**Abstract**

**Background and Aims:** Moral courage distinguishes real moralists from hypocrites and indicates the commitment of nurses to their patients. Organizational commitment can also influence this commitment. Therefore, the present study aimed to investigate the correlation between moral courage and organizational commitment of operating room nurses working in the teaching hospitals of Arak University of Medical Sciences in 2019.

**Materials and Methods:** This cross-sectional correlational study was conducted on 136 operating room nurses who were selected using the convenience sampling method. The required data were collected through demographic information form, the organizational commitment questionnaire of Allen and Myer, and the professional moral courage scale by Sekerka et al. The collected data were analyzed in SPSS software (version 21) using descriptive and analytical statistical tests.

**Results:** The mean scores of moral courage and organizational commitment of operating room nurses were 62.5±6.5 and 101.86±13.7, respectively. Regarding moral courage and organizational commitment, the highest scores were observed in the aspects of moral agent and continuance commitment, respectively. Moreover, moral courage did not have a statistically significant relationship with organizational commitment (P>0.05). The moral courage and organizational commitment of the participants differed significantly in terms of their type of employment (P<0.05) and age (P<0.05), respectively.

**Conclusion:** Given the high mean score of moral courage and organizational commitment in operating room nurses, it can be said that nurses tend to show moral behaviors. On the other hand, the low score of the endurance of threat indicates that operating room nurses do not receive the necessary support from the organization for their courageous behavior. Therefore, the support of senior managers is essential for the occurrence of such behaviors.

Key word:Nursing Ethics, Moral Obligations , Efficiency Organizational, Operationg room Nursing, Courage

**Introduction**

Employees are the backbone of any organization and hospitals are no exception. The nurses play a very important role in the improvement of hospital productivity (1). The sensitivity of this role is even more clear in the operating room since the provision of quality care to unconscious patients requires a high level of commitment (2). Operating room nurses have delicate responsibilities as members of the treatment team. Respect for the basics and values, commitment to the organization, and adherence to professional and ethical principles are more essential, sensitive, and important in this profession (3). However, mostly due to their increasing responsibilities and patients number, social justice, access to healthcare services limitations and personal or organizational barriers prevent them from doing moral behavior easily and poses challenges to them regularly.

One of the factors influencing the decisions of nurses in the face of these challenges is moral courage. Moral courage motivates nurses to do the right thing and accept the consequences, even if it is difficult for them (4). Sekerka (2009) defines the five aspects of moral courage as 1) moral agency which is the desire to show moral behavior and have a strong will to do the right thing, 2) multiple values which refers to the ability to use multiple values ​​in the process of making a moral decision and adherence to one’s beliefs despite external desires or demands, 3) endurance of threat which means showing moral behavior despite real or imaginary dangers or threats, 4) going beyond compliance which indicates that a person should pay attention to the rules and their purpose, and also go beyond the limits of obedience to do the right, logical, or appropriate thing, 5) moral goal which means having the motivation to perform tasks that require making decisions that are accompanied by virtues such as forethought, honesty, and justice (5). Proper moral performance of operating room nurses and their commitment to the patients require considerable moral courage (6).

Organizational commitment means the strong desire of employees of an organization to survive in that organization in a way that the organization becomes part of their identity (7). According to McQuarrie (2004), the organizational commitment of employees depends on various factors, such as individual, occupational, organizational, and extra-organizational factors (8). Investigation of the influential factors on organizational commitment can help an organization improve its performance and attract capable employees. In this regard, moral courage is one of the individual factors that can affect organizational commitment.

Allen and Mayer proposed a three-part organizational commitment model. In this model, commitment determines the relationship between the individual and the organization and consists of three aspects, namely 1) affective commitment which means emotional attachment of the employees to the organization that gives them a sense of identity and keeps them involved, thereby employees with this type of commitment tend to stay in the organization, 2) continuance commitment that refers to the imagined cost of leaving the organization, and 3) normative commitment that indicates staying with the organization as the duty of someone who is a part of that organization (9). Organizational commitment has a great impact on the efficiency and productivity of an organization. People with higher organizational commitment show less absence, delay, and tendency to leave, have a better performance, and are more enthusiastic (10).

Given their professional status and role, operating room nurses face stressful situations, heavy workloads, and various ethical challenges. Therefore, in order to be able to successfully offer patient care and do the right thing in the face of challenges, they should have a high level of organizational commitment and moral courage. Since moral courage is a sign of commitment to the patient and organizational commitment may influence this commitment, and also due to lack of enough studies conducted on this subject, the present research aimed to determine the correlation between moral courage and organizational commitment of nurses in operating rooms affiliated with Arak University of Medical Sciences, Iran, in 2019.

