

# Diversification of Patient Satisfaction with Nursing Care at Night

Małgorzata Marc, Anna Fafara\* and Paweł Januszewicz

Institute of Nursing and Health Sciences, Faculty of Medicine, University of Rzeszów, Rzeszów, Poland

## Abstract

**Aims and objectives:** To establish the relationship between sociodemographic factors and other specific ones as well as satisfaction of patients with night-time services in clinical hospitals.

**Introduction:** Concern for a good night's sleep in a hospital is a basic condition for recovery. The optimal level of nursing care at night determines all the bio-psycho-social-spiritual needs of the patient.

**Method:** The method of diagnostic survey, estimation and statistical methods were used with survey and test research techniques. Research tools are Author's survey questionnaire and the Newcastle Satisfaction with Nursing Scale.

**Results:** The mean ratings between residents of rural areas and cities were over 12 points. There was a correlation between the assessment of satisfaction with nursing care and the professional status.

**Conclusion:** Socio-demographic and other factors partially differentiate the level of satisfaction with night.

**Keywords:** Nursing and therapeutic services; Patient; Quality of care; Nurse; Hospital

## Introduction

Nurse-patient relationship is one of the factors determining the patient's satisfaction with the services provided. The conducted research indicate that nursing care is a basic indicator of satisfaction with comprehensive medical care [1,2]. Few publications focus on the characteristics of nursing care provided to a patient at night, which requires the same supervision, control, support and dedication as during the day. Concern for a good night's sleep in a hospital is one of the basic conditions for recovery, and hence the quality of life. The optimal level of nursing care quality at night determines the diagnosis of all the bio-psycho-social-spiritual needs of the patient. Fulfilling expectations and accurately identifying the needs of the patient are therefore a guarantee of planning and providing care at the highest level. An example of recognizing patients' expectations at night during their stay in the hospital is the analysis of their level of satisfaction and the assessment of the quality of nursing services. The patients expect a sense of security and they want to trust the staff that looks after them. Therefore, the health care system must be based on integrity, respect and interest in the problems of the patients. The main aim of the paper was to establish the relationship between socio-demographic and other specific factors and the satisfaction of patients with services provided at night in Rzeszow clinical hospitals.

## Materials and Methods

In order to achieve the aim of this paper, the method of diagnostic survey, estimation and statistical methods using survey and test techniques were used. The following research tools were used: Author's questionnaire (11 questions in the 5-point Likert scale), The Newcastle Satisfaction with Nursing Scale (the questionnaire contains a set of statements characterizing a given domain, which was evaluated on an increasing scale from 1 to 7 or from 1 to 5 [3]. The scale examines the experience of nursing care and the level of self-satisfaction. The creators of NSNS indicate the criteria for including the patient in the study: 18 years of age and more, minimum 2 nights spent in the department, ability to read and write, during the study stay in the hospital only in one ward, no consciousness issues and informed consent for participation in a research. The scale aims primarily at getting to know the opinions and experiences of patients with nursing care obtained during the stay in the hospital.

The study was conducted from January 1, 2016 to May 31, 2016. The study involved 585 patients admitted to randomly selected clinics of conservative and surgical profile at Clinical Hospitals in Rzeszow. The research project was approved by the Bioethics Committee of the University of Rzeszow of December 2, 2015 (Resolution No. 4/12/2015). The calculations were performed using the IBM SPSS Statistics 20 software. The significance level  $p < 0.05$  and 95% confidence interval were assumed in the study.

## Results

The sex of patients did not differentiate the assessment of nursing care - small differences in the assessment of experience and satisfaction with nursing care are not statistically significant (experience with care  $p = 0.1442$ , satisfaction with care  $p = 0.1615$ ), so they cannot be the subject of reliable generalizations. The age of the patients also did not differentiate in a statistically significant way to assessment of the quality of nursing care (experience with care  $p = 0.1878$ , satisfaction with care  $p = 0.1028$ ) (Table 1).

