



THE RELATIONSHIP BETWEEN NURSES' INTENTION TO STAY AND ORGANIZATIONAL FACTORS IN SPECIAL CARE UNITS

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ABSTRACT

Various studies have demonstrated that the intention to stay in the workplace and also employee retention are important and challenging topics in nursing management.

The present study aims to calculate the score of nurses' intention to stay in special care units (SCUs) and determine its relationship to some organizational factors in SCUs in teaching hospitals affiliated to Isfahan University of Medical Sciences (IUMS) in 2016.

Material and Methods: This cross-sectional study was both descriptive and analytical. It was conducted by census sampling on 339 SCU nurses in six IUMS teaching hospitals. The data collection tool was a questionnaire with three sections. The first section aimed to gather demographic data and job information. The second section included items on the intention to stay. The third section consisted of items about six categories of organizational factors. The data were analyzed using the SPSS 20 program, descriptive statistics, Pearson correlation coefficient, Spearman correlation test, and regression analysis.

Results: Only 34.8% of the nurses intended to retain their current job status in the SCU for the next five years. The Pearson correlation coefficient revealed that the score of the nurses' intention to stay was directly associated with scores of all the organizational factors. The multiple linear regression analysis indicated that, from among the organizational factors, SCU characteristics and the availability of a safe work environment had the closest association with the intention to stay.

Conclusion: According to the results of the present study, the nurses' intention to stay in SCUs had a direct and positive relationship to the organizational factors. Therefore, in order to improve SCU nurses' intention to stay, it is presumably better to consider these factors in SCUs. It is particularly better to hold nurses in high esteem, reward them, support new employees, offer managerial support, tailor duties to skills, distribute workloads proportionately, eliminate discrimination in the workplace, and strike a balance between personal and professional lives.

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Introduction

Nowadays, patients and their families are more cognizant than ever and expect the health system to provide safe and high-quality care so that the outcome of the patient care could be satisfactory. It is thus essential for experienced and trained nurses to be in special care units (SCUs), provide care, and remain at the forefront of fulfilling patients' and their families' requirements. Furthermore, it is necessary to devise a scheme for nurse retention [i]. Nurse retention has been nurse administrators' focus of attention since the 1980s, when there was a shortage of nurses. Furthermore, owing to a worldwide shortage of nursing staff, this phenomenon is discussed as a research priority in the management of nursing services [ii]. On the other hand, studies show that the demand for nurses in acute care units (ACUs) will increase by around 36% by 2020.ⁱⁱⁱ

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Given social changes such as population growth, advancements in science and technology, the outbreak of newly emerging diseases, and a rise in patients' expectations, it is unavoidably necessary to recruit further and more skilled nurses [iv]. Staff resources are the valuable asset of any organization. Moreover, nurses make up the majority of staff in hospitals and healthcare centers. They dedicate themselves to patients with compassion and regardless of any problem. Hence, the intention to stay in a workplace environment and staff retention are among important and challenging topics in nursing management. Organizations make huge expenditure on recruiting, training, and retaining staff resources. If they fail to provide appropriate working conditions, they have to tackle the challenge of a high turnover. The most important problem is that the qualified force would be recruited by organizations with more favorable conditions [v]. Lack of information on the retention rate and factors behind it is the reason why consequences of nurses' tendency to resign are unknown to administrators of health centers and even nurses themselves. Since numerous economic, healthcare, education, and staff-resources expenditures result from their resignation, it is necessary to identify factors behind nurse retention.

Nurses interact with patients more and, at the same time, have major and diverse roles and responsibilities which necessitate their being careful and alert while fulfilling their professional duties. Therefore, any shortcoming or incompetence on their part will directly affect the quantity and quality of health care and the health of individuals. The society will never remain unaffected either [vi,vii]. The recruitment and retention of staff resources in SCUs are of profound significance. Conditions of the SCU necessitate the presence of nurses with special skills in these units. Thus, it is highly important to not only recruit and train these nurses but also retain them. Although the topic of SCU nurse retention and factors behind it are challenging, no study has been carried out on this in SCUs in Isfahan University of Medical Sciences (IUMS). In several studies available to the researchers of the present study, numerous factors had been declared as retention factors; however, each of them either had explored one or a few factors or had compared the two groups that had stayed in the profession or resigned with regard to one single factor.

