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EVALUATION OF CHRONIC PATIENT NURSING CARE BY THE PATIENTS: A UNIVERSITY HOSPITAL CASE

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Abstract

This study aims to identify satisfaction levels of adult chronic patients regarding the care they received at the hospital. The descriptive and cross-sectional study was conducted at Çukurova University Faculty of Medicine Balcalı Hospital between 01.08.2016-31.10.2016. The sample consisted of 910 patients. The data was collected with "Personal Information Form" and "Patient Assessment of Chronic Illness Care (PACIC)." The data were analyzed via IBM 20.0 program. Ethical committee approval, permission from the institution and verbal consent from the patients were obtained for the study. The average age of the participants was 50.88±16.55. The average hospitalization duration was 9.22±11.55 days. It was indicated that 38% of the respondents have cardiovascular diseases, 94.6% use a kind of medication,91.7%

have their medications on time, 85.5% take recommended dosages, 45.5% know the name and the number of the medication they take. The average score for chronic patient care evaluation scale was 3.11±0.74. When the subscales of the scale are analyzed, it was found that the average score for patient participation subscale is 3.75±0.93, decision-making support subscale is 3.46±3.33, target-setting subscale is 2.95±0.78, problem-solving subscale is 3.28±0.97 and monitoring/coordination subscale is 2.51±1.03. Significant correlations were found between the respondents' education level and health education with their evaluations of chronic care. It was indicated that the patients' satisfaction with the nursing care is medium, the highest average scores are in decision-making subscale while the average score for monitoring/coordination subscale is the lowest. In order to raise the satisfaction levels of chronic patients regarding nursing care, chronic patient care should be prioritized in organized education and on-the-job training for nurses. By emphasizing the importance of monitoring and coordinating the patients, better management of chronic diseases can be achieved.

Keywords

Chronic Patient, Nursing, Satisfaction

1. Introduction

Turkish Language Association defines *patient* as 'a person who is unhealthy, sick, feeling discomfort, and whose welfare has been lost (Grand Turkish Dictionary, 2016.)," *nurse* as 'a health care professional who is responsible for regulating, supervising, and evaluating the care of patients (Grand Turkish Dictionary, 2016)," and *nursing* as 'the effort for something to progress and maintain the good state (Grand Turkish Dictionary, 2016)." Nursing care takes a considerable place among the health services provided for the treatment and rehabilitation of the patients. With the rapid development of technology, "quality" has recently become a very important criterion for the improvement and development of health services. Following the spread of quality studies in the field of health, "nursing care and patient satisfaction" has been brought to the agenda (Köşgeroğlu et al., 2005). Along with the establishment of the standards in quality assessment and organization of the applications based on these standards, patient satisfaction is also an essential parameter (Arslan and Kelleci, 2010). In addition, it should be borne in mind that not only the care the patients receive but also the patient confidentiality and the respect for values and beliefs is deterministic regarding patient satisfaction (Arslan and Kelleci, 2010).

Nursing care directly affects hospital satisfaction by taking a role in the treatment of the patient as well as in the holistic nursing care provided. Therefore, evaluation of patient satisfaction will play an important role in the standardization of nursing care as well as in the evaluation, standardization, and quality improvement of community health services (Arslan and Kelleci, 2010). For chronic diseases are onerous both economically and socially for individuals, families, and society, it is required to standardize the health services for the control of these diseases and strengthen the policies (Özdemir and Taşçı, 2012; Kaya et al; Public Health Agency of Turkey, 2013; Senevirathne et al., 2015). In this respect, the quality of treatment and care provided by health care professionals to chronic diseases is quite significant (Üstünova and Nahcivan, 2015). With the developing technology in the recent years, there is a rapid increase in the world as well as in our country regarding the studies of health care evaluation and patient satisfaction assessment.