Experience of nursing care was similar among patients living in cities and in the countryside, while rural residents estimate satisfaction with care much better. The difference between the mean assessment in this domain between the residents of rural areas and cities was more than 12 points, and the difference between the central values (medians) was even greater. The described relationship was highly statistically significant (test probability value  $p = 0.001$ ) (Table 2). Education did not differentiate satisfaction with care, but it had an impact on the assessment of experiences from nursing care. The subjects with higher education assessed the highest the experience of nursing care ( $p = 0.0204$ ) (Table 3). The assessment of the experience of nursing care did not depend on the patient's professional status. In contrast,

\*Corresponding author: Anna Fafara, Institute of Nursing and Health Sciences, Faculty of Medicine, University of Rzeszow Al-Mjr W, Kopisto 2a, 35-310 Rzeszów, Poland, Tel: +48 17 872 09 11; E-mail: [anna.fafara238@wp.pl](mailto:anna.fafara238@wp.pl)

Received March 28, 2019; Accepted September 30, 2019; Published October 07, 2019

Citation: Marc M, Fafara A, Januszewicz P (2019) Diversification of Patient Satisfaction with Nursing Care at Night. J Nurs Care 8: 490.

Copyright: © 2019 Marc M, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Socio-demographic and other factors (time of hospitalization, character/specialty of the department/clinic)	The assessment of nursing care based on the Newcastle Scale	
	Experience with care	Satisfaction with care
Sex	p=0.1442	p=0.1615
Age	p=0.1878	p=0.1028
Marital state	p=0.1634	p=0.1784
Professional status	p=0.1223	p=0.0021**
Education	p=0.0204*	p=0.2874
Place of residence	p=0.8436	p=0.0007***
Number of nights spent in hospital	p=0.0002***	p=0.0001***
Clinic/Ward	p= 0.4944	p=0.7134

**Table 1:** Two-factor interaction between satisfaction and experience of nursing care provided at night (Newcastle Scale) and socio-demographic and other factors in the respondents.

Place of residence	The assessment of nursing care based on the Newcastle scale									
	Experience with care					Satisfaction with care				
	x	Me	s	min	max	x	Me	s	min	max
City	63.6	62.2	9.8	26.3	85.3	56.9	55.3	26.0	0.0	100.0
Village	63.8	64.1	10.4	30.1	83.3	64.4	69.1	26.5	0.0	100.0
p-value	0.8436					0.0007***				

**Table 2:** Two-factor interaction between satisfaction and experience of nursing care provided at night and the respondents' place of residence.

Education	The assessment of nursing care based on the Newcastle scale									
	Experience with care					Satisfaction with care				
	x	Me	s	min	max	x	Me	s	min	max
Primary	64.5	63.5	8.8	49.4	82.7	61.7	64.5	25.3	13.2	100.0
Vocational	62.2	61.5	9.7	30.1	85.3	57.0	53.9	26.5	0.0	100.0
Secondary	63.5	63.1	10.4	26.3	83.3	61.4	65.1	26.3	0.0	100.0
Higher	65.5	67.3	10.0	41.7	83.3	62.2	63.2	27.0	0.0	100.0
p-value	0.0204*					0.2874				

**Table 3:** Two-factor interaction between satisfaction and experience of nursing care provided at night and the respondents' education.

the assessment of satisfaction with nursing care was statistically significantly different between people with different professional status nurses were better rated by the unemployed (=67.4), and pensioners (=69.1), while those professionally active (=57.9) and the retired (=58.3) assessed them worse. The more nights spent in the hospital, the lower the assessments of nursing care – this was visible both in the experience of care and satisfaction with care. The subjects hospitalized for 2-3 days in hospital gave, on average, about 3-4 points higher assessment of care experience and about 10 points higher in satisfaction from care than the respondents hospitalized for at least 4 nights (there was almost no difference between persons hospitalized for 4-5 days and 6 days or longer). There was no significant relationship between departments in the examined hospitals and the assessment of nursing care at night.