Materials and Methods

The present study aims to calculate the score of nurses' intention to stay in SCUs and determine the relationship between nurses' intention to stay and organizational factors in SCUs in IUMS teaching hospitals in 2016. Based on the results of the study, the researchers could provide nursing administrators with the status of the intention to stay and factors which have the closest association with it; moreover, the results could be an opportunity for conducting further studies on the way these factors exert effects and searching for appropriate intervention strategies.

This cross-sectional study was both descriptive and analytical. It aimed to investigate the relationship between nurses' intention to stay in SCUs and organizational factors in teaching hospitals affiliated to IUMS in 2016. From among six IUMS teaching hospitals (namely, Al-Zahra, Amin, Noor and Hazrat-e Ali Asghar, Ayatollah Kashani, Shahid Chamran, and Imam Mousa Kazem), 339 nurses who worked in intensive care units (ICUs), coronary care units (CCUs), or hemodialysis units (HDUs) were included in the study. In order to apply census sampling, the researchers visited SCUs (ICUs, CCUs, or HDUs) in IUMS teaching hospitals after having obtained necessary permits from IUMS and a permit from the Ethics Committee. In the present study, data were collected using a self-report questionnaire, which consisted of three sections. The first section gathered job information and demographic data. The second section was composed of five items on the score of the intention to stay. The third section consisted of items about six categories of possible organizational factors associated with nurses' intention to stay in SCUs. Each item was scored on a five-level Likert scale ranging from "totally agree" to "totally disagree."

Questionnaires were distributed to the subjects at the beginning of each shift. After they were completed, the questionnaires were collected by the researchers. Totally, 550 questionnaires were handed out to the subjects in 23 SCUs (ICUs, CCUs, or HDUs). In order to confirm the validity of the questionnaire in terms of clarity, articulation, and the absence of polysemy, it was submitted to nine university professors and their ideas were implemented in the questionnaire. For the purpose of assuring the reliability of the questionnaire, 30 questionnaires were handed out to the subjects, who filled them out. Using Cronbach's alpha, reliability was calculated at 0.973. The data were analyzed using the SPSS 20 program, descriptive statistics, Pearson correlation coefficient, and Spearman correlation test. When necessary, the independent t-test, multiple linear regression analysis, one-way ANOVA, and the LSD post-hoc test were also used.

Results

Results of the study showed that the mean age of the nurses was 33.1 years, their mean employment history in the current unit was 5.1 years, and the mean of their weekly working hours was 44.3 hours. Moreover, 91.2% of the nurses were female and 8.8% were male. The majority of the nurses (75.5%) were married. Most of them (91.6%) had an undergraduate degree in nursing and 56.7% of them had been educated at state universities. The majority of the nurses (70.5%) were employed in the ICU. Most of them (80.3%) were rotating shift workers. Among the nurses, 39.5% had a temporary employment status and only 9.2% had a formal employment status. Furthermore, 76.4% of the nurses had a previous history of nursing in a unit other than the current one. A high frequency of the nurses (34.8%) had a firm intention of retaining their current job status in the

SCU for the next five years. The present study determined the mean score of the SCU nurses' intention to stay as well as the mean scores of job characteristics, characteristics of head nurses, the availability of a safe work environment, personal development characteristics in the SCU, SCU characteristics, and leadership and career development from the SCU nurses' perspectives. (Table 1) shows the results. The mean scores of the intention to stay and the six categories of organizational factors in nurses are presented in (Table 1).