The related studies in the literature have been examined, and in the study conducted by Üstünova and Nahcivan (2015) aiming at identifying how the individuals with chronic obstructive pulmonary disease (COPD) perceive chronic care management and examining the factors affecting chronic care management, it was found out that patients with COPD were less satisfied with the service they received regarding chronic care management. Moreover, the study conducted by Özpancar (2015) in an attempt to evaluate the effect of the health education provided for the patients with hypertension by the nurse on the compliance of the case management applied to the treatment; coping with chronic disease; and metabolic variables, it was identified that health education and case management model are appropriate to use in order to improve treatment compliance in patients with hypertension. In accord with the results obtained from the scale instruments the Patient Assessment of Chronic Illness Care (PACIC) and The 8-item Morisky Medication Adherence Scale in the study by Ölmez's (2015) conducted with patients with Type-2 Diabetes Mellitus to evaluate chronic disease management and medication compliance from the patient's perspective, it was found out that chronic disease management and medication compliance are not at sufficient levels, and further consideration should be attached to the related issue by both the patients and health care workers.

2. Methodology

2.1 The Purpose and Design of the Study

This study is designed to be a descriptive and cross-sectional research in an attempt to determine the satisfaction levels of adult chronic patients regarding the care they received at the hospital and the adequacy of chronic disease management.

The long-term goals of the research are to obtain evidence-based information on the health care quality by evaluating the satisfaction levels of chronic patients regarding the care they received with PACIC and to provide an assessment instrument to clinics for evaluation and improvement of nursing care.

2.2 Sampling Method

The sample consists of the adult patients with chronic diseases at the internal medicine clinics at Çukurova University Faculty of Medicine Balcalı Hospital between 01.08.2016-31.10.2016. In the study, among probability sampling methods is used simple random sampling. In 2015, the number of patients in the clinics is 9100. Patient distribution based on the clinics is as follows. In descriptive studies, the sample size should be at least 10% of the population, and thus the number of samples is calculated to be 910. Patients to be included in the sample are calculated according to the number of patients in the services (N = 910) (Arlı and Nazik, 2001; Yazicioglu and Erdoğan, 2004). Patients who are conscious, speak Turkish, and volunteer to participate are included in the study. 91% of the predetermined sample has been reached (N: 737).

The number of samples determined by the number of patients in the internal medicine at Çukurova University Faculty of Medicine Balcalı Hospital in 2015 is as follows:

Endocrinology = 686 (n = 69)

Gastroenterology = 971 (n = 98)

Hematology = 1057 (n = 106)

Nephrology = 814 (n = 81)

Oncology = 1127 (n = 113)

Rheumatology-Immunology = 727 (n = 72)

Cardiology = 3710 (n = 371)

2.3 Data Collection Instruments and Procedures

The data were collected by the researchers through face-to-face interviews with the use of “Personal Information Form” and “Patient Assessment of Chronic Illness Care (PACIC)”. The personal information form consists of 13 questions developed by the

researchers to determine the socio-demographic characteristics of the participants. Regarding the PACIC used, the validity and reliability of the scale developed by Glasgow et al. (Glasgow et al., 2005) based on the Chronic Care Model by Wagner were reassured in Turkish by İncirkuş and Nahcivan (2011). The Likert-type scale with 20 items includes 5 subscales: patient participation, decision-making, target-setting, problem-solving, and monitoring/coordination. The Likert-type response options are (1) Never, (2) Rarely, (3) Sometimes, (4) Most of the time, and (5) Always. The increase in the scale scores indicates that individuals with chronic diseases have a high level of satisfaction in regard to the care they receive and that chronic disease management is adequate.

2.4 Data Analysis

The statistical analysis of the data was run in the IBM SPSS 20.0 For Windows. In the analysis of the findings, the descriptive statistics (average, standard deviation, minimum and maximum, and percentiles) were used as well as the t-test (independent samples t-test) and the ANOVA test to compare the scale scores.

