

Original Article

An Investigation of Patients' Perceptions of Nursing Care: Case of Intensive Care**Pinar Yeşil, MSc**

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Abstract

Introduction: Intensive care units are different from other hospital areas due to the nature of patients and illnesses, treatment methods, and physical and emotional environment. This difference can also create differences in nursing care and patients' perceptions of this care. The present study aims to identify intensive care patients' perceptions of nursing care.

Method: Target population of this descriptive and cross sectional study was all patients who were in the intensive care units of five hospitals (1 research hospital, 1 training hospital, 3 state hospitals) with different status in Adana/Turkey. The participants were 368 patients who met the research criteria. The data were collected through "Personal Information Form" and "Patient Perception of the Quality of Nursing Care (PPQNC)" which identified patients' perceptions of nursing care.

Results: The participants were 368 patients, 148 (40.2%) female and 220 (59.8%) male, the average age of the participants was 56.9±15.7. The median of the PPQNC total score was found 73 (70.56±6.80). There was a statistically significant relationship between PPQNC scores and the hospitals where the study was conducted ($p=0.016$). Mean rank values were higher in married patients when compared to single patients ($p=0.031$), in patients with income higher than expenses when compared to patients with income less than expenses ($p=0.013$) and with income equal to expenses ($p=0.017$), in illiterate patients when compared to the patients who graduated from primary school ($p=0.023$) and high school ($p=0.040$), and in patients who graduated from university when compared to the patients who graduated from primary school ($p=0.029$).

Conclusion: It was found that PPQNC scores were high and patient's satisfaction levels with the nursing care they received were good.

Keywords: intensive care, nursing care, care perception

Introduction

Individuals have essential requirements that should be met in order to continue their lives in a healthy way (Craven and Hirnle, 2003; Potter and Perry, 2009). Nursing care contributes to the healing process by helping individuals begin to be able to meet their basic needs again (Göriş and Seyhan, 2014). Care also requires nurses to communicate

with patients and understand their individual differences and perceptions (White, 2003). Perception of care is related to the fact that the health service provided to patients affects their satisfaction (Ugwu et al., 2009). To understand patient satisfaction, "patient's perception" of care must first be understood (Samina et al., 2008). Patient satisfaction is a dynamic and subjective perception related to receiving the expected amount of health

service in the health field (Larrabee et al., 2004; Yücel, 2011).

Patient satisfaction is a sign of the quality of nursing services and patient care (Özer et al., 2009). Satisfaction, to a great extent, is formed with patient-nurse relationship (Yılmaz, 2001). Patient satisfaction increases with the increase in patients' physical and psychological comfort and their receiving service in line with or beyond their expectations (Özer et al., 2009; Yılmaz and Özkan, 2009). Meeting the needs and expectations of fully-dependent intensive care unit (ICUs) patients is of great importance in the treatment process (White, 2003). Beside the physical limitations they experience, patients in ICUs can feel lonely and isolated as they cannot receive the family support they need when they want (Yılmaz and Özkan, 2009). Therefore, nurses working in special units such as ICUs have important responsibilities in maintaining patient care (Terzi and Kaya, 2011). The role of nurses in ICUs is to help patients to undertake their own care and meet their basic needs as soon as possible until they can provide their own care (İçyeroğlu and Karabulutlu, 2011). Such view aims to decrease patients' negative intensive care unit experiences and increase satisfaction levels, which is an indicator of high quality nursing care (Özer et al., 2009; Terzi and Kaya, 2011).

Aim

This study aims to identify intensive care unit patients' perceptions of nursing care.

Materials and Methods

The target population of this descriptive and cross sectional study was all patients who were in the intensive care units of five hospitals with different status in Adana/Turkey. The participants were 368 patients who had been treated for at least 48 hours, who were conscious, who volunteered to participate in the study, who were 18 and over, who could communicate verbally, who did not have any psychiatric problems, and who had treatment between January and May, 2013. No sampling method was used in the study in order to reach the entire target population.

Collection of The Data

The data were collected using "Personal Information Form" which identified the patient's socio-demographic characteristics and "Patient Perception

of the Quality of Nursing Care (PPQNC)" which identified patients' perceptions of nursing care.

