Original Article

Attitudes and Satisfaction of Nurses with the Work Environment in Turkey

Guler Duru Asiret, PhD
Assistant Professor, Nursing Department, Faculty of Health Science, Aksaray University, Aksaray, Turkey

Sevgisun Kapucu, PhD
Assocociate Professor, Internal Medicine Nursing Department, Faculty of Nursing, Hacettepe University, Ankara, Turkey

Tekmile Kurnaz Kose, MSc
Ankara University, Ibnı Sina Hospital, Nursing Services Director, Ankara, Turkey

Berna Kurt, MSc
Research Assistant, Internal Medicine Nursing Department, Faculty of Nursing, Hacettepe University, Ankara, Turkey

Neşe Altınok Ersoy, MSc
Research Assistant, Internal Medicine Nursing Department, Faculty of Nursing, Hacettepe University, Ankara, Turkey

Correspondence: Assist. Prof. Guler Duru Aşiret, Aksaray University, Nursing Department, Faculty of Health Science, 68100, Aksaray, Turkey E-mail: gulerduru@gmail.com

Abstract

Background: The satisfaction of the nurses can be influenced by factors affecting the working environment and working environment.
Aim: The aim of this study was to determine the effect of the factors affecting nurses' work environment and the work environment itself on the satisfaction of nurses.
Methods: A total of 327 nurses were administered an introductory questionnaire, the Practice Environment Scale of the Nursing Work Index (PES-NWI) and the Employee Satisfaction Scale (ESS) in our descriptive study.
Results: The mean PES-NWI score was 2.6±0.4 and the mean ESS score was 79.69. The highest mean score among the PES-NWI sub-dimensions was for staffing and resource adequacy (3.0±0.5) while the lowest mean score was for nursing foundations for quality of care (2.3±0.5). The ESS increased as the PES-NWI score increased (r =-.772, p=0.000).
Conclusions: We found that the attitudes of the nurses regarding the work environment and their vocational satisfaction were moderate and the age, educational level and work duration affected the attitude regarding the work environment.

Key words: Attitude, satisfaction, nursing, work environment

Introduction

Donald (1999) described a high-quality work environment for nurses as “a place where the needs and expectations of the nurses are met as an individual and also where the patients achieve their targets regarding their own health” (Donald 1999). The Institute of Medicine emphasized that the work environment was important for nursing care quality in their report named Ensuring Patient Safety in 2004: Transformation of the Nurses' Work Environment of Nurses (Institute of Medicine 2004). The International Community of Nurses again identified its 2006 theme as “Safe Environment-Safe Employment” while the 2007 theme focused on “Positive Implementation-Work Environment” (Bilazer et al 2008). The work environment of nurses consists of 6 elements, and is a complex issue that plays a major role in the burnout level of the

nurse. These elements are listed as the employment level, working responsibility, management, relationships between colleagues, and vocational and professional incentives (International Council of Nurses 2006; Choi et al 2011).

The work environment is known to currently include uncertain, variable and complex conditions for nurses (Gaynor et al 2007). The development of modern health care, an aging population, the complexity of advanced medical science, and current health policies are thought to increase the responsibilities the nurses need to manage in the work environment and their workload (Choi et al 2011). Additionally, the lack of nurses, a problem affecting the world and our country, is included among the conditions affecting the work environment negatively and preventing health care systems from finding the necessary solutions for better health care. The employment problems and lack of adequate numbers in nursing is known to force both the managers and the nurses to create cost-efficient work conditions and use staff loss strategies. Unhealthy work environments and the work conditions of the nurses are included among important causes of the decrease in the nursing work force and is reported to affect the performance of the nurses and thus nurses' satisfaction, patient care results and patient safety negatively (Choi et al 2011; Gaynor et al 2007). Nurse satisfaction is included among nurse/staff gain strategies and the work environment of the nurses is important for vocational satisfaction and burnout levels. The factors included in work environment such as nurse support systems, age, educational level, nursing staff, clinical capacity, on-call hours, shift hours, accreditation, patient age, patient health status, priority hospitalizations, hospital size, hospital system and nursing experience affect the satisfaction level (Stalpers et al 2015). Besides, the satisfaction of the employees and their expectations regarding the services provided are seen as important indicators of health care quality (Beser & Bayık 2006). Vocational satisfaction is reported as one of the qualifications of a professional nurse just like communication, leadership, responsibility, flexibility, creativity and professional implementation, as expressed by Arthur (Demir Dikmen et al 2014). However, our literature search revealed only a few studies investigating the relationship between the work environment and employee satisfaction although the factors affecting the work environment of nurses have been identified, which led to the planning of this study.

