Original Article

The Acceptance of Illness and Life Satisfaction of Individuals with Chronic Disease

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Abstract

Background: The acceptance of chronic diseases plays an important role in improving self-management of the factors that cause illness.
Purpose: This descriptive study was conducted to investigate the factors affecting the acceptance of illness and the life satisfaction of individuals with chronic diseases.
Methods: The study sample consisted of 178 patients with at least one chronic disease. The data were collected with the 'Patient Information Form', 'Acceptance of Illness Scale', and 'The Satisfaction with Life Scale'.
Results: There was a statistically significant difference between the working status and acceptance of illness of the patients. No statistically significant difference was found among the other sociodemographic characteristics and acceptance of illness and the life satisfaction scores. A significantly positive difference was found between the life satisfaction scores and the acceptance of illness of the patients ($r = 0.163$; $p = 0.030$).
Conclusion: Many factors affect life satisfaction. Patients' acceptance of illness increased their life satisfaction. The study found that the individual's life satisfaction increased as their acceptance of illness status increased. Since the acceptance-of-illness status and life satisfaction vary from individual to individual, nurses should consider this information when planning individualized care. According to this study, the working status plays a positive role in acceptance of illness. this study suggests that nurses, in particular, refer their non-working patients to occupational therapy.

Keywords: Chronic diseases; personal satisfaction; nursing

Introduction

Chronic diseases are gradually increasing as a result of increased life expectancy due to the developments in medicine worldwide. This increase causes economic or social burden, depending on the chronic diseases, individuals and community (Sav, Salehi, Mair and McMillian, 2017). Similarly, chronic diseases are increasing in Turkey due to an aging population and changing lifestyle. According to the 2017 cause-of-death statistics of the Turkish Statistical Institute, the top three diseases that caused death were circulatory system diseases (39.7%), cancer

(19.6%) and respiratory system illnesses (12%) (Turkey Statistical Institute, 2017).

The acceptance of chronic disease plays an important role in improving self-management of the factors that cause illness. In addition, coping with the development of complications, depending on the disease, is extremely important in minimizing stress (Kostyła, Tabała and Kocur, 2013). Acceptance not only increases self-esteem but also leads to positive feelings towards one's limitations and the treatment process (Kurpas, et al, 2013). Studies have shown that the frequency of hospital admission for individuals who do not accept the illness also increases (Jankowska-Polańska, Kaczan, Lomper and Nowakowski, 2018).

Some studies have focused on examining the factors that are effective in the acceptance-of-illness process. Unlike these studies, we questioned the correlation between acceptance and life satisfaction along with the factors affecting the acceptance-of-illness process. Satisfaction is the fulfilment of individuals' life expectations, needs, wishes and desires (Diener, 1984). Accordingly, life satisfaction is a person's evaluation of his or her own quality of life as a whole, subjectively and internally (Chokkanathan, and Mohanty, 2017). In connection with the chronic illness process, it is necessary to understand the correlation between the acceptance of illness and life satisfaction to live a good and happy life.

Acceptance of illness and life satisfaction enhance an individual's quality of life. Only when the individual accepts the illness will he or she be successful in implementing the lifestyle changes required for the illness and its treatment. The aim of the study was to investigate the factors affecting the acceptance of illness and the life satisfaction of individuals with chronic disease.

Methods

The study was conducted using a descriptive research design. The study population comprised individuals who received treatment in inpatient departments of three hospitals belonging to a private health group in Istanbul between July 2017 and December 2017 and those who received treatment in an outpatient clinic due to chronic diseases; these patients had been diagnosed with a chronic disease for at least 6 months. The study sample consisted of 178 patients from 18 to 65 years old who agreed to participate in the study and were diagnosed with a chronic disease at least 6 months prior to the study.

Data Collection Tools: 'The Satisfaction with Life Scale', 'Acceptance of Illness Scale' and 'Patient Information Form' were used as data collection tools in the study.

Patient Information Form: The 'Patient Information Form', prepared by the researchers as part of the literature review, consists of 16 questions including three open-ended and 13 closed-ended questions about the individual's personal characteristics, chronic disease and treatment.

'Acceptance of Illness Scale': The scale was developed by Felton and Revenson in 1984, and a validity and reliability study of the Turkish version was conducted by Buyukkaya Besen and Esen (2011). The 'Acceptance of Illness Scale' is used to measure the patient's acceptance-of-illness levels.