Data Collection Tools

The Personal Information Form

The 16-item Personal Information Form which was prepared in line with the related literature included questions about patients' age, gender, education status, marital status, occupation, income, hospital/clinics where they were being treated, previous hospital experience, and dependence status (Çoban, 2006; İçyeroğlu & Karabulutlu, 2011; Şişe, 2013).

Patient Perception of the Quality of Nursing Care

Patient Perception of the Quality of Nursing Care (PPQNC) was developed by Ann M. Dozier et al. (2001) in America in 2001. Validity and reliability of the PPQNC for Turkish was enhanced by Çoban (2006). PPQNC was developed to measure patient perception of the quality of nursing care and to identify the level of satisfaction about this care. The likert-type scale included 15 statements about the quality of nursing care. For the 15 statements, the scale required choosing one of the 5 options given: I agree=5, I partly agree= 4, I do not know=3, I disagree=2, I totally disagree=1, and no response=0. The score given for each statement was taken as a basis. Thus, minimum and maximum scores to be obtained from the scale were between 15 and 75. Higher scores in the total scores indicated patients' satisfaction with the nursing care (Çoban, 2006).

The forms were administered by the researcher through one-to-one interviews so as to make patients feel more comfortable. Personal Identification Form used in the study took approximately 5 minutes while Patient Perception of the Quality of Nursing Care took 10 minutes, which made 15 minutes in total.

Data analysis

Normality controls in relation to the continuous measurements were done using Shapiro Wilk test; and it did not display normal distribution. Mann Whitney U and Kruskal Wallis tests were used for the differences between care scale total scores and socio-demographic characteristics. Some descriptive statistics included minimum, maximum, median, 25%-75% percentiles, and mean rank values. Spearman correlation coefficient was used for the relationships between the continuous measurements. Analyses were obtained from MedCalc 12.5.0

package programming and the statistical significance was taken $p < 0.05$.

Ethical consideration

Before the study was conducted, the official permissions were obtained from the hospital administrators where the study was conducted and from our Hospital Clinical Studies and Ethics Committee. The patients' verbal consent was obtained before each interview.

Results

The participants were 368 patients, 148 (40.2%) female and 220 (59.8%) male. Of all the patients, 72% were single and the average age was 56.9 ± 15.7 . PPQNC total score was found 70.56 ± 6.80 . As for the units where the patients were treated, 33.2% were in the coronary intensive care, 17.4% were in the inter-intensive care, 14.9% were in the general surgery intensive care, and 13.3% were in thoracic surgery intensive care. Of all the patients, 74.1% graduated from primary school, 53.3% did not work, and 50.5% had income less than expenses. It was also found that 83.4% had hospital experience and 43.7% had intensive care unit experience before. Of all the patients, 76.1% were half-dependent, 39.2% had changes in their views about nursing care with their latest stay in the hospital, and 97.3% of those who changed their views were found to be more satisfied when compared to their previous stays.

Mean rank values of the PPQNC scores of the married patients were higher than those of single ones; the difference was statistically significant ($p = 0.031$). An analysis of the patients according to their income shows that mean rank values of the patients with income higher than expenses had higher mean rank values belonging to PPQNC scores than those with income less than expenses ($p = 0.013$) and those with income equal to expenses ($p = 0.017$) (see Table 1).

An analysis of the participants' education level shows that illiterate patients' mean rank values belonging to PPQNC scores were higher than those who graduated from primary school ($p = 0.023$) and high school ($p = 0.040$). Mean rank values belonging to PPQNC scores of university students were higher

than those who graduated from primary school ($p = 0.029$) (see Table 1).

There was a statistically significant relationship between the PPQNC scores and the hospitals where the study was conducted. PPQNC scores of the patients in Hospital 2 were higher than those of the patients in other hospitals ($p = 0.016$). PPQNC scores of those who had changed their views about nursing care and stated that they had positive experience this time were found to be significantly higher than those who had negative experience ($p = 0.016$) (see Table 2).

No significant differences were found between mean rank values of PPQNC scores and gender, working status, intensive care units they were in and dependency in movement activities ($p > 0.001$) (see Table 1 and Table 2).