## Discussion

The aim of the study was to analyze the relationship between socio-demographic and other factors and the assessment of health services provided by nurses at night in the opinion of hospitalized patients. The results of the research on quality of night care and factors influencing the opinion of patients and nurses were often similar to the results obtained. Analyzing the results of scientific research, it was observed that between selected socio-demographic and other factors (duration of hospitalization, character/specialty of the ward) there was a correlation between levels of satisfaction and satisfaction with night care [4-6]. According to our research, rural residents assessed the satisfaction of nursing care at night much better. The difference between the mean assessment in this domain between the residents of rural areas and cities was more than 12 points. Different results obtained Delura. All rural residents (100%) and 97.1% of people living in the city experienced satisfaction with nursing care. The education of patients

did not differentiate the satisfaction with the care provided, but the subjects with higher education assessed their experience with nursing much better p=0.0204 [7]. Different results obtained Stanisławska, indicating lack of significant differences between education of the respondents and the experience of care (p=0.0942) [5]. McColl analyzed the impact of the level of education on the assessment of nursing care and indicated that both satisfaction (p<0.001) and satisfaction (p<0.01) correlated statistically significantly. The respondents with higher education assessed nursing care worse [8]. Research by Quintana and Bredart prove that patients with lower education were more satisfied from nursing care [9,10]. Analysis of the statements by the patients examined by Majchrzak-Kłokocka showed that the greatest deficit in the sense of safety in nursing care was among people with higher education (30%). In turn, the nurse reaction time is critically assessed by people with higher education (30%) [11]. The relationship between the availability of nurses in the evening and night hours and the education of patients in the studies by Springer showed a statistically significant relationship (p=0.017). Analysis of these results showed that people with higher education assessed the availability of nurses worst - 25.9% of negative assessments (p<0.05). Szpringer confirmed in research, that the type of professional activity determined in a statistically significant way the opinion of patients on ensuring a sense of intimacy and respect for personal dignity during services (p=0.04) [1]. The link between education and the quality of nursing care was not indicated in the studies of Akin and Erdogan [12]. Both Uzun and Żakowska confirmed in their studies that patients with higher education assessed the quality of nursing care worse [13,14]. Delura surveyed a group of 60 patients in the pre-operative period in four departments and proved that there is no statistically significant relationship between patient satisfaction from preoperative nursing care and socio-demographic

factors (sex, marital status, place of residence, professional status). Men (100%) and 96.3% of women confirmed satisfaction with the services provided. Regardless of the material status, all respondents confirmed satisfaction with care [7]. Our research showed a relationship between the assessment of satisfaction with nursing care and the professional status. Nursing care was much better assessed by the unemployed (=67.4), and the pensioners (=69.1), while worse assessments awarded the employed (=57.9) and the retired (=58.3). Similar results obtained other researchers [1]. The results of our research in relation to sex are in line with the results of other authors who did not show a higher assessment of satisfaction with nursing care depending on sex [9,15-17]. However, numerous studies confirm different correlations. In the studies by Grochans, Stanisławska, Gunther and Zagroda, men are more satisfied with nursing care [5,18-20]. Alhusbanet and Sloman did not find a relationship between the sex of patients and the assessment of the quality of nursing care [21,22]. The age of the patients also did not differentiate in a statistically significant way the assessment of the quality of nursing care (experience with care  $p=0.1878$ , satisfaction with care  $p=0.1028$ ). In studies conducted in Poland, it was proved that there is a positive correlation between age and the level of satisfaction with the care provided. An example of this is the research of Wyrzykowska and Delura [7,23]. The results of other studies confirm that people over 40 were more satisfied with the care than younger patients [24,25]. Chen pointed to a statistically significant relationship between satisfaction with hospital services and the age of the respondents - the older the patient, the greater satisfaction with nursing care [26]. Our research confirmed the dependence that the more nights spent in the hospital the worse the assessment of nursing care both in terms of experience ( $p=0.0002$  \*\*\*\*) as well as satisfaction with the care provided ( $p=0.0001$  \*\*\*\*). The length of stay in the hospital, however, generally did not affect the overall assessment of the level of night care by the patient. In the studies of Stanisławska, patients similarly assessed the experience and satisfaction with nursing care. The patients staying in hospital up to 5 days (82%), more than 5 days (80%), assessed the satisfaction of nursing care higher than patients hospitalized from 6 to 10 days (73%), and more than 10 days (65%) [5]. The studies of patients residing in hospitals in Poland and Greece indicated that the longer hospitalization of patients, the lower the level of satisfaction with health services ( $p=0.004$ ) [27]. A similar relationship observed Gutysz-Wojnicka in her studies - the longer the patient stay in the institution, the lower the assessment of experiences related to nursing care [3]. A study of 150 patients carried out by Furtak-Niczyporuk did not show a relationship between the length of patient's hospitalization and the assessment of nursing care quality. Patients hospitalized from 1 to 3 days (91.6%) and above 4 days (88%) issued very good and good marks to the nursing staff [28]. Married and widowed persons also assessed night care in the hospital much better (=78.4) [3].