2.5 Ethical Considerations

The approval was obtained from Çukurova University Faculty of Medicine Non-interventional Clinical Research ethics committee (44/19, 03 July 2015). Permissions from the hospitals were obtained for the research to be carried out. Informed consent was obtained from the patients participating in the study.

3. Findings

In Table 1, the socio-demographic characteristics of the patients are presented. According to the categorization, 28.4% of the patients are in the age group of 40 and below, 41.8% in the age group of 41-60, and 29.9% in the age group of 61 years and over. The average age of the participants is 50, 88±16,55. 75.6% of the patients participating in the study are married while 24.4% are single. Considering the patients' educational level, 49.5% are with elementary school graduate and less and 50.2% with secondary school graduate and higher. It was observed that 93.1 of the participants have social security (Table 1).

Table 1: *Distribution of Socio-Demographic Characteristics of the Participants (N: 737)*

Demographic Characteristics	**n**	**%**
Age		
Age 40 and younger	209	28.40
Age 41-60	308	41.80
Age 61 and older	220	29.90
Marital Status		

Married	557	75.60
Single	180	24.40
Educational Level		
Elementary school and lower	367	49.50
Secondary school and higher	370	50.20
Social Security		
Yes	686	93.10
No	51	6.90
Total	737	100

Examining the distribution of participants' chronic disease characteristics in Table 2, it is observed that 70.8% of the patients have had chronic diseases for the last 2 years, and the respondents most commonly have had the cardiovascular disease with a rate of 26.5%. 15.3% of the other patients stay at the oncology clinic, 14.2% at hematology, 13.4% at Gastroenterology, 11.1% at Nephrology, and the rest stays at other clinics (19.4%). When the rate of the participants' applications to emergency service due to the chronic disease within 6 months was analyzed, 63.4% was found to have applied to emergency service. It was observed that 94.6% of the patients use a kind of medication for their chronic diseases. It was determined that 91.7% of the patients took their medication on time as recommended/prescribed, and 85.5% took the recommended/prescribed dose. When determining the state of health education for chronic disease, it was observed that 74.9% of the patients received health education, and the education was provided by doctors (71.0%), nurses (33.1), and the radio / TV / Internet (16.0%), (Table 2).

Table 2: *Distribution of Participants' Chronic Disease Characteristics (N: 737)*

	n	**%**
Years with chronic disease		
A year and less	215	29.20
2-5 years	266	36.10
6 years and more	256	34.70
The service		
Cardiology	195	26.50
Oncology	113	15.30
Hematology	105	14.20
Gastroenterology	99	13.40
Nephrology	82	11.10
Rheumatology-Immunology	74	10.00
Endocrinology	69	9.40
Hospitalization duration		
less than 5 days	301	40.80
5 days and more	436	59.20
Applying to the emergency service due to chronic disease within 6 months		
Yes	467	63.40

No	270	36.60
The use of a kind of medication		
Using	697	94.60
Not using	40	5.40
Awareness of medication use		
I take my medication on time as recommended/prescribed.	676	91.70
I take recommended/prescribed dose.	630	85.50
I do not know the name of the medication I take.	507	68.80
I do not know the number of the medication I take.	208	28.20
I know the name and the number of the medication I take.	333	45.20
Health education for chronic disease		
Educated	552	74.90
Not educated	185	25.10
Who provides health education and how		
Doctor	523	71.00
Nurse	244	33.10
Radio/TV/Internet	118	16.00
Total	**737**	**100**

In Table 3 where the average scores of Patient Assessment of Chronic Illness Care and subscales are evaluated, the scale average score is 62.14 ± 14.828. The average scores of subscales from the highest to lowest is target-setting (14.78±3.910), problem-solving (13.14±3.896), monitoring/coordination (12.58±5.161), patient participation (11.26±2.806), and decision-making (10.37±2.695), (Table 3).