The International Labor Organization identifies the main stressors of the nursing work environment as conflicts with managers, role conflict and uncertainty, work overload, emotional stress due to working with patients, caring for patients who need intensive care or are dying, conflicts experienced with the patients, and being on call (Bilazer et al 2008). Nurses working in an environment that makes them want to quit affects the service quality and decreases productivity (Kebapci & Akyolcu 2011). Work satisfaction is important in terms of giving high quality patient care. While work satisfaction scores of the individuals who were satisfied with their profession have been found to be high (Baran & Okanlı 2015), negative situations such as work dissatisfaction, quitting work and personality problems were reported to be related to nurses feeling a lack of power in another study (Başaran & Duygulu 2014). However, employee satisfaction and work environment factors are included in the outcomes of leadership, an important factor in making nurses feel strong. The positive and negative effects of leadership models influence the patient outcomes, work environment and the nursing workforce (Cummings et al 2010).

Satisfaction of the employees is reported to be an important factor in terms of the sustainability of the quality of patient care. Aiken et al. (2008) reported that dissatisfaction, burnout and intention to quit have negative effects on maintaining patient care quality. Regularly conducting studies on the satisfaction levels of nurses and other health care staff are important in terms of maintaining quality. It is believed that studying the factors related to the work environment that influence the quality of the care provided by nurses will also be useful (Stalpers et al 2015).

The aim of this study was to determine the effect of the factors affecting nurses' work environment and the work environment itself on the satisfaction of nurses.

Methods

Design and setting

This descriptive study was conducted between 1 July and 15 September 2015 on a total of 327 nurses working at the clinics of a university

hospital in Ankara. The nurses that accepted to be included in the study were informed on the aim and verbal consent was obtained. Study data were collected by the investigators using the face-to-face interview method in the nurse room of the clinics, whenever the nurses were available between the working hours. Data collection took about 15-20 minutes. Written permission for the study was obtained from the Hacettepe University Non-interventional Clinical Research Ethics Committee and IRB approval numbers is 15/374-23. The necessary permissions were obtained from the hospital head physician's office. Verbal consent was also obtained from the nurses included in the study.

Subjects

The population of the study consisted of 640 nurses working in the specified hospital. We planned to include all the nurses working in the clinics without selecting a sample in our study. However, a total of 327 nurses were included (participation rate 51.09%) within the scope of the sample due to the nurses being on leave (annual leave, sick leave, unpaid leave, etc.), working shifts, not wanting to participate or not fully completing the forms.

Data collection

The data of the study were collected by using an introductory questionnaire, the Practice Environment Scale of the Nursing Work Index (PES-NWI) and the Employee Satisfaction Scale (ESS). Six close- and six open-ended questions for a total of twelve questions were included in the introductory questionnaire to obtain sociodemographic data and information regarding the working status of the nurses.