Our results showed that the level of night care was better assessed on the conservative (=77.1) than the surgical (=75.4) departments. Different results obtained Stanisławska the assessment of services and satisfaction with nursing care was higher in surgical wards than in the conservative wards. Statistical analysis showed significant differences between the cardiology department and the urology department in the case of the assessment of experiences in nursing care ( $p<0.000$ ) [5]. The collected data showed high satisfaction and satisfaction of patients with nursing care provided in clinical hospitals in the city of Rzeszow.

## Conclusion

The quality of services provided by nurses at night influences the overall assessment of the quality of medical services. At night, nurses provide well-being, peace and safety to hospitalized patients, and

thus appropriate conditions for proper sleep and rest. Expectations of patients regarding the nursing staff are constantly increasing and are clearly articulated in the field of services provided at night. A comparison of information from the providers of nursing services and their recipients will allow obtaining objective results, assessing the level of nursing quality. The basic aspect of night care requires a lot of research that would adequately describe the reality of the nurse's work in relation to the satisfaction of patients with the level of care provided at night. Improvement of working conditions and activities for broadly understood care of patients at night should be the main objective of the pro-quality direction of development of every medical institution, especially clinical one.

## References

1. Szpringer M, Chmielewski J, Kosecka J, Sobczyk B, Komendacka O (2015) Patient satisfaction as one of the aspects of the quality of Health care. *Med Og Nauk Zdr* 21: 132-137.
2. Dudzik-Urbaniak E, Kutaj-Wąsikowska H, Kutryba B, Piotrowski M (2009) A set of accreditation standards: Quality monitoring center in health care. *Gryfs* 1: 9-19.
3. Gutysz-Wojnicka A (2010) The use of the Polish version of the newcastle satisfaction with nursing scale for the assessment of nursing care. *Faculty of Health Sciences, Poznań* 2: 102-111.
4. Kozmilla M, Putowski L (2009) Assessment of patients' satisfaction with nursing care at the Medical Care Center in Jaroslaw. *Ann Acad Med Siles* 63: 20-27.
5. Stanisławska J, Talarska D, Drozd E, Michalak M, Filipiak K, et al. (2011) The Assessment of patient's satisfaction with nursing care in the surgical and non-surgical units with the use of The Newcastle Satisfaction with Nursing Scale (NSNS). *Przegl Lek* 68: 157-160.
6. Przychodzka E, Turowski K, Torenkowicz R, Jasik J, Celej-Szuster J (2006) Selected aspects of the quality of nursing in the patients hospitalized due to dysfunctions of the spine. *Dobrostan a Edukacja. Wydawnictwo Naukowe Neuro Centrum* 201-207.
7. Delura M, Posluszna-Owczar M, Rezmerska L (2016) Satisfaction of patients from pre-operative nursing care. *Innovations in Nursing and Health Sciences* 4: 8-16.
8. Thomas LH, McColl E, Priest J (1996) Newcastle satisfaction with nursing scale: An instrument for quality assessments of nursing care. *Qual Health Care* 5: 67-72.
