

## ■ Original article

## Evaluation of organizational commitment among nurses in intensive care units

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### Abstract

**Background and Purpose:** Organizational commitment has been on a downward trend among medical staff in different sections of the health care system. This study aimed to investigate the level of organizational commitment among the nurses engaged in the intensive care units (ICUs) of Mazandaran Heart Center in Sari, Iran.

**Methods:** This descriptive-analytical study was conducted at the educational hospital of Mazandaran University of Medical Sciences, affiliated to Mazandaran Heart Centre. Data were collected using Allen and Meyer's organizational commitment questionnaire, which was completed by 90 nurses selected by census sampling from different ICUs. Data analysis was performed using SPSS V.21.

**Results:** In this study, 17 participants (18.9%) were male, and 73 (81.1%) were female, with the mean age of  $7.25 \pm 34.4$  years. Among the variables associated with organizational commitment, including age, work experience and working hours, only age and work experience had significant correlations with the rate of commitment ( $P=0.001$ ).

**Conclusion:** According to the results of this study, medical supervisors and managers need to provide nurses with adequate facilities in order to encourage commitment and motivation among these health professionals.

**Keywords:** Organizational commitment, Nurse, Intensive care unit

### Introduction

Organizational commitment is defined as the sense of honor to be associated with an organization, performing job duties correctly and working for long hours, while finding this process worthwhile (1). Organizational collaboration involves the individual's commitment to the identification and acceptance of the goals and values of that organization, as well as the desire to cooperate with the organization in order to achieve the goals and keep a certain position (2). This type of commitment reflects the attitude and values of individuals, acting as an incentive allowing them to stay in their position

and focus on the achievement of professional goals and expectations (3).

According to the literature, comparing to Nurses who working under no obligation, engaged employers have better experience in long commitments. Vigorous obligation is the direct result of work experience. Furthermore, highly experienced employers tend to have more competence, self-confidence and positive attitude towards their organization (4, 5). In this issue, Turnover intentions are associated with negative feelings, and this is considered as the main

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reason behind the importance of organizational commitment. Therefore, in a system attempting to control the rate of job turnover, it is necessary to recognize the factors leading to increased organizational commitment (6).

Abundance of commitment leads to organizational citizenship behavior (OCB). Commitment could be associated with a few aspect of OCB; for instance, engaged employees tend to have more dedication and conscientiousness. As such, individual organizational socialization and psychological contracts largely influence the prevalence of the normative. Psychological contracts signify the perception of an individual towards the preexisting condition, as well as the mutual exchange between the individual and the associated organization. In this context, the individual becomes aware of what to present to the organization and what to expect in return (7).

Among health care professionals, organizational commitment focuses on the preservation, recursion and enrichment of human health (8). In this regard, factors such as intention for the turnover of young nurses, desire to perform non-medical functions or out-of-hospital activities, rate of early retirement among nurses and self-redeeming are known to decline the number of nursing staff in a health care establishment. Therefore, it could be concluded that with increased organizational commitment, it is possible to conserve agile health staff in a medical organization (9, 10).

Studies conducted in other countries have indicated factors such as low workload, balanced occupational duties and raise of salary to be effective in increasing occupational satisfaction and organizational commitment, while reducing nurse burnouts. In such regard, provision of support and welfare for the nursing staff could remarkably enhance their function and disposition to confront tense conditions at work. Other contributing factors in the improvement of commitment among health care staff include high income, appropriate retirement plans, adequate holidays and desirable amounts of rewards and job perks (11-14).

According to several studies, if nurses have abundant commitment to their organizations, the

overall turnover rate is likely to decline in the medical system (15-17). On the other hand, organizational commitment could be a significant predictor of the turnover rate, while it cannot determine the rate of job satisfaction (18).

Organizational commitment and legislation of new codes as to improve the salary in the medical staff play a pivotal role in the development of health care. Regarding the lack of adequate studies focusing on this issue among the employees of critical care units, this study aimed to investigate the rate of organizational commitment and its related factors among the nurses engaged at the intensive care units (ICUs) of Mazandaran Heart Center in 2014.

