Original Article

Care dependency in individuals with chronic physical disease: Its relationship with compliance to treatment and life satisfaction

Feride Taskin Yilmaz, Ezgi Yildiz, Betul Esra Cevik, Zeynep Unver

Health High School of Susehri, Sivas Cumhuriyet University, Sivas, Turkey

Abstract

Aim: The reasons such as the fact that individuals with chronic diseases are mostly in the old age and that the diseases lead to changes in physical and psychological fields may bring about an increase of dependence in meeting daily needs. This study aims to determine the relationship between care dependency and compliance to treatment and life satisfaction in individuals with chronic physical diseases.

Material and methods: This research designed as a descriptive and relationship-seeking style includes 294 individuals with chronic physical diseases who were hospitalized for internal medicine clinics of a university hospital. After the ethics committee permission, the data were obtained by patient identification form, Care Dependency Scale, Modified Morisky Scale and Life Satisfaction Scale.

Results: It was found out that the level of care dependency and motivation and knowledge levels of the individuals were positively weak (p<0.05), and that there was a positive moderate relationship between care dependency and life satisfaction level (p<0.01). In addition, individuals' life satisfaction and motivation level in drug use account for 23% of the total variance in care dependence. In addition, 23% of the change in individuals' dependency on care results from life satisfaction and motivation for medication use.

Conclusions: As the levels of independence increases in fulfilling the care requirements of individuals with chronic physical disease, their compliance with drug and life satisfaction also tend to increase. Moreover, compliance to treatment and the life satisfaction of individuals are also important determinants in care dependency.

Keywords: Care dependency; chronic disease; compliance to treatment; life satisfaction

INTRODUCTION

Chronic diseases are defined as conditions that progress slowly, last three months and longer periods, arise from more than one risk factor, usually have a complex prognosis, require continuous medical support and/or restrict daily life (1-3). Along with the development of diagnostic and therapeutic methods and the increased importance of preventive health services, the factors such as aging of the world population, stressors resulting from rapid urbanization, decrease in physical activity due to developing technology and changes in lifestyle such as nutritional habits lead to an increase in the incidence and prevalence of chronic diseases (4,5). According to the Chronic Diseases and Risk Factors Survey in Turkey (TKrHRF) conducted by the Ministry of Health, 65% of men and 62% of women have chronic disease report (6). Chronic diseases, which increase day by day regardless of the level of development of the countries and the structure of social classes, make it difficult to provide health services

and increase the cost (7,8). Therefore, applications for the prevention and management of chronic diseases have started to gain importance today (8).

The aim of the management of chronic diseases is to help the individual live well and increase the level of well-being (2). However, reasons such as the fact that individuals with chronic diseases are mostly in the old age and that the diseases lead to changes in physical and psychological fields may bring about an increase of dependence in meeting daily needs (9-11). Care dependency is defined as the need for professional support, a decrease in the level of meeting the needs of physical and psychosocial self-care, and demanding a certain level of care according to dependence (12,13). Care dependency is a condition that can be seen by everyone due to disease and disability and can be temporary, long-term or permanent. (10). Determining the care dependency is an important determinant in identifying the care needs of patients, reducing health risks and controlling disease (14,15).

However, it is of vital importance for individuals to return to their active lives and to provide them to regain their independence by helping them in case of dependence (16). One of the most basic strategies in the management of chronic diseases is to adapt the individual to the disease and treatment (17,18). Individuals with chronic diseases require regular lifelong medication to control symptoms and to reduce and prevent complications (6). Compliance with medication is defined as the extent to which patients use their medication that they are prescribed by health care providers (18,19). Compliance with medication is generally considered as the responsibility of the patient. However, health professionals should be supportive in increasing patients' compliance with medication (20). It has been stated in the literature that individuals with chronic diseases do not comply with long-term treatment, and this causes various negative consequences such as an increase in mortality, frequency of hospitalization and health expenditures (3,7,18,20).

