Journal of Multidisciplinary Care (JMDC)
doi: 10.34172/jmdc.1230 2023;12(3):111-116 http://jmdc.skums.ac.ir

Original Article

The effect of assertiveness-based empowerment on professional commitment and moral courage of nurses working in Shahrekord educational hospitals

Azadeh Nouroozi[1], Shahram Etemadifar[2], Fatemeh Deris[3], Shirmohammad Davoodvand[2*]

[1]Student Research Committee, Shahrekord University of Medical Sciences, Shahrekord, Iran
[2]Department of Adults and the Elderly, Community-Oriented Nursing Midwifery Research Center, Nursing and Midwifery School Shahrekord University of Medical Sciences, Shahrekord, Iran
[3]Department of Epidemiology and Biostatistics, School of Health, Shahrekord University of Medical Sciences, Shahrekord, Iran

Abstract

Background and aims: Professional commitment and moral courage affect the quality of nursing care. Assertiveness is a necessary communication skill for nurses. The studies have less focused on the relationship between the mentioned variables. Therefore, this study examined the impact of assertiveness-based empowerment on professional commitment and moral courage.

Methods: This quasi-experimental study was conducted on 70 nurses of Shahrekord educational hospitals who entered the study via available sampling and random allocation in intervention and control groups in 2021. Then, the assertiveness-based program was implemented in six 2-hour sessions for the intervention group. In both groups, data were collected before, immediately, and three months after the intervention using the Nurses' Professional Commitment Standard questionnaire (NPCS) and Sekerka's moral courage. The data was analyzed using SPSS software version 18. One sample t-test, chi-square, and repeated measurements analysis were used.

Results: Before the study, neither group showed significant differences in demographic data, professional commitment, and moral courage ($P>0.05$). However, this difference was significant immediately after the intervention and three months later ($P<0.001$).

Conclusion: The empowerment program based on assertiveness improved nurses' professional commitment and moral courage. Therefore, it is appropriate to use these moral virtues in the professional training of nurses to provide high-quality care to patients.

Keywords: Nurse, Assertiveness, Professional commitment, Moral courage, Empowerment

***Corresponding Author:**
Shirmohammad Davoodvand,
Email: shdavodvand@gmail.com

Received: August 21, 2023
Accepted: September 9, 2023
ePublished: September 29, 2023

Introduction

More than 19 million nurses are worldwide, constituting about 70% of the healthcare provider system (1). Nursing literature introduces nursing (C6), representing caring, compassion, competence, communication, courage, and commitment (2). Commitment to nursing is called professional commitment (3), which is related to nursing and includes three dimensions: emotional, continuous, and normative commitment (4). Nursing decreases nursing turnover and leaves the profession (5). The reduction of professional commitment in nurses can reduce the quality of caring, and enhancing it can benefit both the individual and their organization (6,7). Some studies, such as Lu et al. 2005 reported it at a moderate level (8), and Shali et al reported it as (86.36 ± 8.61), which is at a moderate level (9). indicate the need to strengthen the level of professional commitment of nurses.

On the other hand, nursing is replete with many physical, mental, and psychological tensions that nurses must deal with (10). Lachman believes that nurses need moral courage to do this. In the form of the mnemonic (Courage, Obligation to honor, Danger management and Expression and action (CODE)), she reminded nurses of the components of moral courage: courage, professional commitment, risk management, and the use of experience in practice (11). However, Karampourian et al, using the moral courage questionnaire of Sekerka, reported the moral courage score of Iranian nurses as (36.92 ± 2.46) that needed promotion (12).

In 2016, the World Health Organization (WHO) emphasized strengthening nurses as the front line of health care (13). Lack of appropriate professional communication is considered a weakness in nursing that affects moral courage, professional commitment, and quality of care. Loose assertiveness is emphasized as a reason for this situation. Then, assertiveness, firstly trained by Salter in 1991, should be strengthened. Salter emphasized expressing feelings, expressing opposing opinions, accepting and praising others, using the power of repartee, and using the pronoun "I" (14).

Assertiveness contributes to individual empowerment and enables the nurse to defend his and others' rights, especially the patient (15). Lyndon stated that it can improve professional relationships in clinical settings and reduce errors (16), and Vivar (2006) mentioned that it can reduce conflict in nursing (17). Also, Trapani et al said that nurses without assertiveness have difficulties making ethical decisions, and a nurse who communicates effectively defends her rights and those of others, which is an example of moral courage (18). Although several studies have emphasized the use of assertive behaviors in the clinical setting and support self-expression and bravery (14,19,20), McCarten and Hargie's (21), like studies conducted in Iran found that nurses are generally less assertive (19,22,23).

Ethical issues affect each other through communication (2). A nurse who communicates effectively defends her rights and that of others, which is an example of moral courage (18). On the other hand, moral courage, professional commitment, and decisiveness have commonalities in terms of definition. Therefore, they probably have a reciprocal effect (3,10,14).

Nurses need professional commitment and moral courage in the stressful clinical setting. Moreover, considering the vital communicative role of nurses in clinical settings and the impact of assertiveness on professional communication, ethics, and professional character, as well as studies suggesting the need to strengthen the level of assertiveness among nurses, it is necessary to study it. Since there have been no previous studies on the effect of the assertiveness program on the moral courage and professional commitment of nurses, this study was conducted to determine the effect of the empowerment program based on assertiveness on the professional commitment and moral courage of nurses working in educational hospitals in Shahrekord.

