer	77.52±12.20	36.76±7.11	18.52±4.84	22.23±2.01
CAD	75.14±4.55	34.85±3.89	18.42±4.10	21.85±1.51
HT+DM	73.24±4.36	31.35±3.33	17.54±3.15	20.46±1.97
Gonarthrosis	84.72±6.19	39.45±2.11	22.09±3.23	23.18±2.82
Chronic bronchitis	84.81±7.06	40.09±4.22	21.63±3.20	23.09±3.80
Osteoporosis	75.90±5.52	35.63±0.80	20.27±3.97	20.00±2.32
ARF	89.57±8.67	46.14±2.96	21.28±2.28	22.14±4.22
Heart failure	89.66±15.65	38.33±8.23	25.00±4.93	26.33±3.82
Goiter	81.33±2.30	36.66±0.57	20.00±1.73	24.66±1.15
Hepatitis	71.00±0.00	36.00±0.00	20.00±.00	15.00±0.00
- [	p>0.001	p>0.001	p=0.127	p>0.001

ACIS; Adaptation to Chronic Illness Scale. CRF; chronic renal failure. ARF; acute renal failure. HT; hypertension. DM;diabetes mellitus. COPD; Chronic Obstructive Pulmonary Disease. CAD; Coronary Artery Disease. BMI; body mass index

tion to the chronic disease (17,18). Yuet et al. (2002) determined that a low level of education resulted in the bad adaptation to the disease, in a study they conducted with individuals related to KOAH (17). In the study of Ersan et al. (2013) where they examined psychosocial adaptation, depression, anxiety, and stress levels, it was determined that there was a significant relation between the level of education and psychosocial adaptation (18). Similar to the findings of the literature, it was determined in our study that physical adaptation levels of high school and university graduates were better compared to the individuals at other education levels. It can be said that as a result of informed and instrumental support types being more in individuals with higher levels of education, controllability of the disease as a stress factor is related to the increase in understanding of the disease and treatment process correctly.

Chronic diseases may result in repetitive physician examinations and hospital stays because of different symptoms taking place both in the progress and process of the disease. According to the study of Treatment Adaptation of Chronic Diseases in Turkey made by Association of Developing Drug Consciousness and Rational Drug (2018), one of every ten individuals with chronic disease re-stays at hospital because of his/her maladaptation with the treatment and stays at hospital for 6 days on average. Repetitive hospital stays hinder the use of health services in a cost-effective way and may disturb the adaptation of the patient to the disease in the course of time (19). In our study findings, it was determined that general adaptation, physical adaptation, and social adaptation levels of individuals not staying at hospital before because of their chronic diseases were better compared to the individuals having repetitive stays. According to the results of the study in the literature, as chronic diseases progress in years, they decrease the function capacity, they decrease the quality of life as they experience repeated symptoms frequently, and they increase the level of anxiety and accordingly may affect the adaptation capacity negatively (20,21). On the other hand, in a study of Oguz et al. (2010) related to Chronic Heart Failure (CHF), it was mentioned that the reason for frequency of applications to the hospital was maladaptation of individuals to the disease management (22). In our study, it is thought that the reason of adaptation of individuals, who have not stayed at hospital before, being better might be that higher level of exhaustion in individuals having repetitive hospital stays resulted with the decrease in their internal motivations for their fight against the disease.

The information level of individuals with chronic disease related to their disease and their belief in their treatment are important factors for the process of adaptation to the disease. It was found in our study that the psychological adaptation level of individuals having knowledge of their disease was higher compared to the ones who have not been informed. In parallel with our finding, it was mentioned in the literature that individuals with enough level of information related to their disease prevented the perception of the disease as a disaster by individuals and that it affected their reactions against the disease in a positive way by making the cope easier (23). Treatment adaptation may be decreased by increasing the anxiety level of patients with insufficient information (23).

Symptoms like dyspnea, tiredness, lack of sleep, and cough which develop as a result of ventricle malfunction occurring in CHF decrease the quality of life in individuals, and they affect daily living activities of individuals in a negative way and especially, they may

disturb psychosocial adaptation levels. Ersan et al. (2013) mentioned in their study that psychosocial adaptation of cardiac patients may be disturbed depending on a lot of factors (18). Similarly, Dogru and Karadakovan (2016) found that generally psychosocial adaptation was affected in a negative way in patients with cardiac insufficiency (24). In our study, the disease group, with the best general adaptation level among patients whose physical, social, and psychological adaptations were evaluated, was determined to be patients with CHF.

It was mentioned in studies of literature related to patient expectations and patient satisfaction that patients were asking to have information and take training for the nursing services the most (25, 26). Akgul Baskale et al. (2015) mentioned that patients were asking from health staff to have information related to the subjects such as treatment and side effects, repeating probability of the disease, effects of the disease on psychological positions, prognosis, how much time the treatment would continue, and the disease (what the disease was and its reasons) (8). Schmid-Buchi et al. (2008) found that cancer patients needed information and professional support related to the proper management of the disease and its treatment (27). Saares and Suominen (2005) found that insufficient level of information related to the treatment was an important source of anxiety and fear in the patients (28). Thus, while social adaptation levels of individuals who asked for information from the nurses related to the implementations were found to be higher in our study, psychological adaptations of individuals, expecting solutions to problems from nurses and who were satisfied and without any expectation, to the disease were much more higher. Our study finding reflects continuous need of information, communication, and psychological support of nurses for the proper adaptation of individuals, with the chronic disease, to the process of disease.

#### **CONCLUSION**

In conclusion, the gender, level of education, experience of hospital stays, information status related to his/her disease, BMI, medical diagnosis, and expectation models of nurses were determined to affect adaptation to the chronic disease to an important extent, from physical, social, and psychological aspects. Generally, the adaptation level to the disease was not at a level to be interpreted as very good. Successful and effective conduct of care implementations of chronic diseases is possible with a professional and coordinated team work. The most important output of successful care implementations is patient data who could maintain physical, social, and psychological adaptation to the chronic disease. The nurse who is an important and irreplaceable member of health team with his/her professional leading roles in care management of chronic diseases should question physical, social, and psychological status and wellbeing of the individual with chronic disease frequently, should evaluate with applicable measurements, should use basic communication and diagnosis abilities effectively, and should develop his/her ability to establish therapeutic relation.

Ethics Committee Approval: Necessary written permissions were obtained from the public hospital where the study was conducted. In order to conduct the study, the written permission and approval of the Osmaniye Korkut Ata University Board Of Scientific Research and Publication Ethics were received (05/03/2018-5835).

**Informed Consent**: The patient's written consent was taken with the informed voluntary consent form.

Peer-review: Externally peer-reviewed.

**Author Contributions:** Concept – DA, HK; Design – DA, UÖY; Supervision – DA, HK; Resource – UÖY, HK; Materials – DA, HK; Data Collection and/or Processing – UÖY, HK; Analysis and/or Interpretation – DA, UÖY; Literature Search – DA, HK; Writing – DA, HK; Critical Reviews – DA, UÖY.

Conflict of Interest: The authors have no conflict of interest to declare.

**Financial Disclosure:** The authors declared that this study has received no financial support.

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