Many negative emotions such as having a chronic disease, trying to cope with the symptoms of the disease, difficulties or constraints caused by treatment, and worries about the future may affect the physical, cognitive and social life of the individual (2). This may lead to a decrease in the life satisfaction of individuals with chronic disease (21,22). Life satisfaction is a cognitive assessment of the individual's life as a whole (23) and is an important indicator of subjective well-being in chronic patients (24,25). Life satisfaction is associated with a disease, injury and mortality and is related to other health determinants such as social support and positive health behaviours (23,26).

Healthcare professionals, especially nurses, have responsibilities toward individuals with chronic diseases such as providing training, care, counseling, organizing studies, being representative of change and a resource person (2). Maintaining daily self-care skills, supporting recovery, and increasing life satisfaction are the main goals of nursing care (13). In this context, nursing care should be planned in order to keep the patient's independence at the highest level starting from admission to hospital to during hospitalization and after discharge period. (11). Determining the care needs and independence status in order to meet the basic human needs of individuals with chronic diseases is thought to support compliance with treatment and increase life satisfaction.

MATERIAL and METHODS

Aim and Study Design
The study was conducted descriptively and relationally in order to determine the levels of care dependency, compliance with treatment and life satisfaction and to detect the relationship between care dependency and compliance with treatment and life satisfaction of individuals with chronic physical disease.

Sample
The sample of the study consists of inpatient individuals with chronic physical disease in internal medicine clinics (internal medicine, endocrinology, nephrology, pulmonology, neurology, rheumatology, and cardiology) in a university hospital of a city in Central Anatolia Region of Turkey from February to June 2019. It was aimed to reach all inpatient individuals at the specified time without going to sample selection. In this context, 294 patients with chronic disease who had been diagnosed by a physician for at least six months, who were not diagnosed with psychiatric diseases, who did not use antipsychotic medication, who did not have verbal communication barriers and who accepted to participate in the study were included in the study sample.

Data Collection Tools
Data were obtained by using the patient identification form, Care Dependency Scale, Modified Morisky Scale, and Life Satisfaction Scale.

Patient Identification Form: This form consists of 14 questions that examine the individual characteristics of the patients (age, sex, marital status, education level, working status, smoking and alcohol use status, etc.) and disease characteristics (name of the disease, duration of disease, duration of drug use, condition of having regular health check, etc.).

Care Dependency Scale: The scale was developed by Dijkstra et al (27), based on Virginia Henderson's emphasis on human needs, and developed to assess patients' dependency on care. The reliability and validity study of the scale in Turkey was conducted by Hakverdioğlu Yönt et al (28). Consists of 17 items, the scale evaluates patients' status of compliance with eating/drinking, continence, body posture, mobility, day/night pattern, getting (un)dressing, body temperature, hygiene, avoidance of dangers, communication, contact with others, sense of rules/values, obeying the rules, daily activities, recreational activities, memory, learning ability. This 5-point Likert-type scale is scored between 1-"I am totally dependent" and 5-"I am not dependent ". The lowest score to be obtained from the scale is 17 and the highest score is 85. A high score indicates that the individual is independent in meeting the care needs, whereas a low score indicates that the individual is dependent on meeting the care needs (28). In this study, the Cronbach alpha value of the scale was found to be 0.97.

Modified Morisky Scale: The scale was developed by Morisky et al (29), and the validity and reliability study of the scale in Turkish was conducted by Vural et al (30). The scale used in the assessment of compliance with long-term drug therapy in chronic diseases consists of 6 questions. Each question can be answered as "yes" or "no". Each question is calculated over 1 point. In the answers given in questions 2 and 5, the answer yes is "1 point", the answer no is "0 point"; in 1st, 3rd, 4th, and 6th questions, the answer yes is "0 point" and the answer no is "1 point".

The scale has two sub-dimensions: motivation and knowledge. If the total score of the patient from questions 1, 2 and 6 is 0 or 1, it indicates "low motivation level", and

if it is greater than 1, it shows "high motivation level". If the total score obtained from questions 3, 4 and 5 is 0 or 1, it indicates "low knowledge level", and if it is greater than 1, it shows "high knowledge level" (30). In this study, Cronbach's alpha value of the scale was found to be 0.94.