Discussion

Patient satisfaction is accepted as a criterion which displays quality of care and which gives information about the extent to which patient values and expectations are fulfilled (Yılmaz, 2001; Wolosin, 2005; Khan et al., 2007). Patient satisfaction is the degree of meeting patient expectations about nursing care in terms of care, technical quality, continuity, physical environment, availability, effectiveness and results (Mpinga and Chastonay, 2011).

The participants' PPQNC scale scores ranged between 30 and 75 and the mean of the total score was found 73 (70.56 ± 6.80). This result was pleasing as it was very close to the maximum score that can be obtained from the scale. Khan et al. (2007), in their study which evaluated satisfaction of patients in internal diseases and surgical clinics, found that 45% of the patients were pleased with the nursing care provided.

Johannessen et al. (2011) investigated patient satisfaction in the intensive care units of three hospitals in Norway and found that the patients in all three hospitals were pleased with the nursing care. Parallel to the findings of the present study, the related literature indicates that patients are pleased with nursing care (O'Connell et al., 1999; İcyeroğlu and Karabulutlu, 2011; Koç et al., 2012; Suhonen et al., 2012; Şişe, 2013; Atallah et al., 2013).

Table 1: Distribution of mean rank values of the patients according to some socio-demographic characteristics

	Variables	Min- Max	Median [% 25-75 percentiles]	Mean rank	P
Gender	Female (n=148)	40-75	73 [68.3-75]	172.90	0.076
	Male (n=220)	30-75	73 [70-75]	192.30	
Marital status	Married (n=265)	30-75	73 [70-75]	191.73	0.031
	Single (n=103)	40-75	72 [68-75]	165.89	
Working status	Working (n=172)	30-75	73 [69-75]	190.95	0.260
	Not working (n=196)	40-75	73 [69-75]	178.84	
Income level	Income less than expenses (n=186)	40-75	73 [69-75]	179.67	0.042
	Income equal to expenses (n=162)	30-75	73 [69-75]	183.15	
	Income higher than expenses (n=20)	65-75	75 [73.3-75]	240.35* [†]	
Education level	Illiterate (n=11)	69-75	75 [72-75]	250.68	0.019
	Primary school (n=272)	30-75	73 [69-75]	177.36*	
	High school (n=68)	61-75	73 [69.3-75]	187.57*	
	University (n=16)	67-75	75 [72.3-75]	235.88 [†]	

*Differences with the first category, [†] Differences with the second category

Table 2: Distribution of mean rank values according to hospitals and clinics

	Variables	Min-Max	Median [% 25-75 percentiles]	Mean rank	P
Hospital	Hospital 1 (n=160)	30-75	73 [67-75]	171.88	0.016
	Hospital 2 (n=51)	53-75	75 [72-75]	227.64*	
	Hospital 3 (n=64)	62-75	73 [71-75]	192.55†	
	Hospital 4 (n=24)	53-75	73 [69-75]	176.15†	
	Hospital 5 (n=69)	50-75	73 [68-75]	177.32†	
Clinics	General surgery intensive care (n=55)	42-75	73 [68-75]	183.97	0.119
	Coronary intensive care (n= 122)	30-75	74 [71-75]	198.91	
	Cardiovascular surgery intensive care (n= 9)	57-75	67 [62-74.5]	125.00	
	Internal diseases intensive care (n=17)	59-75	71 [65-75]	163.18	
	Neurology intensive care (n=13)	49-75	75 [62.5-75]	200.31	
	Neurosurgery intensive care (n=19)	53-75	69 [63-74]	128.95	
	Inter-intensive care (n=64)	62-75	73 [71-75]	192.55	
	Thoracic surgery intensive care (49)	50-75	73 [68-75]	179.85	
	Primary intensive care (n=20)	55-75	72.5 [66.3-75]	171.13	
	Dependency in movement activities	Fully-dependent (n=71)	30-75	73 [66-75]	
Half-dependent (n=226)		31-75	73 [68.8-75]	149.48	
Intensive care experience	Yes (n=160)	30-75	73 [69-75]	188.47	0.413
	No (n=206)	31-75	73 [69-75]	179.64	
Changes in views about nurses before and after staying in hospital	Yes (n=147)	55-75	73 [69-75]	178.65	0.713
	No (n=214)	31-75	73 [69-75]	182.62	
Changes in views about satisfaction	Satisfied (n=142)	55-75	73 [69.8-75]	74.87	0.016
	Not satisfied (n=4)	55-73	61 [55.5-71]	24.75	