Table 1. The mean scores of the intention to stay and six categories of organizational factors in SCU nurses

Variable	Mean	SD	Min	Max	Total
Intention to stay	9.17	7.4	5	25	25
Job characteristics	5.83	4.11	50	115	115
Characteristics of head nurses	6.34	4.8	10	50	50
Availability of a safe work environment	9.59	7.8	35	88	95
Personal development characteristics in the SCU	5.41	1.7	16	60	60
SCU characteristics	5.25	7.4	7	35	35
Leadership and career development in the SCU	1.42	4.7	12	60	60

As the table shows, the mean score of the intention to stay was 17.9. Results of the association between the score of the nurses' intention to stay and the scores of the organizational factors (namely, job characteristics, characteristics of head nurses, the availability of a safe work environment, personal development characteristics in the SCU, SCU characteristics, and leadership and career development from the SCU nurses' perspectives) are shown in (Table 2).

Table 2. Pearson correlation coefficients between the score of the intention to stay and the scores of the organizational factors from the perspectives of the SCU nurses

Organizational factors	Intention to stay	
	r	P
Job characteristics	334.0	001.<0
Characteristics of head nurses	336.0	001.<0
Availability of a safe work environment	311.0	001.<0
Personal development characteristics in the SCU	210.0	001.<0
SCU characteristics	375.0	001.<0
Leadership and career development in the SCU	239.0	001.<0

The Pearson correlation coefficient revealed that the score of the nurses' intention to stay was directly associated with the scores of all the organizational factors ($p < 0.001$). In order to know which factor was most associated with the intention, multiple linear regression analysis was used. The results are shown in Table 3. The analysis indicated that, from among the factors, the closest association with the intention was related to SCU characteristics ($p < 0.001$, $t = 3.92$, $\beta = 0.292$) and the availability of a safe work environment ($p < 0.01$, $t = 2.57$, $\beta = 0.159$).

Table 3. The multiple linear regression model for the score of the intention to stay based on the scores of the organizational factors

Organizational factors	B	T	P-value
Job characteristics	116.0	63.1	10.0
Characteristics of head nurses	105.0	29.1	20.0
Availability of a safe work environment	159.0	57.2	01.0
Personal development characteristics in the SCU	95.0	33.1	18.0
SCU characteristics	292.0	92.3	001.<0
Leadership and career development in the SCU	074.0	99.0	32.0