Life Satisfaction Scale: The scale was developed by Diener et al (31) in order to determine life satisfaction levels of individuals, and the validity and reliability study of the scale in Turkish was conducted by Yetim (32). The scale consists of 5 items and is 7-point Likert-type (1-"Not at all appropriate" and 7-"Completely appropriate"). The lowest score to be obtained from the scale is 7 and the highest score is 35. The high scores indicate that the respondent's life satisfaction is high while low scores suggest that life satisfaction level is low (32). In this study, Cronbach's alpha value of the scale was found to be 0.92.

Implementation
The data were collected by the researchers during face-to-face interviews in the patient room when the general health status of the patients was stable in terms of vital functions. The researchers informed the patients about the purpose and importance of the study, and the data forms were applied to patients who agreed to participate in the study by one-to-one interviews. It took about 20-25 minutes to complete the study forms.

Ethical Approval
Written permission was obtained from the ethics committee of Sivas Cumhuriyet University (Decision no: 2019-01 / 21) and from the institution where the research was conducted before collecting the data. In addition, each patient to be included in the study was informed about the content of the study and volunteering of the participation, and their verbal consent was received.

Evaluation of the Data
The data were interpreted in the SPSS 22.0 package program. Through the evaluation of the data, in addition to the mean and percentage distribution, Pearson Correlation Analysis was used to determine the relationship between the Care Dependency Scale and the Modified Morisky Scale and the Life Satisfaction Scale. Furthermore, multiple regression analysis was used to determine the contribution of compliance to treatment and life satisfaction predicting care dependency of individuals. In addition, student t test, One-way ANOVA and Kruskal Wallis test were used to compare the mean scores of the scales with some characteristics of the patients. In statistical assessment, the significance was accepted as $p < 0.05$.

RESULTS

Approximately half of the patients (51%) are 65 years or older, and the mean age is 61.54±15.45 years. 51.7% of the participants are male, 84.4% are married, and 25.2% are illiterate. 82% of the patients do not work in any job, and 8.8% live alone. 13.3% of the patients are currently smoking, and 3.1% drink alcohol. When the distribution of chronic physical diseases are examined, it has been found that the majority of patients have diabetes (48.6%) and hypertension (40.8%). The mean duration of the disease is 10.63±7.99 years, and the mean duration of drug use is 9.80±7.30 years. More than half of the patients (59.5%) have stated that they have regular health checks. In addition, 55.1% of the patients have remarked that there is an individual with a similar disease in their family (Table 1).

Table 1. Socio-demographic and disease characteristics of patients (N=294)		
Characteristics	**n**	**%**
Age (Mean±SD) (year)	61.54±15.45 (min=24, max=88)	
<65	144	49.0
≥65	150	51.0
Gender		
Female	142	48.3
Male	152	51.7
Education status		
Illiterate	74	25.2
Literate	28	9.5
Elementary-Middle School	146	49.7
High school	33	11.2
University	13	4.4
Smoking habit		
Drinks	39	13.3
Left	74	25.2
Never	181	61.6

Alcohol habit		
Drinks	9	3.1
Left	19	6.5
Never	266	90.5
Name of chronic physical disease*		
Diabetes	143	48.6
Hypertension	120	40.8
COPD / Asthma	62	21.1
Heart disease / heart failure	57	19.4
Kidney diseases	33	11.2
Rheumatic diseases	28	9.5
Neurological diseases	26	8.8
Thyroid diseases	10	3.4
Cancer	5	1.7
Duration of disease (Mean±SD) (year)	10.63±7.99 (min=1, max=42)	
Duration of drug use (Mean±SD) (year)	9.80±7.30 (min=1, max=40)	
Having regular health checks		
Yes	175	59.5
No	119	40.5
The presence of an individual with a similar disease in the family (mother, father, sibling, child)		
Yes	162	55.1
No	132	44.9