Table 3: *The Average Scores of the Patient Assessment of Chronic Illness Care and Subscales (N: 737)*

Scale and Subscales	**X̄±SD**
Patient Assessment of Chronic Illness Care (Turkish PACIC)	62.14±14.828
Patient participation	11.26±2.806
Decision-making	10.37±2.695
Target-setting	14.78±3.910
Problem-solving	13.14±3.896
Monitoring/coordination	12.58±5.161

In Table 4 where the distribution of average scores of Patient Assessment of Chronic Illness Care based on the participants' socio-demographic characteristics was evaluated, it was examined that as the age range increases, the average score of Patient Assessment of Chronic Illness Care increases. PACIC item average scores were significantly higher with the patients

who had social security (62,61 ± 14,878) than the patients who did not (55,76 ± 12,626) (p <0.001), (Table 4).

Table 4: *Distribution of Average Scores of Patient Assessment of Chronic Illness Care Based on the Participants' Socio-Demographic Characteristics (N: 737)*

Socio-Demographic Characteristics			**Patient Assessment of Chronic Illness Care**		
	n	**%**	**X̄±SD**	**t/F**	**p**
Age*					
Age 40 and younger	209	28.40	60.05±13.684	8.815	**0.000**
Age 41-60	308	41.80	61.11±14.448		
Age 61 and older	220	29.90	65.55±15.846		
Educational level**					
Elementary school and lower	367	49.50	64.32±15.834	4.029	**0.000**
Secondary school and higher	370	50.20	59.96±13.430		
Social Security**					
Yes	686	93.10	62.61±14.878	3.686	**0.001**
No	51	6.90	55.76±12.626		

*Anova Test, ** Independent samples t-test

In Table 5 evaluates the distribution of average scores of Patient Assessment of Chronic Illness Care based on the participants' chronic disease characteristics. It was determined that the average score of Patient Assessment of Chronic Illness is higher with the patients who have had more years with the chronic disease (p <0.001). Also, the item average scores of PACIC were found to be significantly higher with the participants who received health education (65.15 ± 14,514) than those who did not (53.15 ± 11.843) (p <0.001). Similarly, the item average scores of PACIC with the patients who have applied to the emergency service due to chronic disease within 6 months (64.41±15.253) were found to be significantly higher than those who did not (58.20±13.189), (p<0.001), (Table 5).

Table 5: *Distribution of Average Scores of Patient Assessment of Chronic Illness Care Based on the Participants' Chronic Disease Characteristics (N: 737)*

The participants' chronic disease characteristics			**Patient Assessment of Chronic Illness Care**		
	n	**%**	**X̄±SD**	**t/F**	**p**
Years with chronic disease*					
A year and less	215	29.20	58.42±15.256	13.552	**0.000**
2-5 years	266	36.10	61.96±13.841		
6 years and more	256	34.70	65.44±14.750		

Hospitalization duration**					
less than 5 days	301	40.80	62.73±14.711	0.900	0.368
5 days and more	436	59.20	61.73±14.911		
Applying to the emergency service due to chronic disease within 6 months**					
Yes	467	63.40	64.41±15.253	5.591	**0.000**
No	270	36.60	58.20±13.189		
Using a kind of medication for chronic disease**					
Using	697	94.60	62.50±14,925	3.580	**0.001**
Not using	40	5.40	55.75±11,379		
Health education for chronic disease**					
Educated	552	74.90	65.15±14.514	11.236	**0.000**
Not educated	185	25.10	53.15±11.843		

4. Discussion

Health services are among the main parameters contributing to the development of the society, hence the country. Assessment of nursing care in health services plays an important role in increasing the quality of care provided. Therefore, patient satisfaction is an important criterion in evaluating the care. It is necessary to evaluate the nursing care and create the most appropriate care model for individuals with chronic disease.

It has been reported that a successful, sustained, and effective chronic care model reduces the need for hospitalization, emergency service, and psychological and physiological effects that may be caused by chronic diseases and increases the medication compliance (Bonomi et al., 2002).