**Materials and Methods**

This cross-sectional-correlational study was performed on 136 operating room nurses who were selected using the convenience sampling method based on the statistics in the operating rooms affiliated with Arak University of Medical Sciences. The inclusion criteria consisted of the educational level of high school and above as well as ≥6 months of work experience. The data collection tool was a three-part questionnaire, the first part of which examined the demographic information of the participants, such as age, gender, education, work experience, employment status, and marital status.

The second part of the questionnaire investigated moral courage by using the professional moral courage questionnaire designed by Sekerka et al. (2009). This questionnaire contains 15 phrases regarding the five dimensions of moral agency, multiple values, endurance of threats, going beyond compliance, and moral goals, each of which includes three separate questions (5). This questionnaire was scored based on a Likert scale from 1 (never) to 5 (always). Therefore, the total score of the questionnaire ranged from 15 to 75 and the moral courage score was the mean of the scores of all the phrases. In a study conducted by Mohammadi et al. the content validity index of this questionnaire was obtained at 81% and the Cronbach’s alpha was calculated at 0.85. Therefore, after obtaining permission from Mohammadi et al., the same version of the questionnaire was used in the present study (11). Cronbach's alpha was measured again in the present research using a sample of 20 people which was obtained at 0.76, 0.71, 0.86, 0.86, 0.72 regarding the aspects of moral agency, multiple values, endurance of threats, going beyond compliance, and moral goals, respectively. Furthermore, the total Cronbach's alpha coefficient was obtained at 3.91.

The third part of the questionnaire consisted of the standard questionnaire of organizational commitment designed by Allen and Myer (1990) and contains 24 items (9). The validity of this questionnaire was confirmed in a study performed by Dehghani et al. in 2015 (12) and the same version was used in the present study after acquiring the permission of the researcher. Moreover, the reliability of the questionnaire was confirmed using a sample of 20 nurses and the Cronbach's alpha coefficient was obtained at 89%. This questionnaire measures the organizational commitment and is scored based on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). This questionnaire consisted of 24 items which were divided into three aspects, namely continuance commitment (8 items), emotional commitment (8 items), and normative commitment (8 items) (13).

The required permissions for the conduction of the research were obtained from the Research Deputy and Arak University of Medical Sciences and hospitals (IR.ARAKMU.REC.1398.092). The ethical considerations were respected since the purpose of the study was explained to all the participants and they were assured that their information would be kept confidential. Therefore, the published data were kept confidential and in compliance with publication ethics. The collection of data from all the hospitals lasted for 30 days. The collected data were analyzed in SPSS software (version 21) using descriptive statistical tests, namely frequency, frequency percentage, mean, standard deviation, Pearson correlation coefficient, one-way analysis of variance, and independent t-test.

**Results**

The mean values of the age of the nurses and their work experience were within 30-40 and 8-14 years, respectively. The minimum and maximum ages of the participants were 20 and 50 years, respectively. Furthermore, the minimum and maximum years of the work experience of the participants were 1 and 30 years, respectively. In total, 136 nurses participated in this study, 87.5% of whom were female. Moreover, 68.4% of them were married, while 31.6 were single. The mean score of the moral courage in operating room nurses was 62.5±6.5 which is considered a high level. Furthermore, the mean score of the organizational commitment was 101.86±13.7 which is considered high as well.

There was a significant relationship between the mean score of the aspects of moral courage and the type of employment (P<0.05), so that the mean scores of the aspects of the endurance of threat, going beyond compliance, and moral goals were the lowest and highest in the contractual employment and formal employment groups, respectively. In addition, the scores of different age groups regarding the affective aspect of the organizational commitment had a significant difference with each other (P<0.05). The most and least scores of affective commitment were observed in the age ranges of 20-30 and 40-50 years, respectively. Table 1 shows a summary of the demographic information of the participants and the mean score of moral courage and organizational commitment.

Among the various aspects of moral courage, the highest and lowest mean scores were observed in moral agency (13.78±1.6) and endurance of threat (11.3±1.8). Furthermore, regarding organizational commitment, the highest and lowest mean scores were perceived in continuance commitment (36.2±8.01) and affective aspects (31.5±5.34), respectively. Table 2 shows the collected data on the aspects of moral courage and organizational commitment. There was no significant relationship between the moral courage and organizational commitment of operating room nurses (P>0.05). Moreover, no significant relationship was detected between the various aspects of moral courage and those of organizational commitment (P>0.05). The correlation coefficient of the relationship between the aspects of moral courage and those of organizational commitment of operating room nurses is shown in Table 3.