*n number changed because more than one options were marked

Table 2. Distribution of Mean Scores of the Care Dependency Scale, the Modified Morisky Scale, and the Life Satisfaction Scale		
Scales	Possible min-max scores from study	Mean±SD
Care Dependency Scale	17-85	70.46±19.13
Eating/drinking	1-5	4.40±1.16
Continence	1-5	4.22±1.33
Body posture	1-5	3.95±1.35
Mobility	1-5	4.01±1.31
Day/night pattern	1-5	4.32±1.12
Getting (un)dressing	1-5	4.05±1.41
Body temperature	1-5	4.38±1.11
Hygiene	1-5	3.88±1.49
Avoidance of danger	1-5	3.83±1.47
Communication	1-5	4.47±1.08
Contact with others	1-5	4.46±1.09
Sense of rules/values	1-5	4.11±1.39
Obeying the rules	1-5	4.34±1.22
Daily activities	1-5	3.99±1.40
Recreational activities	1-5	3.86±1.52
Memory	1-5	4.09±1.27
Learning ability	1-5	4.03±1.25
Modified Morisky Scale		
Motivation	0-3	2.03±0.96
Knowledge	0-3	2.08±1.01
Life Satisfaction Scale	5-35	19.72±8.32

Table 2 shows the distribution of the mean scores of the Care Dependency Scale, the Life Satisfaction Scale and the Modified Morisky Scale of individuals with chronic physical disease. Accordingly, it has been found out that the average score of the patients from the Care Dependency Scale is 70.46±19.13, and that they are independent in meeting their care needs when considered the range of points that could be taken from the scale. However, it was determined that the patients experienced the most dependence on avoidance of dangers (3.83±1.47), hygiene (3.88±1.49) and body posture (3.95±1.35).

When the scores obtained from the Modified Morisky Scale are evaluated, the mean score of the motivation sub-dimension is 2.03±0.96, and the mean score of the knowledge sub-dimension is 2.08±1.01. Accordingly, when the compliance of the patients to the treatment is examined in general, their motivation and knowledge levels have been found to be high. However, 26.9% of the patients (n=79) have low motivation levels and 28.2% (n=83) have a low level of knowledge (Table 2).

In the study, the mean score of the patients on the Life Satisfaction Scale has been found to be 19.72±8.32. Accordingly, the life satisfaction level of the patients is moderate (Table 2).

Table 3 shows the correlation between the mean scores of the Care Dependency Scale, the Life Satisfaction Scale and the Modified Morisky Scale. Accordingly, there is a positive weak relationship between the level of care dependency and motivation and knowledge levels of patients (respectively r=0.230, p<0.01; r=0.143, p<0.05), and there is a positive moderate relationship between care dependency and life satisfaction level (r=0.456, p<0.01). Although this correlation analysis does not show the cause and effect relationship between the scales, it indicates that compliance to treatment and life satisfaction of the patients tend to increase as the level of independence increases in fulfilling their care needs. Moreover, it has been found out that there is a positive weak relationship between the levels of satisfaction with life and motivation and knowledge levels of patients (respectively r=0.163, p<0.01; r=0.210, p<0.01).

Table 3. The relationship between the mean scores of the Care Dependency Scale, the Modified Morisky Scale, and the Life Satisfaction Scale of the patients				
Scales	Care Dependency Scale	Motivation	Knowledge	Life Satisfaction Scale
Care Dependency Scale				
Modified Morisky Scale				
Motivation	r=0.230 p=0.000**			
Knowledge	r=0.143 p=0.014*	r=0.495 p=0.000**		-
Life Satisfaction Scale	r=0.456 p=0.000**	r=0.163 p=0.005**	r=0.210 p=0.000**	-
*Correlation is significant at the 0.05 level, **Correlation is significant at the 0.01 level				

Table 4. Multiple Regression Analysis Indicators of Care Dependency					
Variables	B	SE	ß	t	p-value
Motivation	3.489	1.172	0.177	2.977	**0.003***
Knowledge	-0.664	1.130	-0.035	-0.587	0.557
Life Satisfaction	0.998	0.121	0.435	8.244	**0.000***
R=0.483, R²=0.234, F=29.466, p= 0.000*					
*significant at the 0.01 level					

Table 4 shows the results of multiple regression analysis of the care dependency of the patients in terms of various variables. In the multiple regression analysis, the motivation subscale means score of the Modified Morisky Scale and the mean score of the Life Satisfaction Scale have been found to be significant factors affecting care dependency (R=0.483, R2=0.234, F=29.466, p=0.000). The life satisfaction and motivation level of the patients in medication use explain 23% of the total variance in the level of care dependency. High levels of life satisfaction and motivation for drug use positively affect the level of independence of patients in meeting their care needs. In the multiple regression analysis, the mean knowledge subscale score of the Modified Morisky Scale has been the excluded variation.