The Nursing Work Index- Practice Environment Evaluation Scale

The validity and reliability study for the scale was conducted by Lake (2002) while a similar study for Turkey was performed by Turkmen et al., (2011). Cronbach's alpha value for the scale was found to be 0.82. The four-point Likert type scale consists of 31 items. The scale has five sub-dimensions. When the scale scores are being evaluated, the conversion is performed by extracting the coded numbers from 5. To do this, the scores of all items are reversed as "1-4", "2-3", "3- 2", and "4-1" and then the sub-dimension scores are calculated. The mean score of the 5 sub-dimensions are added and a scale score between 1 and 4 is obtained by dividing the total into 5. A higher score indicates more positive attitude of the individual towards the work environment (Turkmen et al 2011).

Employee Satisfaction Scale

This questionnaire developed by the Turkish Ministry of Health was used at regular intervals to evaluate the satisfaction of the healthcare staff working at all hospitals and to make improvements in the institutions according to the results obtained. The total score of the three-point Likert type questionnaire is found by adding the score of all items. The Employee Satisfaction Questionnaire Coefficient is obtained by using the questionnaire total score (questionnaire total score /number of subjects) x 100/36). According to this coefficient, 90 points and more is evaluated as very good, 80-89 points as good, 70-79 points as moderate, and 69 points or less as bad (Republic of Turkey Ministry of Health 2011).

Data analysis

The Statistical Package for Social Sciences (SPSS), version 15.0 (SPSS Inc., Chicago, IL, USA) was used in the evaluation of the data. Mean, standard deviation, percentage (%) and numbers (n) were used to present the descriptive statistics. The data were consistent with a normal distribution in our study and we therefore used the t test in independent groups in pairwise comparisons and the One-way Anova test in comparisons of more than two groups. The relationship of two scales with each other was calculated with Pearson correlation analysis. The statistical significance limit was accepted as 0.05.

Results

Socio-demographic and professional experience-related characteristics of the nurses

The mean age of the nurses included in the study was 34.23±7.77 years. Females made up 89.6% of the total population, 59.5% were married, and 65.4% had a university degree. The working duration was shorter than 12 years in 55% of the nurses, 48% worked at a service, the working duration at the clinic was less than 8 years in 61.5%, and 56% stayed on call. Of the nurses within the scope of the sample, 73.1% did not have enough time for themselves due to the working conditions and 96.6% stated that they did not get enough material gain in return of their professional work (Table 1).

Table 1. Socio-Demographic and Professional Experience-Related Characteristics of the Nurses (N=327)

	n	%	M±SD
Age	327	100	34.23±7.77
Gender			
Female	293	89.6	
Male	34	10.4	
Marital status			
Single	132	40.4	
Married	195	59.6	
Educational level			
High school	31	9.5	
Associate	63	19.3	
Bachelor	214	65.4	
Postgraduate	17	5.8	
Professional experience			
≤12years	180	55.0	12.77±9.25
≥13years	147	45.0	
Work unit			
Inpatient services	157	48.0	
Intensive Care	72	22.0	
Daily monitoring and treatment *	70	21.4	
Policlinic	28	8.6	
Working duration in unit			
≤8 years	201	61.5	8.53±8.29
≥9 years	126	38.5	
Holding vigil			
Yes	183	56.0	
No	144	44.0	
Enough time to devote himself			
Yes	88	26.9	
No	239	73.1	
Obtaining sufficient material gain			
Yes	11	3.4	
No	316	96.6	

M, mean. SD, standard deviation.

Table 2. Mean Scores from the PES-NWI and the ESS

Variable	n	M±SD
Nurse participation in hospital affairs	327	2.54±0.53
Nursing foundations for quality of care	327	2.29±0.51
Nurse manager ability, leadership, and support of nurses	327	2.57±0.58
Staffing and resource adequacy	327	3.08±0.51
Collegial nurse–physician relations	327	2.44±0.61
PES-NWI	327	2.59±0.45
ESS	327	79.69

M, mean. SD, standard deviation. PES-NWI; The Nursing Work Index- Practice Environment Evaluation Scale, ESS; Employee Satisfaction Scale.