9. Bredart A, Robertson C, Razavi D, Batel-Copel L, Larsson G, et al. (2003) Patients' satisfaction ratings and their desire for care improvement across oncology settings from France, Italy, Poland and Sweden. *Psycho-Oncology* 12: 68-77.
10. Quintana J, Gonzales N, Bilbao A, Aizpuru F, Escobar A, et al. (2006) Predictor of patient satisfaction with hospital health care. *BMC Health Serv Res* 6: 102-108.
11. Majchrzak-Kłokocka E, Taraszewicz H, Danielewicz M, Abramczyk A (2012) Satisfaction of hospitalized patients with care provided by a nurse. *PrzedsZarz* 2: 201-214.
12. Akin S, Erdogan S (2007) The Turkish version of the new-castle satisfaction with nursing care scale used on medical and surgical patients. *JCN* 16: 646-653.
13. Uzun O (2001) Patient satisfaction with nursing care at a University Hospital in Turkey. *JNCQ* 16: 24-33.
14. Żakowska A, Zera A, Krupienicz A (2009) The quality of nursing care in the opinion of patients after urological and orthopedic procedures with subarachnoid anesthesia. *PrzUrol* 3: 39-44.
15. Talarska D, Wolska A (2001) Evaluation of the quality of care in the urological ward - Patient satisfaction. *Pielęg Pol* 2: 291-294.
16. Radwin LE (2003) Cancer patient's demographic characteristics and rating of patient-centered nursing care. *J Nurs Scholarship* 35: 365-370.
17. Kropornicka B, Baczevska B, Turowski K (2003) Satisfaction with nursing care in a group of patients hospitalized for lumbar discopathy. *Lublin-Polonia* 129: 132-138.

18. Gunther M, Alligood MR (2002) A discipline specific determination of high quality nursing care. JAN 38: 353-359.
19. Zagroda M, Cudak-Bańska E, Dyk D, Krysiak I, Gutysz-Wojnicka A (2005) Assessment of patient satisfaction with nursing care. Pielęg Pol 19: 49-52.
20. Grochans E, Seewald K, Szkup-Jabłońska M (2011) Satisfaction with nursing in the patients cared traditionally and with Primary Nursing method. Probl Pielęg 19: 177-184.
21. Alhusban MA, Abualrub RF (2009) Patient satisfaction with nursing care in Jordan. Journal of Nursing Management 17: 749-758.
22. Sloman R, Wruble AW, Rosen G (2006) Determination of clinically meaningful levels of pain reduction in patients experiencing acute post-operative pain. ASPMN 7: 153-158.
23. Wyrzkowska M (2007) Evaluation of nursing care in the opinion of patients. Pielęg Chir Angiol 1: 3-10.
24. Stomberg MW, Wickstrom K, Joelsson H (2003) Postoperative pain management on surgical wards – do quality assurance strategies result in long – Term effects on Staff member attitudes and clinical outcomes? ASPMN 4: 4-22.
25. Peterson WE, Charles C, Di-Censo A (2005) The New-castle satisfaction with nursing scale: A valid measure of maternal satisfaction with inpatient post-partum nursing care. JAN 52: 672-681.
26. Chen H, Li M, Wang J, Xue C, Ding T, et al. (2016) Factors influencing inpatients' satisfaction with hospitalization service in public hospitals in Shanghai, People's Republic of China. Patient Preference and Adherence 10: 601-612.
27. Theodosopoulou E, Raftopoulos V, Krajewska-Kulak E (2007) Study of patients 'satisfaction with the quality of hospital care in Greece in comparison with patients' satisfaction in Poland. Adv Med Sci 56: 136-139.
28. Furtak–Niczyporuk M, Kos M, Jurek A, Albinia M (2017) The evaluation of nursing care from the patient perspective. Journal of Education, Health and Sport 7: 31-43.