Table 5. Comparison of Some Individual and Disease-Related Features of Patients with the Care Dependency Scale, the Modified Morisky Scale and the Life Satisfaction Scale

Characteristics	Care Dependency Scale Mean±SD	Modified Morisky Scale Motivation Mean±SD	Knowledge Mean±SD	Life Satisfaction Scale Mean±SD
Age (year)				
<65	76.75±14.81	2.13±0.83	2.14±0.98	20.06±8.57
≥65	64.42±20.84	1.93±1.07	2.02±1.03	19.40±8.09
Test (t/p)	5.822/0.000**	1.764/0.079	1.008/0.314	0.674/0.501
Gender				
Female	71.99±17.92	1.99±0.93	2.07±1.04	20.78±8.43
Male	69.03±20.15	2.06±1.00	2.09±0.98	18.74±8.12
Test (t/p)	1.327/0.186	-0.644/0.520	-0.236/0.812	2.109/0.036*
Education status				
Illiterate	64.75±12.54	1.79±1.03	2.01±1.04	19.83±8.19
Literate	64.82±19.44	2.00±0.98	2.28±0.80	21.28±8.64
Elementary-Middle School	71.33±19.05	1.93±0.99	2.13±1.03	18.96±8.37
High school -University	80.23±11.13	2.18±0.90	1.93±0.99	21.02±8.16
Test (KW/p)	34.418/0.000**	8.019/0.046*	2.927/0.403	2.851/0.415
Smoking habit				
Drinks	76.74±16.44	2.15±0.84	1.87±1.08	19.38±8.19
Left	65.97±21.34	1.97±1.03	2.04±1.03	18.09±8.43
Never	70.94±18.36	2.02±0.96	2.14±0.98	20.46±8.25
Test (F/p)	4.289/0.015*	0.446/0.641	1.300/0.274	2.192/0.114
Duration of disease				
Test (r/p)	-0.018/0.764	0.015/0.796	0.136/0.019*	-0.006/0.925
Duration of drug use				
Test (r/p)	-0.030/0.613	0.009/0.884	0.134/0.022*	-0.029/0.618
Having regular health checks				
Yes	69.78±19.60	2.19±0.87	2.21±0.97	19.14±8.65
No	71.45±18.46	1.78±1.04	1.89±1.03	50.57±7.78
Test (t/p)	-0.732/0.465	3.585/0.000**	2.741/0.007**	-1.449/0.148

*significant at the 0.05 level; ** significant at the 0.01 level.

The study has found out that there is a relationship between the age-education level, smoking habit and the level of care dependency. Patients who are 65 years old and older, who are illiterate and have a previous smoking history have a higher level of care dependence (Table 5).

The study has also revealed that high school and university graduates and individuals who have regular health checks have higher motivation levels for drug use. In addition, a positive correlation has been determined between the duration of illness and of drug use and the level of knowledge about drug use (Table 5).

When the relationship between some sociodemographic and disease characteristics and life satisfaction of the patients was examined, it was found that the difference exists only in terms of gender. Life satisfaction levels of women were higher than men (Table 5).

DISCUSSION

The presence of the chronic disease may bring about an increase in dependence and daily physical deficiency in daily life activities. The reasons such as intensive treatment, long-term symptoms regarding treatment and its side effects, and a long hospital stay of inpatients especially in internal medicine clinics may increase the risk of care dependency (16). In this study, it is aimed to determine the relationship between care dependency and life satisfaction and compliance with treatment in individuals with chronic physical disease, and the findings obtained have been discussed in accordance with the literature.