The average age of the participants is 50.88±16,55. A study by Çiftçi (2015) aiming at determining the health literacy of the patients with chronic disease and the health care service was conducted with 201 chronic patients whose average age was 57.96 ± 6.15. Also, in the study by Ay et al. (2015) whose objective is to have the health care professionals interpret the chronic disease care from the patients' perspective, the results showed that the average age of the participants was 57.6±15.8.

The results of our study regarding average age, and other demographic characteristics of the participants such as marital status, educational level, and social security exhibit similarities with the results of other studies.

70.8% of the participants have had a chronic disease for at least 2 years, and the most commonly observed disease is cardiac with a rate of 26.5%. 94.6% of the patients take medication due to their chronic disease and take these medications at the recommended time and dose. In the study conducted by Çiftçi (2015), it was seen that the years with the chronic disease, the group of the disease, and the results of medication use shared similarities.

When the average scores of Patient Assessment of Chronic Illness Care and subscales in this study are evaluated, the scale average score is observed to be 62.14±14.828 and the average scores of subscales from the highest to lowest to be target-setting, problem-solving, monitoring/coordination, patient participation, and decision-making.

Glasgow et al. (2005) found a significant relationship between age, gender and the number of diseases and PACIC average scores in their study conducted with 283 patients with the aim of providing the care appropriate for the chronic diseases and establish a care model. Similarly, PACIC item average scores were significantly correlated with age, educational level, the years with the chronic disease, and health education for chronic disease in our study. PACIC item average scores were significantly higher with the patients who received health education about the disease (65.15 ± 14.514) than those who did not (53.15 ± 11.843) ($p<0.001$). Moreover, the PACIC item average score was observed to increase as the average age and the years with chronic disease increased.

In our study, the Patient Assessment of Chronic Illness Care (Turkish PACIC) that enables individuals with the chronic disease to evaluate the care and services provided is used as an instrument. The scale average score of the patients participating in the study is 3.11 ± 0.74. PACIC average scores ranged from 2.26 to 3.14 in the similar studies conducted on the subject. Therefore, the PACIC scale score in this study is higher than the similar studies by Ay et al. (2015), Çiftçi (2015), and İncirkuş and Nahcivan. (2011). Furthermore, the increase in the scale scores indicates that individuals with chronic diseases are very satisfied with the care they receive and that the chronic disease management is adequate. This indicates that the total average score in the study is high, and the patients participating in the study find the chronic disease management adequate. The most significant impact of this outcome is that 70% of the participants are educated about the chronic diseases they have.

Evaluating the subscales in the study, the highest score was patient participation while the lowest subscale score was monitoring/coordination. The results of the study by Üstünova and Nahcivan (2014) conducted a study with 300 patients to determine how individuals with chronic obstructive pulmonary disease (COPD) evaluate the chronic care management and to examine the factors associated with chronic care management also showed that the decision-making subscale has the highest average score whereas monitoring/coordination has the lowest. Çiftçi (2015) and Rosemann et al. (2007) had similar the subscale rankings in their studies.

Research is limited adult patients with chronic diseases at the internal medicine clinics at Çukurova University Faculty of Medicine Balcalı Hospital between 01.08.2016-

31.10.2016.

5. Conclusions

It was indicated that the patients' satisfaction with the nursing care is medium, the highest average scores are in decision-making subscale while the average score for monitoring/coordination subscale is the lowest. In order to raise the satisfaction levels of chronic patients regarding nursing care, chronic patient care should be prioritized in organized education and on-the-job training for nurses. By emphasizing the importance of monitoring and coordinating the patients, better management of chronic diseases can be achieved.

6. Scope of Future Research

This study is recommended to repeat with more participants and at hospitals with different statuses.

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8. Disclosure

The authors declare no conflict of interest.

References

Arlı, M. and Nazik, H. (2001). Introduction to scientific research. Ankara: Gazi Bookstore.