The Characteristics of the Nurses Regarding their Attitudes towards and Satisfaction with the Work Environment

The mean PES-NWI score of the nurses in the study was 2.59±0.45 and the mean ESS was 79.69. The mean PES-NWI sub-dimension scores were 2.54±0.53 for nurse participation in hospital affairs, 2.29±0.51 for nursing foundations for quality of care, 2.57±0.58 for nurse manager ability, leadership, and support of nurses, 3.08±0.51 for staffing and resource adequacy, and 2.44±0.61 for collegial nurse–physician relations (Table 2).

When the PES-NWI mean total score and sub-dimension scores were compared by age, the mean total and sub-dimension scale scores of participation in the nurse participation in hospital affairs, nursing foundations for quality of care, nurse manager ability, leadership, and support of nurses, and collegial nurse–physician relations were found to be higher in nurses aged 34 and below than in older nurses ($p \leq 0.05$).

When mean PES-NWI sub-dimension scores were compared by gender, the mean scores for nursing foundations for quality of care and nurse manager ability, leadership, and support of nurses were higher in male nurses than the female nurses ($p \leq 0.05$).

When the PES-NWI mean total score and sub-dimension scores were compared by educational level, the total and mean scores of all sub-dimensions of the scale were higher in nurses with a high school or master's degree than nurses with undergraduate and graduate degrees ($p \leq 0.05$).

When the PES-NWI mean total score and sub-dimension scores of were compared by professional experience duration, the scores of those with a professional experience duration of 12 years and less were higher ($p \leq 0.05$). When the mean total score and sub-dimension scores of PES-NWI were compared by the unit of employment, the nurse manager ability, leadership, and support of nurses sub-dimension was found to be higher in nurses working at the intensive care unit than nurses working at other units ($p \leq 0.05$).

When the total score and sub-dimension mean scores of PES-NWI were compared by working duration at the unit, the values for participation of the nurse participation in hospital affairs, nursing foundations for quality of care, and collegial nurse–physician relations sub-dimensions were higher in those with a working duration of 8 years or less that nurses who had been working longer ($p \leq 0.05$), (Table 3).

The ESS score of the nurses within the scope of our study increased as their PES-NWI score increased (r=-0.772, p=0.000).

Discussion

Attitudes of the Nurses towards the Work Environment

The attitude score of the nurses within the scope of the study was found to be moderate (2.59±0.45), and the sub-dimension of adequacy of human power and other resources (3.08±0.51) to be more positive than other sub-dimensions (Table 2). Similar to our study, Ma et al (2015) reported that the attitude of the nurses towards the work environment was moderate. The mean sub-dimension scores of the scale regarding the work environment and the attitudes of the nurses towards the work environment are seen to vary in the various studies in the literature. The sub-dimension score for staffing and resource adequacy was reported to be lower than the other sub-dimensions in the studies by Choi and Boyle (2014) and Warshawsky and Havens (2011). The mean score obtained from the nurse manager ability, leadership, and support of nurse sub-dimension by the nurses was reported to be higher than the other sub-dimensions in a study conducted by Zuniga et al.

The attitudes of the nurses aged 34 and below in our study were more positive than older individuals ($p \leq 0.05$). This could be associated with the vocational satisfaction of young individuals being higher due to starting a new job, getting used to new situations, or having found a job. Besides, the attitude towards the work environment related to age could possibly be affected by factors such as the change of technological products used in the clinics, long adaptation duration to technological changes with advanced age and increase of expectations from work with advanced age. It is also reported that that burnout increases in nurses with advanced age due to the interaction between the nurses (Gunusen & Ustun 2008).

Mean PES-NWI total and all sub-dimension scores of nurses with a high school and master's degree were higher than in nurses with undergraduate and graduate degrees ($p \leq 0.05$). A negative relationship has been reported between the educational level and work satisfaction in the literature and one of the reasons is the differences between the training individuals with a high educational level receive at school and their current work environment (Ozturk et al 2015). The higher expectations of nurses with undergraduate and graduate degrees from the work environment and clinic may have affected our results.