In the study, individuals with chronic disease have been found to be partly independent in meeting their care needs (Table 2). Similarly, in a study conducted on inpatients for

heart failure and Chronic Obstructive Pulmonary Disease (COPD) in Germany, patients were found to have limited dependence on care (15). In a prospective study conducted with individuals with chronic disease, it was found that the level of care dependence of the patient group gradually increased at the end of one year (33). In the studies examining the level of care dependency of inpatients in medical and surgical clinics, care dependency levels of inpatients were determined to be higher (16,34). In a comparative study conducted with inpatients, outpatients and home-cured patients living in Japan, Netherlands, Poland, and Turkey, it was found that the individuals who stay in nursing homes have the highest nursing care dependency (35). The study findings are regarded as positive in terms of being independent in meeting daily needs considering the mean duration of the disease.

In this present study, individuals with chronic disease were found to experience the most care dependence on avoiding dangers, hygiene, and body posture (Table 2). In another study conducted with hospitalized patients due to heart failure and COPD, it was found that they have care dependency in daily activities such as mobility, hygiene, dressing and avoidance of danger (15). Inpatients may experience dependence in the situations such as the perception of danger like exposure to hospital infections, limitation of movement and body posture due to being bedridden, and lack of hygiene due to the absence of the bathroom in each patient room in clinics. Therefore, it is important for nurses to support the care needs of individuals, especially in these situations.

Compliance with treatment in individuals with chronic disease includes perceptions, attitudes and behaviours that contain an individual's lifestyle, behaviour, way of taking medication, believing in and maintaining the treatment. In this context, knowledge, desire and motivation of the patients are very important in their compliance with the treatment (5). In the study, the motivation and knowledge levels of the patients are generally high; however, approximately one quarter have low levels of motivation and knowledge (Table 2). In some studies conducted with individuals with chronic disease, compliance to treatment of individuals was found to be moderate (3,18,20). The different findings obtained from the studies can be explained by the disease characteristics of the study groups.

Life satisfaction of individuals with chronic disease may be impaired as a result of a number of symptoms and complications (2). However, increasing the life satisfaction of individuals can be achieved by reducing chronic health problems in the physical and mental health field (36). In the present study, it has been determined that the life satisfaction level of the patients is moderate (Table 2). In another study conducted with adult individuals with chronic disease, 44.6% of the individuals stated that they have high life satisfaction, and 49.8% have moderate life satisfaction (23). In a prospective study, it was found that life satisfaction decreases in individuals with chronic disease (26). In addition, other studies have found that the life satisfaction of individuals with chronic disease is reduced (22,24,33). Although the study findings indicate that the life satisfaction of individuals is affected by the disease, it may be due to being in the hospital environment.

In the study, it was found that as the level of independence of the patients increases in fulfilling their care needs, drug compliance including motivation and knowledge also increases (Table 3). Although there is no similar study in the literature, the study findings reveal the importance of supporting the independence of individuals in fulfilling their daily needs as much as possible. We think that individuals who can do their daily needs independently may be more aware of coping with the disease and therefore regular drug use.

In individuals with chronic disease, daily activities based on insufficiency of physical activity may be adversely affected due to the common symptoms such as pain, weakness, and fatigue. In addition, physical disorders can further increase the discomfort of patients by lowering their psychological state (21). This situation shows that life satisfaction may be impaired in individuals due to care dependence. In the study, it was found out that as the level of independence of patients increases in fulfilling their care needs, their life satisfaction also tends to increase (Table 3). In a study conducted with elderly individuals with chronic disease, it was revealed that there is a positive relationship between care dependency and physical, social/familial, emotional, functional well-being and fatigue, which are components of quality of life; in other words, the quality of life increases with the increased independence levels in meeting their daily needs. In the same study, quality of life was found to be an important determinant of care dependence by 24.7% (13). In a study of patients with advanced COPD and heart failure, care dependence was shown to be associated with impaired quality of life (33). In another study conducted with adult individuals with chronic disease, it was found that decreased life satisfaction is associated with poor health level, and individuals with low life satisfaction perceived their overall health to be 6.2 times worse than those with high life satisfaction (23).