Table 1. Mean scores of moral courage and organizational commitment of participants according to their demographic characteristics

Table 2. Mean score of aspects and total score of moral courage and organizational commitment of operating room nurses

Table 3. Correlation coefficient of the relationship between the aspects of moral courage and those of organizational commitment in operating room nurses

**Discussion**

In the present study, the mean score of moral courage in the operating room nurses was high. This finding is consistent with the results of previous studies conducted in Iran (14). However, the obtained score of moral courage was low in a study performed by Day. This inconsistency could be due to differences in work environments, moral climate, organizational culture, support of managers and organizations, fear of rejection, as well as improvements of the moral courage in nurses over time (15). Therefore, it seems useful to conduct further studies on the correlation between organizational commitment and other organizational and ethical concepts and variables.

Regarding moral courage, the highest and lowest mean scores were observed in moral agency and endurance of threat, respectively. In previous studies (16, 17) on moral courage, the lowest mean score was observed in the endurance of threat, which is consistent with the results of the present study. Low endurance of threat is of great importance since the organizational factors and performance of the people working in operating rooms can have a great impact on the behavior of nurses and pose ethical challenges and dilemmas to them. Operating room nurses see themselves as moral agents and tend to show moral behaviors that are associated with virtues, such as forethought, honesty, and justice. However, the pressure and fear of moral challenges reduce their endurance of threats. The low score of this aspect could indicate that nurses do not feel supported by the organization for their courageous behavior.

The mean score of organizational commitment in operating room nurses was high which was consistent with the results of the studies performed by Azari et al. (18) and Khosravani et al. (19) in Amol, Iran. However, according to the findings of the majority of previous studies (20-24), the organizational commitment of nurses was moderate. This inconsistency could be due to a variety of factors, such as differences in working conditions, work environments, organizational rules and regulations, and the level of awareness of nursing managers regarding the ways to improve organizational commitment. Moreover, the self-reporting nature of questionnaires which made the study results dependent on the understanding of nurses of the concepts of moral courage and organizational commitment is one of the limitations that must be considered. Further studies on this topic can facilitate decision-making on the factors affecting organizational commitment in nurses.

The highest and lowest mean scores of organizational commitment in operating room nurses were observed in the continuance and affective commitment, respectively. Based on the findings of the study performed by Khosravani et al., the highest mean score was observed in the aspect of affective commitment which is not consistent with the results of the present study (19). The finding of the present research could be due to the desire of nurses to remain a member of the organization regarding their awareness of the cost of leaving it since they need their job and if they leave it, they will lose everything. Low mean score of affective commitment indicates their lower attachment to the organization which means that they are only motivated to work in that organization since they do not have better job opportunities.

In line with the findings of the present study, the results of another study which was performed in Iran (2015) indicated that there was no significant correlation between moral courage and organizational commitment in operating room nurses (25). However, according to the results of another study conducted by Mokhtaran (2015) in Iran, courage, as one of the aspects of the performance of managers, has the most positive and significant effect on the organizational commitment of the employees (26). The organizational commitment of the employees and their courage can play a significant role in creating an open atmosphere in which the voice of the employees is heard so that they can easily offer their suggestions to the organization. Therefore, it is necessary to examine the relationship between these two variables (i.e., moral courage and organizational commitment) with stronger methodologies that may have been overlooked by previous researchers.

According to the results, moral courage had a significant relationship with only one of the demographic characteristics which is the type of employment. Moreover, people who are formally employed show greater moral courage in terms of going beyond compliance, moral goals, and endurance of threats, compared to the contractually employed group. This finding was consistent with that of the studies performed by Aultman and Marry (11). According to Baringher, some nurses show moral courage despite their young age, low work experience, and type of employment; however, generally, older age and formal employment increase job security, decisive behaviors, and moral courage in nurses. (27) The findings of the present study can be carefully generalized, while it is necessary to conduct more detailed studies.

**Conclusion**

Given the high mean score of moral courage and organizational commitment in operating room nurses, it can be concluded that they tend to show ethical behaviors. On the other hand, the low score of the endurance of threat indicates that the operating room nurses working in the operating room do not feel the necessary support from the organization for their courageous behavior. Therefore, the support of senior managers is essential in this regard. Despite evidence of a correlation between moral courage and organizational commitment, no significant relationship was found in this study. It seems that conducting studies on a larger scale, which do not have the limitations of the present study, can increase the generalizability of the findings. The self-reporting nature of the tools is the most important limitation of this study, which should be considered.

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