The Likert-type scale consists of eight items, each of which has five points. The lowest score to be taken from the scale is 8, and the highest score is 40. A low score signifies a low acceptance of illness, whereas a high score signifies high acceptance of the illness condition (Buyukkaya Besen and Esen, 2011). The original version of the scale has a Cronbach's alpha value of .79. In this study, the Cronbach's alpha value was found to be .717.

'The Satisfaction with Life Scale': The validity and reliability of the Turkish version of the scale, which was developed by Diener et al. (1985), were examined by Dagli and Baysal (2016). The scale was developed to determine individuals' satisfaction with their lives. It is a seven-point Likert-type scale consisting of five items (1, I strongly disagree; 7, I strongly agree).

The lowest possible score on the scale is 5, and the highest is 35. While a low score indicates low life satisfaction, a high score indicates high life satisfaction. The original version of the scale has a total Cronbach's alpha value of .88. In this study, the Cronbach's alpha value of the scale was found to be .765.

Ethical Aspects of the Study: For this study, written ethics committee approval from the X University Clinical Trials Assessment Commission (dated 22.06.2017 and numbered 2017-11/16), written permission from the researchers who conducted the validity and

reliability study indicating that the scales could be used and written institutional permission from the hospitals where the study was conducted were obtained. The patients in the study sample were informed about the purpose and duration of the study and what was expected from them; their written consents were obtained in accordance with the principle of volunteerism.

Statistics: Data were analyzed by using SPSS 22.00 statistical package for Windows. The percentage distribution, average value, and standard deviation were used for descriptive statistics. Parametric tests were used for comparison of the continuous variables if the data had a normal distribution (t test, one-way ANOVA), if the data did not have a normal distribution, non-parametric tests were used (Mann-Withney U, Kruskal-Wallis test). Pearson's correlation analysis was used to analyze the relationship between acceptance-of-illness and life satisfaction. Statistical significance was accepted if the p value was lower than 0.05.

Results

The mean age of the patients was 60.9 ± 14.15 years old. A total of 50.3% of the patients (n = 91) were male, and 76.8% (n = 139) were married. Exactly 42.5% (n = 77) of the patients had completed an undergraduate education or higher (Table 1).

Upon assessing their comorbidity status, it was observed that patients had other illnesses accompanying the chronic disease. Among those, 45.3% (n = 82) had hypertension; 38.7% (n = 70) had cancer; 23.2% (n = 42) had diabetes; 2.8% (n = 5) had hyperlipidemia; 15.5% (n = 28) had coronary artery disease; 1.7% (n = 3) had hyperthyroidism; 5% (n = 9) had chronic pulmonary disease; 0.6% (n = 1) had epilepsy; 2.2% (n = 4) had gastrointestinal disease; 0.6% (n = 1) had Parkinson's disease; 0.6% (n = 1) had dementia; and 3.9% (n = 7) had hypothyroidism.

No statistically significant difference was found between the acceptance of illness and life satisfaction scores of the patients according to their gender, marital status, educational status and the status of having children ($p > 0.05$). A statistically significant difference was found between the employment status and acceptance of illness of the patients ($t = 2.58$; $p < 0.05$), but no significant difference was found between employment status and life satisfaction ($p > 0.05$).

There was no statistically significant difference between the acceptance of illness and life satisfaction scores of the patients in terms of income and leisure activity status ($p > 0.05$) (Table 1). According to the patients' status of having a family member with a chronic disease, presence of medical problems, proper use of medications and level of knowledge about the illness, no statistically significant difference was found between their acceptance of illness and life satisfaction scores ($p > 0.05$). There was no statistically significant difference between the patients' acceptance of illness and life satisfaction scores in terms of their knowledge level and perception about the disease and the people with whom they were living ($p > 0.05$) (Table 2).

No statistically significant correlation was found between the patients' average ages and acceptance of illness ($r = -0.140$; $p = 0.064$). There was no statistically significant correlation between the patients' average ages and life satisfaction scores ($r = 0.100$; $p = .187$). No statistically significant correlation was found between the number of years with chronic disease and acceptance-of-illness status ($r = 0.056$; $p = .472$) or life satisfaction ($r = -.030$; $p = .695$). There was a significantly positive correlation between the patients' life satisfaction and their acceptance of illness ($r = .163$; $p = .030$) (Table 3).