*Differences with the first category, † Differences with the second category

The present study found that married patients' mean rank values of the PPQNC scores were higher than those of single patients. The difference was statistically significant. Naidu (2009) investigated patient satisfaction and the factors affecting nursing care and found that patients' marital status affected the satisfaction level. Similar to the results of the present study, Şişe (2013), in the study conducted in a university hospital; and Özlü (2006), in a study conducted in surgical clinics of different hospitals, found that married patients were more pleased with the nursing care provided. In a similar vein, Yürümezoğlu (2007) investigated patients in internal diseases and surgical clinics and found that married patients were more pleased with the nursing care. Married patients usually have more social support when compared to single patients, which might make them have less expectations from nurses and thus feel more pleased with the nursing care.

Mean rank values belonging to PPQNC scores of the patients with income higher than expenses were higher than those of the patients with income equal to expenses and with income less than expenses. The difference was found to be statistically significant. In their study which investigated the factors that affected patient satisfaction in social security hospitals, Jafari et al. (2014) found that income level is a factor which affected satisfaction. In line with the present study, in their study conducted in urology clinics, İçyeroğlu and Karabulutlu (2011) found that satisfaction mean scores of the patients with income equal to expenses or with income higher than expenses were higher than the group with income less than expenses. The related literature indicates that income level changes from person to person and thus it is a factor that affects satisfaction level regarding health services (Özer and Çakıl, 2007; Kırılmaz, 2013). Patients with good income can meet some of their needs better than those with low income; therefore, they might have less expectations from nurses.

Mean rank values of PPQNC scores of the illiterate participants were higher than those of the participants who graduated from primary school or high school. As for the participants who graduated from university, their mean rank values of PPQNC scores were higher than those of the participants who graduated from primary school. The difference in terms of education status was found to be statistically significant. Yürümezoğlu (2007) investigated patients in internal diseases and surgical clinics and

found that education level of the patients affected their satisfaction level. Johansson et al. (2002) also evaluated the relationship between nursing care and patient satisfaction and found that education level of the patients affected their satisfaction level. In their study which investigated patient satisfaction indicators, Quintana et al. (2006) found that illiterate patients or patients who graduated from primary school had higher satisfaction levels. Kıdak and Aksaraylı (2008), in their study which evaluated and observed patient satisfaction, found that patients' satisfaction level decrease with the increase in education level. The related literature indicates that patients' education level affects their satisfaction level (Naidu, 2009; Özer and Çakıl, 2007; Kıdak and Aksaraylı, 2008). Patients' knowledge and expectations regarding the service they receive are expected to increase with the increase in their education level, and the satisfaction level decreases when the expectations are not fulfilled (Yürümezoğlu, 2007; Johansson et al., 2002).

The difference between PPQNC scores and the hospitals where the study was conducted was found to be statistically significant. PPQNC scores of the patients in Hospital 2 were higher than those of the patients in other hospitals ($p=0.016$). Johannessen et al. (2011), in their study conducted in the intensive care units of three hospitals in Norway, found that although the number of staff in Hospital B was lower than Hospital A, satisfaction level of the patients was higher in Hospital B. Özlü (2006) investigated surgery clinics of various hospitals and found that the hospital was a factor which affected patients' satisfaction levels. This difference in the present study might have resulted from such factors as different status of hospitals, different number of nurses and patients, and different patient expectations and services.

Conclusion

In conclusion, this study found that PPQNC scale scores were high, and the patients' satisfaction level with nursing care was good. Patients' satisfaction level was found to be affected by such variables as marital status, education level, income level, and the hospitals they were in.

Further research is required that the study should be replicated with larger groups of participants, considering the potential factors that negatively affect patient satisfaction and care perception.

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