Arslan, Ç., Kelleci, M. (2011). Satisfaction Levels of Patients regarding Nursing Care at a University Hospital and Some Relevant Factors. Anatolia Nursing and Health Sciences Journal, 14(1), 1-8.

Çiftçi, K. İ. (2015). Determination of Health Literacy and Services of Health Care with Chronic Diseases Patient. T. R. Atatürk University Institute of Health Sciences, Public Health Nursing Department, Master Thesis, Erzurum, Turkey.

Glasgow, R.E., Whitesides, H., Nelson, C. C., and King D. K. (2005). Use of the Patient Assessment of Chronic Illness Care (PACIC) With Diabetic Patients. Diabetes Care, 28(11), 2655-2661 https://doi.org/10.2337/diacare.28.11.2655

İncirkuş, K., and Nahcivan, N.Ö. (2011). Reliability and Validity of Evaluation Scale for Chronic Patient Care-Patient Form in Turkish Version. Dokuz Eylül University Nursing College E-Journal, 4 (1), 102-109.

Kaya, Ç., Akturan, S., Şimşek, M., Uğuz, K., İçen, F., and Akman, M. (2013). Evaluation of Chronic Patient Care based on Patient Perspective. Turkish Family Physician Online Journal System, 4(3),

Köşgeroğlu, N., Acat, B. and Karatepe, Ö. (2005). Satisfaction Scale of Nursing Care for Chemotheraphy Patients. Anatolia Psychiatry Journal, 6, 75-83.

Ölmez, B. (2015). Evaluation of Chronic Patient Care in Type-2 Diabetes mellitus and Drug Compliance. Yıldırım Beyazıt University, Medical Faculty, Dissertation for Family Medicine Department., Ankara, Turkey.

Özdemir, Ü. and Taşcı, S. (2012). Psychosocial Problems and Care for Chronic Patients. Erciyes University Health Sciences Faculty, 1(1), 57-72.

Özpancar, N. (2013). The Effect of Training Provided by Nurses to Patients with Hypertension on Adaptation to Treatment. Marmara University, Institute of Health Sciences, Internal Diseases Nursing Department, PhD Thesis, Istanbul, Turkey.

Rosemann, T., Laux, G., Droesemeyer, S., Gensichen, J., and Szecsenyi, J. (2007). Evaluation of a culturally adapted German version of the Patient Assessment of Chronic Illness Care (PACIC 5A) questionnaire in a sample of osteoarthritis patients. Journal of Evaluation in Clinical Practice, 13(5), 806-813 https://doi.org/10.1111/j.1365-2753.2007.00786.x

Senevirathne, C. P., Katulanda, P., and Dhanapala, N..D. (2015). The Prevalence of Hypertension, Obesity, Diabetes And Job Satisfaction Among Public Health Workers In Central Province, Sri Lanka. LIFE: International Journal of Health and Life-Sciences, 1(2), 25-47 https://doi.org/10.20319/lijhls.2015.12.2547

T.R. Ministry of Health (2013). Public Health Agency of Turkey. The Study of Chronic Diseases and Frequency of Risk Factors in Turkey, Ankara.

Turkish Language Association. Grand Turkish Dictionary. Retrieved from: http://www.tdk.gov.tr, Accessed date: 09.06.2016.

Üstünova, E., and Nahcivan, N. (2015). Evaluation of Disease Management of Patients with Chronic Obstructive Lung Disease and Relevant Factors. Florence Nightingale Nursing Journal, 23(1), 11-22.

Wagner, E. H., Austin, B. T., Davis, C., Hindmarsh, M., Schaefer, J., and Bonomi, A. (2001). Improving chronic illness care: translating evidence into action. Health Affairs, 20(6), 64-78. https://doi.org/10.1377/hlthaff.20.6.64

Yazıcıoğlu, Y. and Erdoğan, S. (2004). SPSS Applied Scientific Research Methods. Ankara: Detay Publishing.