Table 1. The Acceptance of Illness and Life Satisfactions of the Patients According to Their Sociodemographic Characteristics (N=178)

	N(%)	Acceptance of Illness Status X±SD	Life Satisfactions X±SS
Gender			
Female	**87(48.1)**	**29.51±5.93**	**24.52±5.77**

Male	**91(50.3)**	**29.10±6.46**	**24.34±6.50**
t- value		**.447**	**.204**
p value		**.655**	**.839**
Marital status			
Married	**139(76.8)**	**29.13±6.35**	**24.19±6.12**
Single	**39(21.5)**	**29.92±5.60**	**25.28±6.22**
t- value		**-.691**	**-.977**
p value		**.491**	**.330**
Education			
Primary school	**43(23.8)**	**24.744±5.598**	**23.511±6.489**
High school	**58(32.0)**	**29.103±5.925**	**23.793±6.231**
University and more	**77(42.5)**	**30.342±6.581**	**25.428±5.804**
F-value		**2.502**	**1.826**
p value		**.085**	**.164**
Statuses of having a children			
No	**30(16.6)**	**30.46±5.70**	**24.63±6.18**
Yes	**148(81.8)**	**29.06±6.28**	**24.39±6.15**
t- value		**1.12**	**.196**
p value		**.261**	**.845**
Working status			
Yes	**62(34.3)**	**30.95±5.01**	**24.45±6.71**
No	**115(63.5)**	**28.44±6.62**	**24.33±5.78**
t- value		**2.58**	**.126**
p value		**.010***	**.900**
Household income			
Income is lower than their expenses	**14(7.7)**	**28.500±6.223**	**23.357±5.017**
Income equal to their expenses	**116(64.1)**	**28.991±6.251**	**23.896±6.430**
Income is higher than their expenses	**48(26.5)**	**30.319±6.058**	**26.041±5.504**
KW-value		**1.562**	**4.511**
p value		**.458**	**.105**
Leisure activity status			
Hayır	**55(30.4)**	**28.49±6.47**	**23.23±5.82**
Evet	**123(68.0)**	**29.67±6.05**	**24.96±6.22**
t-value		**-1.17**	**-1.7**
P value		**.242**	**.082**

[1] t= Student's T Test was used.

[2] Z= Mann Whitney U Test was used.

[3]KW=Kruskall Wallis Test was used.

[4] F=Anova One-way Analysis was used.

***p<0.05**

Table 2. Acceptance of Illness and Life Satisfaction of the Patients According to their Illness-Related Characteristics (N=178)

	N(%)	Acceptance of Illness Status X±SS	Life Satisfactions X±SS
Statuses of having a family member with a chronic disease			
No	**74(40.9)**	**28.83±5.52**	**24.35±5.67**
Yes	**104(57.5)**	**29.63±6.63**	**24.49±6.48**
t-value		**-.844**	**-.148**
P value		**.400**	**.882**
The proper use of the medications			
No	**9(5.0)**	**27.55±6.80**	**22.11±6.07**
Yes	**169(93.4)**	**29.39±6.16**	**24.55±6.14**
U -value		**633.500**	**584.000**
p value		**.412**	**.240**
Complications about chronic disease			
No	**136(75.1)**	**29.26±6.38**	**24.23±6.21**
Yes	**42(23.2)**	**29.42±5.62**	**25.07±5.93**
t-value		**-.147**	**-.770**
P value		**.883**	**.442**
Knowledge level perception about the disease			
Bad	**15(8.3)**	**29.266±6.943**	**22.533±7.845**
Moderate	**66(36.5)**	**29.151±6.018**	**24.121±5.900**
Good	**62(34.3)**	**28.935±5.685**	**24.306±5.877**
Very good	**35(19.3)**	**30.294±7.200**	**26.057±6.168**
KW- value		**2.412**	**4.785**
p value		**.491**	**.188**
The statuses of receiving the training about the illness			
No	**118(65.2)**	**29.61±6.26**	**24.20±6.01**
Yes	**60(33.1)**	**28.70±6.07**	**34.88±6.40**
t-value		**.930**	**-.697**
p value		**.354**	**.487**
The people they were living with			
Tek	**15(8.3)**	**31.214±3.866**	**25.200±6.710**
Eşi ve çocukları	**156(86.2)**	**29.234±6.215**	**24.307±6.184**
Diğer	**7(3.9)**	**26.857±8.933**	**25.571±4.076**
KW- value		**1.342**	**.462**
p value		**.511**	**.794**

[1] t= Student's T Test was used.

[2] Z= Mann Whitney U Test was used.

[3]KW=Kruskall Wallis Test was used.

[4] F=Anova One-way Analysis was used.