Compliance to treatment and quality of life are interrelated rather than causal. Patients with a better quality of life are better able to adapt to their medication and thus achieve better results. On the contrary, patients with poor quality of life are less likely to adapt to their medication, leading to poor outcomes and thus making their quality of life worse (18). In the study, it was revealed that as the levels of motivation and knowledge about compliance to treatment increase, life satisfaction also increases (Table 3). In a qualitative study that examined the effect of the use of medication on quality of life in patients with chronic disease, the majority of individuals who participated in the study reported that medication use had a positive

effect on their quality of life (1). In a study conducted with individuals with chronic disease in Lebanon, compliance to treatment was found to be associated with a high quality of life (18).

In the regression analysis conducted in the study, it was found that the motivation level and life satisfaction of the patients with chronic diseases were the factors significantly affecting the care dependency (Table 4). In other words, high levels of life satisfaction and motivation for medication use positively affect the level of independence in meeting the daily needs of patients. Because there are no studies in the literature, the study findings could not be compared. All in all, care dependency, compliance to treatment, and life satisfaction are interrelated.

In this study, patients who are 65 years old and over, who are illiterate and have a previous smoking history were found to have a higher level of care dependence (Table 5). In a comparative study conducted in The Netherlands, Poland and Turkey, it was revealed that there is a relationship between the participants' age, gender, education level and level of care dependence, but this relationship also varies between countries (13). In a study conducted with patients hospitalized at Geriatrics clinic, the average age of individuals with low level of care dependence was found lower than the average age of individuals with medium level of care dependence. However, in the same study, it was found that there is no relationship between gender, marital status and status of living alone and the level of care dependence (14). In another study, no difference was found between the gender of the patients and the level of care dependence while as the age increases, the level of care dependence increases, and the dependency status gradually increases, especially in individuals aged 58 and over (16). There is a need for more research planned with a large sample group to determine the sociodemographic and disease characteristics that may affect the level of care dependence in individuals with chronic disease.

In this present study, it has also been determined that high school and university graduates and individuals who have regular health checks have higher motivation levels for drug use. In addition, as the duration of illness and of drug use increase, the knowledge level of the patients about drug use also increases (Table 5). In another study, it was found that the patients who are women compared to men, the elderly compared to the young, the uneducated compared to educated people, and those who take a single drug compared to those who use multiple medications have a higher rate of compliance with the treatment and lower correlation level between the duration of the disease and the of drug use and compliance with the treatment (7). Another study conducted with patients using multiple drugs revealed that there is no significant difference in terms of gender, age, marital status, educational status, status of living alone, and motivation and knowledge levels, while the motivation levels of patients using 6 to 8 drugs and of individuals using 2 to 3 drugs were found

to be low (5). In another study, it was found that young and asthmatic patients have lower motivation level, and male, single and hypertensive patients have lower level of knowledge (3).

This study have revealed that female patients have higher level of life satisfaction (Table 5). Another study conducted with individuals with chronic diseases found that women have lower level of life satisfaction (24). In a study conducted with patients with hypertension, it was found out that age, gender, duration of illness, and status of going to health checks do not affect life satisfaction. (22). The reason for the inconsistencies in the study findings may be related to the data collection tools used to assess the differences in the populations studied and the level of life satisfaction.

LIMITATIONS

The limitations of the study were the fact that the study was conducted with inpatients in a single university hospital, that patients were admitted by time without sampling, and that a limited number of individuals were reached. Therefore, the results obtained are valid only for this sample group. In addition, data on individuals' dependence on care, adherence to treatment, and life satisfaction are based on self-reports.

CONCLUSION

In accordance with the findings, it was revealed that compliance to treatment and life satisfaction of individuals with the chronic disease tend to increase as their independence levels increase in fulfilling the care needs, and their compliance to treatment and life satisfaction are also important determinants in care dependence. In this context, it is of great importance to support the independence of individuals with chronic physical disease in meeting their daily needs. For this reason, health professionals, particularly nurses who have primary responsibility for the care of a patient, should address the individual as a whole, determine the care needs of individuals in the hospital environment and participate in the care of the individual to the extent that they can tolerate. It is also important for professionals to periodically assess these individuals in terms of the risk of care dependency and to question compliance to treatment and life satisfaction. It is recommended that the study be conducted with inpatients in different hospitals and different clinics or with individuals with chronic physical illnesses receiving outpatient treatment with larger sample groups.

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