## Materials and Methods

This descriptive-analytical study was performed on all the nurses (N=130) employed at the ICUs of Mazandaran Heart Center, Iran in 2014. Data were collected using Allen & Meyer's standard model of organizational commitment. This questionnaire consists of 24 descriptive items, which are replied with the following phrases: Strongly agree, Agree, Do not know, Disagree and Strongly disagree. Score range is from 1 (strongly disagree) to 7 (strongly agree) (12).

Validity of the questionnaire was calculated using the standard methods. Reliability of the questionnaire was determined using Cronbach's alpha, as Gitter previously calculated the reliability to be 0.81 (14). In Iran, the reliability of this questionnaire was determined by Nahrir at 0.94, using Cronbach's alpha (12).

The study protocol was approved by the associated authorities at the ICUs of Mazandaran Heart Center. Afterwards, subjects were selected by census sampling, including the staff with associate degree, bachelor and master's of sciences employed at the cardiac intensive care unit (CICU), coronary care unit (CCU), and angiography and dialysis sections of the hospital.

Inclusion criteria of the study were as follows:

- 1) overall clinical experience of more than 6 months;
- 2) clinical experience at ICUs for at least one month and
- 3) current employment at ICUs. Subjects were

granted terms of confidentiality, and the results of the study were provided in closed envelopes in each unit. In this study, scores of 3.5 and above were indicative of notable organizational commitment in the participants.

We used the CHI 2 test in order to examine the relationship between organizational commitment and the associated factors. To investigate the prevalence of organizational commitment among nurses, we used descriptive statistics (mean and standard deviation), and for the comparison of differences between the study groups, t-test was used. Moreover, t-test and logistic regression were used to evaluate the rate of organizational commitment among the subjects. Data analysis was performed in SPSS V.21.

## Results

Due to the lack of cooperation and refusal to complete the questionnaires, only 90 out of 130 nurses participated in this study, 17 of whom (18.9%) were male and 73 (81.1%) were female, within the age range of 23-54 years (mean age:  $7.25 \pm 34.4$  years). Only 5.6% of the subjects had a master's degree, 12.2% had a history of management at the hospital or other wards, and 67.8% were married.

Moreover, 20% of the subjects were in their internship course, 7.8% had working contracts with the hospital, 35.6% were official staff and others had specific contracts. Also, 7.8% of the subjects were head nurses, and 90% were regular staff. Among the studied subjects, 34.4% were employed at the CCU, 46.7% were engaged at the ICU, 8.9% worked at

the dialysis unit, and 10% were engaged at the angiography section of the hospital. In addition, 37.8% of the nurses were within the age range of 36-45 years, and 84.4% received a monthly salary of less than 1.5 million Toman.

In this study, 24.4% of the nurses had clinical experience of less than 5 years, and 35.6% had professional experience of 5-10 years; these two groups accounted for the largest proportion of our sample size. On the other hand, 25.6% of the subjects had clinical experience of 10-15 years, and 14.4% had over 15 years of work experience. Minimum age of the participants was 23 years, and the maximum age was 54 years. The highest income among the studied nurses was 2.5 million Toman per month.

Among the investigated variables in this study, including age, work experience and working hours, only age and experience had significant correlations with the rate of organizational commitment. Results of Pearson's correlation coefficient were non-parallel for age ( $r = -0.327$ ,  $P = 0.006$ ) and work experience of the subjects ( $P = 0.002$ ), and a significant correlation was observed between these two variables. This was due to the use of linear correlation analysis only for work experience.

According to the results of logistic (Table 1) with every one year of work experience, the rate of organizational commitment reduced by 0.027 (out of 7), which is equivalent to 0.38% ( $\beta = -0.327$ ,  $P = 0.002$ ). On the other hand, the correlation between the employment status of the subjects was not considered significant; however, changes in the employment status of official and non-official

**Table 1.** Correlations between Variables of Organizational Commitment

Model	Standard Error	Non-standard Correlation	Standard Correlation	t	P-value
		Standard Error	$\beta$		
1	(Constant)	0.428		10.833	0.0001
	Work Experience	0.011	0.265	-2.026	0.046
	Salary	0.0001	-0.121	-0.981	0.329
	Working Hours	0.002	-0.001	-0.013	0.990
2	(Constant)	0.246		-18.830	0.0001
	Work Experience	0.01	-0.259	-2.129	0.036
	Salary	0.0001	-0.121	-0.992	0.324
3	(Constant)	0.099		44.420	0.0001
	Work Experience	0.008	-0.327	-3.243	0.002

nurses were considered significant. Additionally, the correlation between employment at corporate sectors and rate of organizational commitment was significant, while the lowest rate of commitment was observed among the staff of angiography section ( $P=0.017$ ).