***p<0.05**

Table 3: The Correlation between the Acceptance of Illness and Life Satisfaction of the Patients (N=178)

	Acceptance of Illness Status r/p	Life Satisfaction r/p
Age	**-.140/.064**	**.100/.187**
Chronic Disease Years	**.056/.472**	**-.030/.695**
Life Satisfaction	**.163/.030***	**-**

*** p<0,05**
r= Correlation Analysis was used.
***p<0.05**

Discussion

The mean age of our study sample is similar to the mean age range of those with chronic illness in the Turkish population. The sociodemographic characteristics of the patients were similar to those of the community.

Acceptance of Illness: The study found that sociodemographic characteristics, such as gender, age, marital status, educational level, social security and employment status, had no effect on the acceptance of illness. In other studies, sociodemographic characteristics did not affect the acceptance of illness (Buyukkaya Besen, 2012; Zalewska, Miniszewska, Chodkiewicz and Narbutt, 2007). It was determined in the study conducted by Sireci and Karabulutlu that the average acceptance of illness in male patients was higher than that in female patients. It was also observed in the same study that the acceptance-of-illness scores of the patients having university or graduate education were higher compared with those of the other patients (Sireci and Karabulutlu, 2017). The sociodemographic characteristics and the acceptance of illness of the patients in this study are similar to those reported in the literature, except for those in Sireci and Karabulutlu's study.

Patients' knowledge about their disease did not affect their acceptance of illness. Sireci and Karabulutlu stated in their study that the mean acceptance-of-illness scores of the patients who gained information about their illnesses were higher than the scores of those who did not receive any information (Sireci and Karabulutlu, 2017). This difference was associated with the fact that the education levels of the patients included in the sample of Sireci and Karabulutlu's study were lower than those in other studies, including this one.

It was seen in the present study that the illness duration did not affect the acceptance-of-illness level of the patients. Zalewska et al. (2007) observed that the illness duration did not affect the acceptance of illness. Demirtas and Akbayrak (2009) found that patients with diabetes for more than 10 years had less acceptance of illness. Similarly, Sireci and Karabulutlu (2017) stated that the mean acceptance-of-illness score of the patients with an illness duration of 3–5 years was higher than that of the other groups. Study sample differences were thought to cause the differences between the present study results and the results reported in the literature.

Life Satisfaction: Increased life satisfaction led to a decrease in mortality risk (Boehm, Winning, Segerstrom and Kubzansky, 2015). For this reason, it is believed that determining a patient's life satisfaction is important.

In this study, chronic illness status and sociodemographic characteristics did not affect life satisfaction. Another study stated that age affected life satisfaction, and gender did not (Ziolkowski , Blachnio and Pachalska, 2015). In addition, it was stated in the study conducted by Macia (2015) that among elderly individuals, the life satisfaction scores of women were higher than those of men (Macia, Duboz, Montepare, and Gueye, 2015).

It was observed in the present study that the people with whom the patients were living did not affect their life satisfaction. Guan et al.

(2015) showed that the mean life satisfaction scores of individuals living alone or with a spouse were lower than those of individuals living with the next generation. The difference between the results of the present study and those in the literature was thought to be associated with the traditional family structure in Turkey.

Correlation Between the Acceptance of Illness and Life Satisfaction: It was seen in the present study that there was a positive correlation between the acceptance of illness and life satisfaction of the patients. Many factors affect life satisfaction (Sireci and Karabulutlu, 2017; Macia, et al, 2015; Anke et al, 2015). Patients' acceptance of illness increased their life satisfaction. It is important that health professionals know the factors that affect patients' acceptance of illness.

Conclusion and Implications for Practice: Individuals' acceptance of illness is important for the course of the disease. No difference was found between the acceptance of illness and life satisfaction scores of the patients according to their sociodemographic characteristics, except for their employment status. The present study showed that the life satisfaction of individuals increased as their acceptance of illness increased. According to this study, the working status plays a positive role in acceptance of illness. This study suggests that nurses, in particular, refer their non-working patients to occupational therapy. Since acceptance of illness and life satisfaction varies from person to person, nurses need to consider this information when planning individual care. It is thought that the care given by nurses would increase the overall quality of care and the patient's satisfaction if the acceptance of illness and life satisfaction of patients was considered.

Limitation: The study was carried out in three hospitals belonging to a private health group in Istanbul. Istanbul is the most populous city and reflects the composition of the Turkish population. The results of the present study may reflect the Turkish demographic structure. The economic status of patients treated in private hospitals is higher than that of patients treated at a state hospital. This factor may have caused their life satisfaction expectations to be high.

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