Discussion

According to the results of the current study, the mean score of the nurses' intention to stay in SCUs was 17.9. In a study by Soudagar et al., it was revealed that 53.2% of nurses who had participated in the study had a very firm and fairly firm intention to stay in the nursing profession [viii]. In a study, Hojjati and Azma showed that the mean of the intention to stay in the profession was 33.7 ± 6.8 and was at an average level [ix]. In addition, Sourdif (2004) stated that most nurses in the study intended to continue the nursing profession [x]. Kaveh et al. (2009) reported in their study that the mean score of the intention to stay was 2.4, which was lower than the given mean. [xi] Since the studies had explored the rate of the intention to continue the nursing profession and had not touched on SCUs, the results of the present study were categorized into 5 levels so as to be interpreted. An intention score in the range of 1 to 5 represented very little intention; 6-10, little intention; 11-15, moderate intention; 16-20, firm intention; and 21-25, very firm intention to stay. Therefore, the mean score of the nurses' intention to stay in SCUs showed a firm intention. Based on the results of the present study, SCU characteristics and the availability of a safe work environment had the closest association with the nurses' intention to stay in SCUs. Given that 65% of efficient human life is spent in the work environment, it is therefore important to pay attention to the work environment of employees so as to maintain and promote administrative integrity and retain them [xii]. A supportive work environment encourages nurses to stay in the profession. SCU nurses work in conditions where they ought to tackle an enormous workload, the complexity of duties, and emotional strains at the same time that they are expected to provide proper care [xiii,xiv]. Results of the study by Sawatzky and et al. (2015) revealed that the professional practice, nursing management, physician-nurse collaboration, nursing competence, autonomy, organizational responsibility, and control were statistically significantly associated with and the tendency to leave the ICU and the nursing profession ($p < 0.05$). Furthermore, staff resources and a positive work environment were significantly associated with the tendency to leave the ICU [xv]. In ACUs, a higher level of teamwork and an assurance about adequate staff resources lead to greater job satisfaction ($p < 0.001$). [xvi] According to results of a study by Tourangeau et al. (2013), the most important factors behind retention are reasonable workloads (frequency = 75.3%) and manageable nurse-patient ratios. Moreover, two factors, namely inadequate staff resources and unmanageable workloads, were disincentives to nurses' intention to remain employed in acute care hospitals [xvii]. Conducting a study on emergency nurses in 2012, Sawatzky and Enns declared that the key factor behind retention was striking a balance between nurses' competence and the profession and, moreover, other factors including nursing management, professional practice, physician-nurse collaboration, staff resources, and shift work had an impact on this balance [xviii]. Furthermore, according to a study by Duffield et al. (2011) providing praise and recognition had the most profound influence on job satisfaction and satisfaction with nursing. An increase by one point in the item "A nurse manager or immediate supervisor who is a good manager and leader" decreased the tendency to leave by 20% and increased job satisfaction by 17% [xix]. In a study by Mehrabi and Golnari (2015), there was a relationship between job security and organizational behavior ($R = 0.80$, critical ratio = 2.503). In other words, employees' job security as an independent variable had an influence on their demeanor and behavior toward clients.^{xx} In addition, in research by Ranjbar and Shafizadeh (2015), performance evaluation, the availability of healthcare and safety facilities in a workplace, physical conditions of a work environment (including temperature, humidity, noise, and light), and participation in activities and decision-making included 13% of the total variance of factors affecting retention [xxi]. In order to retain employees, it is necessary to have an environment which could provide staff with great incentives through fair payments and perquisites, optimal working conditions, interestingly challenging and encouraging tasks, and well-matched colleagues [xxii]. Heavy workloads result in occupational stress, emotional exhaustion, a reduction in job satisfaction, and an increase in turnover. Putting in overtime, doing the night shift, and working shifts in the holidays are the key factors behind turnover. Executives and senior managers could influence these. Executives' attention to these factors would encourage nurses to stay in their profession. The quality of care, the usefulness of trained skills in delivering care, nurses' participation in

determining policies, the number of on-call shifts done by nurses, and the way overtime is paid are among factors behind nurse retention [xxiii]. Flexibility in scheduling maintained by effective strategies such as job sharing and self-scheduling are central to nurses' decision to stay in their positions [xxiv]. The following improve nurse performance and maintain nurse retention: manageable nurse-patient ratios, versatility, sufficient daily nursing time for each patient, nurse education, reverence for nurses, good interaction, adaptation to the work environment, provision of support for new employees, empowerment of staff with a reward and recognition program, and facilitation of education. Managerial support includes listening to staff, encouraging teamwork, and communicating with staff [xxv].

Conclusion

Based on the results of the present study, SCU characteristics and the availability of a safe work environment impact on nurses' intention to stay in SCUs. In a safe work environment, nurses, who remain at the forefront of healthcare provision, are supported by administrators, teamwork is encouraged, duties and workloads are tailored to nurses' skills, no discrimination is found, colleagues enjoy a good and professional relationship, opportunities for advancement and promotion exist, there is a flexible schedule, and there is a balance between nurses' personal and professional lives.

The present cross-sectional and quantitative study was carried out with the aim of determining the relationship between the intention to stay and the organization factors in SCUs. Nevertheless, it did not explore the relationship of the organizational factors to or their effects on the intention to stay in SCUs based on the type of unit and effects of each of the factors on the intention. Hence, it is recommended that studies on these be conducted.

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Footnote

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Authors' Contribution

Azadeh Tavakoli Mohammadi designed the study and the questionnaire, collected the data, wrote the first and final draft of the manuscript and, together with Marzieh Adel Mehraban, critically revised it.

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