In this study, a significant correlation was observed between direction and the commitment of the nurses, and nurses who followed authority direction had higher organizational commitment compared to others ( $P=0.003$ ). Furthermore, a significant correlation was found between management experience and nurse commitment, and rate of organizational commitment was higher in the absence of managerial experience ( $P=0.033$ ). Finally, there was a significant correlation between work shifts, and the rate of commitment was higher in rotating work shifts among nurses ( $P\leq 0.0001$ ).

## Discussion

According to the results of this study, there is a significant correlation between organizational commitment and work experience; correspondingly, highly experienced nurses were observed to have more commitment compared to other nurses. In the present study, 94% of the subjects had a bachelor's degree and an average level of organizational commitment to their job (20). On the other hand, 3% of the nurses had bachelor's degrees with an average commitment rate of 2.42, which was lower than the total average of the present study (21-22).

According to our findings, nurses with master's degree had lower organizational commitment, while previous studies have not reported any correlations between these two variables. This could be due to the lack of proportionality between the salary and the education level of nurses (23). In one study, Yaghubi et al. (2008) reported no significant correlation between the level of education and rate of organizational commitment among nurses. maybe this is due to a lack of suitable job and had been placed in the right (20).

In the current study, no correlations were observed between gender and rate of organizational commitment, while in another study, Abili et al.

reported a significant relationship between gender and organizational commitment among nurses (24). In general, the average rate of commitment and its relation to gender has been reported to be below standard between male and female nurses (22).

In the present study, a significant correlation was observed between organizational commitment and the assigned units of the nurses. Similarly, the results obtained by another study conducted in Jordan were indicative a significant relationship between organizational commitment and job satisfaction among nurses (25).

According to the findings of the present study, there was a significant relationship between age and organizational commitment. As such, nurses over 40 years of age were found to have higher commitment compared to others. In general, there was no significant relationship (22). It has a significant relationship between age and organizational commitment (23). Furthermore, factors such as employment status, responsibility and experience contributed to the improvement of organizational commitment (26). In the present study, younger nurses were observed to have remarkable commitment as an incentive for making progress in their career. In contrast to our study, Yaghubi et al. did not elaborate on the relationship between age and organizational commitment (20).

In the current study, no significant correlations were found between organizational commitment and factors such as age, gender, education level and work experience of the subjects (27). Regarding the rate of organizational commitment, turnover intents accounted for the lowest score (20.3). According to our findings, organizational commitment and nurse burnout are among the major contributing factors for turnover intention, and the factors associated with job satisfaction could multiply the impact of turnover intent among nurses (29).

Job satisfaction and organizational commitment are considered as the significant determinants of turnover rates among nurses. As such, we observed a significant correlation between the rate of organizational commitment and turnover intents. Therefore, turnover intentions should be taken

into account in young nurses with low job security, and medical organizations are required to provide proper facilities as to motivate and increase the commitment of these professionals to the health care organization (14).

Organizational commitment is a legal obligation, and evidence suggests that significant commitment to job performance and legal obligation of nurses are the most important factors in increasing commitment (25). Highest rates of organizational commitment have been reported among nurses with work experience of 6-10 years, which is mainly due to the consolidated position of these individuals, as well as the prospect for occupying managerial positions in the future. Furthermore, nurses with work experience of more than 15 years tend to demonstrate higher commitment to their job (22-30-31).

## Conclusion

In conclusion, employment of individuals with high qualifications in the right positions could remarkably enhance organizational commitment among different medical staff. Therefore, supervisors and managers need to create facilities and encourage the medical staff in various aspects to increase their commitment and motivation. The findings of the current study could be applied to other issues, such as motivation and negligence among nurses, in the evaluation of organizational commitment.

## Conflicts of interest

The authors declare that they had no competing interests.

## Author's contributions

Kaveh Jafari and Tahereh Afshin have contributed to the designing, writing, revising and approving the final manuscript. Saeed jafari have performed data collection. Saeed jafari was involved in the study conception, design and material support. Maryam Barzegar was involved in the critical revisions for important intellectual content and review of content.

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