Demir Dikmen et al. (2014) reported that professionalism is affected negatively as the number of years worked increases and this could be related to increasing professional burnout in time. Mean PES-NWI total and mean scores of all sub-dimensions were higher in nurses with 12 years or less professional experience in our study ($p \leq 0.05$). The mean PES-NWI total score and sub-dimension scores from the participation of the nurse participation in hospital affairs, nursing foundations for quality of care, and collegial nurse–physician relations were higher in nurses with a working duration of 8 years or less ($p \leq 0.05$), (Table 3).

Working in different clinics is reported to create a difference regarding the aims of patient care, clinical duties, role and expectations, social structure, and rules of the work environment (Choi & Boyle 2014). The mean score the nurses working in intensive care units from the nurse manager ability, leadership, and support of nurses sub-dimension was 2.76±0.56 and the highest mean score was from collegial nurse–physician relations (3.02±0.43).

Pediatric clinics where medical and surgical patients stay together were found to be the most preferred work environment in the study of Ma et al. (mean=3.07). We found no significant difference between the unit where the nurses worked and their attitudes regarding the work environment. The mean score for nurse manager ability, leadership, and support of nurses, nurses working in the intensive care unit were found to be higher than in other units ($p \leq 0.05$).

Wheelan et al. (2003) found that teamwork in intensive care units is conducted in a good way and these units provide a positive work environment. This result obtained from our study can be explained by the increased autonomy of the nurses working in the intensive care unit.

Vocational Satisfaction Status of the Nurses

The vocational satisfaction status of the nurses was found to be moderate in our study and this was consistent with the literature. The vocational satisfaction of the nurses has been reported to be low (Murrels et al 2008) or moderate in other studies (Lober & Savic 2012).

High stress levels in the nursing profession are known to occur due to factors such as excessive workload and role uncertainty (Van Bogaert et al 2014). Besides, the physical symptoms and injuries experienced due to the profession can cause the nurses to experience emotional stress and fatigue.

Additionally, the excessive workload of nurses, inadequacies experienced in preparation for the profession, conflicts with other health care staff, inadequate leadership and low professional autonomy can cause professional burnout. The vocational satisfaction status of the nurses is thought to decrease with the effect of all these factors that arise from the work environment and procedures they perform as required by the profession. In parallel with this situation, the preferred nursing work environment was reported to be significantly associated with better nursing care results and vocational satisfaction, and decreased burnout and intention to quit in other studies (McCaughey et al 2014). We found that the satisfaction of the nurses from their occupation increased as their scores of attitude towards the work environment increased (r=-0.772, p=0.000).

The studies of Abu AlRub et al. (2016) similarly reported a strong positive relationship between the work environment of the nurses and their professional satisfaction. Liu et al. (2012) reported that the work environment significantly affects vocational satisfaction and positive friendships in the work environment also increase satisfaction with work, while inadequate authority transfer, salary increase and rewards have the opposite effect. The negative thoughts of the nurses regarding the work environment can lead to similar negative thoughts about the profession. It is also known that the satisfaction the patients receive from nursing care also decreases as the satisfaction the nurses receive from the profession decreases. Such thoughts regarding the profession negatively affect the communication of the nurses with other health staff and the sick individual and also the quality of the care provided. Therefore, it is important to optimize the nurses' work environment.

Conclusion

In this study, we found that the work environment and vocational satisfaction status of the nurses were at moderate levels. The age, educational level and vocational work duration of the nurses affected their attitude regarding the work environment. Based on these results, programs and regulations to improve the work environment of the nurses who make up the largest health care group will increase the quality of nursing care. Such an increase in quality may prevent recurrent hospitalizations and complications, decrease the hospitalization and recovery duration, and enable more efficient resource use. A contribution can also be expected to both individual and country finances.

This study was carried out at Ankara University, Ibnı Sina Hospital. Ankara University, Ibni Sina Hospital, 06100, Ankara, Turkey

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Table 3. The Comparison of sub-dimensions of the Work Index According to the Introductory Characteristics of the PES-NWI

Variable	Nurse participation in hospital affairs M ± SD	Nursing foundations for quality of care M ± SD	Nurse manager ability, leadership, and support of nurses M ± SD	Staffing and resource adequacy M ± SD	Collegial nurse–physician relations M ± SD	Total score M ± SD
Age						
≤34 years ≥35years t*	2.66 ± 0.52 2.41 ± 0.51 **t=4.192** **p=0.000**	2.43 ± 0.53 2.16 ± 0.43 **t=4.950** **p=0.000**	2.65 ± 0.60 2.49 ± 0.54 **t=2.419** **p=0.016**	3.13 ± 0.51 3.03 ± 0.51 t=1.752 p=0.081	2.55 ± 0.65 2.33 ± 0.55 **t=3.241** **p=0.001**	2.68 ± 0.47 2.48 ± 0.40 **t=4.030** **p=0.000**
Gender						
Male Female t*	2.68±0.58 2.52±0.52 t=1.663 p=0.494	2.44±0.63 2.28±0.49 **t=1.728** **p=0.006**	2.77±0.72 2.55±0.56 **t=2.141** **p=0.004**	3.16±0.56 3.07±0.51 t=0.972 p=0.165	2.53±0.59 2.43±0.61 t=0.908 p=0.652	2.72±0.51 2.57±0.44 t=1.809 p=0.91
Educational level						
Bachelor and above High school and associate t*	2.37±0.47 2.61±0.54 **t=3.832** **p=0.000**	2.10±0.44 2.38±0.51 **t=4.628** **p=0.000**	2.41±0.53 2.64±0.59 **t=3.369** **p=0.001**	2.98±0.55 3.13±0.49 **t=2.392** **p=0.017**	2.28±0.57 2.52±0.61 **t=3.353** **p=0.001**	2.43±0.42 2.66±0.44 **t=4.317** **p=0.000**
Professional experience						
≤12years	2.65±0.54	2.43±0.54	2.65±0.63	3.16±0.50	2.55±0.63	2.69±0.47

≥13years t*	2.39±0.48 **t=4.504** **p=0.000**	2.13±0.40 **t=5.496** **p=0.000**	2.47±0.50 **t=2.791** **p=0.007**	2.99±0.52 **t=3.049** **p=0.002**	2.32±0.56 **t=3.396** **p=0.001**	2.46±0.39 **t=4.655** **p=0.000**
Work unit						
Inpatient services Intensive Care Daily monitoring and treatment Policlinic F**	2.48±0.50 2.68±0.47 2.53±0.64 2.49±0.49 F=2.455 p=0.063	2.25±0.49 2.42±0.52 2.30±0.53 2.19±0.46 F=2.296 p=0.78	2.48±0.51 2.76±0.56 2.62±0.69 2.45±0.61 **F=4.427** **p=0.005**	3.10±0.52 3.02±0.43 3.11±0.60 3.08±0.50 F=0.473 p=0.701	2.40±0.65 2.48±0.59 2.45±0.59 2.54±0.49 F=0.542 p=0.654	2.54±0.43 2.67±0.41 2.60±0.52 2.55±0.43 F=1.457 p=0.226
Working duration in unit						
≤8 years ≥9 years t*	2.61±0.55 2.43±0.48 **t=3.035** **p=0.003**	2.40±0.54 2.12±0.40 **t=5.384** **p=0.000**	2.58±0.63 2.56±0.49 t=0.265 p=0.792	3.11±0.53 3.03±0.49 t=1.310 p=0.191	2.51±0.64 2.34±0.54 **t=2.481** **p=0.017**	2.64±0.48 2.50±0.38 **t=2.852** **p=0.005**

M, mean. SD, standard deviation. P<0.05. t* statistic from a t-test analysis, F** statistic from an analysis of variance.