Materials and Methods

The present study was a quasi-experimental study approved by the Research and Technology Deputy of Shahrekord University of Medical Sciences in 2021. The sample consisted of 70 nurses in the medical and surgical wards of educational Hospitals in Shahrekord. Based on the following formula, considering type one (α) error to be 0.05 and the power 80%, to estimate sample size. In this study, based on a study done by Nemati et al (24). on Evaluating the effect of assertive training programs on assertiveness communication and self-concept of nurses, the mean and standard deviation of 7.4 ± 9.5 for the intervention group and 7.4 ± 1.6 for the control group were used considering for self-concept as the key variable, and a 10% attrition probability the sample size of 35 people in each group was calculated.

$$n = \left(\frac{Z1 - \alpha/2 + Z1 - \beta}{d} \right)^2$$

$$d = \frac{\mu 1 - \mu 2}{\sigma\sqrt{2}}$$

$$Z1\text{-}\alpha/2 = 1.96$$

$$Z1 - \beta = 0.84$$

$$d = 0.5$$

$$n = 35$$

Inclusion criteria were those with a bachelor's degree or higher in nursing, at least six months of clinical experience, consent to participate in the study, and not participating in the same program earlier. People were excluded from the study in case of unwillingness to participate in the study and imperfect filling of the questionnaires. After sampling, one hospital was assigned as the intervention group and the other as the control group using a coin toss.

The assertiveness-based intervention was held as a workshop for the intervention group from April to May 2022. The educational content was collected using the related literature under the guidance of research supervisors and a psychiatric nurse. Then, it was given to 10 nursing and midwifery school faculty members for review. Two weeks later, six people gave their comments, which applied. The content was returned to them for final review. After the final approval, the content was presented to research participants in six 2-hour sessions in the hospital classes (Table 1). A master's student in nursing who was trained assertion, a psychiatric nurse, and a Ph.D. in nursing education conducted the workshop. Some parts of the content were down virtually in the form of PowerPoint slides or audio files via messenger software presented for follow. The control group just received routine care.

Before the intervention, three questionnaires were completed by both groups:

Table 1. Schedule of educational intervention

Sessions	Title	Duration	Instructor	Teaching method	Educational technology
1	necessity of assertiveness	2 hours	- PhD in Nursing - MSC student in nursing - Psychiatric nurse	- Lecture - Ask and answer - Group discussion - Self-assessment - Self-reflection	- Audio file - PPT presentation - Educational booklet
2	nurse roles and professional relationships and values				
3	communication patterns				
4	Anger and stress management				
5	Criticism and being critical				
6	- saying "no" - self-confidence				

1. Demographic questionnaire that contains questions about (age, gender, marital status, job position, education, work experience in the relevant department, and employment status) which was designed based on similar studies and was approved by the academic members of the Faculty of Nursing and Midwifery.
2. The Nurses' Professional Commitment Standard (NPCS) questionnaire was designed by Lachman and Aryana in 1986 (25). It consists of 26 items in four dimensions: understanding of nursing (6 questions), satisfaction with nursing (4 questions), involvement with the nursing profession (6 questions), and dedication to the nursing profession (10 questions). The questionnaire is scored on a five-part Likert scale (completely disagree, disagree, have no opinion, agree, and completely agree). The total score of the questionnaire is between 26 and 130, and a higher score means a higher professional commitment to the nurse. This questionnaire was translated into Farsi and approved for its psychometric characteristics by Jolaee et al. The tool validity is approved through content validity, and the reliability of the tool has been proven by determining the internal correlation and the coefficient of 0.74 (26).
3. The professional moral courage questionnaire was designed by Sekerka et al in 2009 (27). This questionnaire contains 15 statements in five dimensions, including multiple values, tolerance of threats, moral agency, movement beyond compliance, and moral goals. Each dimension includes three questions. Each statement is given a score of one to seven on a seven-part Likert scale from never true to always true. The range of scores of the items in each dimension (minimum three and maximum 21) and the total score is a minimum of 15 and maximum 105. Based on this questionnaire, the moral courage of people is divided into three levels: scores 21-49 mean weak, scores 50-77 mean average, and scores 78-105 mean desirable. The validity and reliability of its Persian version in Iran were also proved for the first time in 2014 by Mohammadi et al. The tool validity is approved through content validity, and Cronbach's alpha coefficient, equal to 0.85, indicates its reliability (28).

Immediately and three months after the intervention, the NPCS scale and professional moral courage questionnaire were refilled by participants, and SPSS version 18, including the independent t-test, way ANOVA, Fisher's exact test, and chi-square, repeated measurement analysis.

Results

Two groups are equal in terms of demographic variables before the intervention ($P>0.05$), except for the employment status ($P<0.001$; Table 2).

There was no significant difference between the two groups in the total score of nursing professional commitment before the intervention ($P>0.05$). The average score of the total nursing professional commitment immediately ($P<0.001$) and three months after the intervention ($P<0.001$) is significantly higher than before the intervention in the control group. The average score of the total professional commitment of nurses in the intervention group is significantly higher than the control group after the intervention, too ($P<0.001$; Table 3).

On the other hand, analysis of the repeated measurement variance shows that the total score of moral courage before the intervention did not significantly differ between the two groups ($P>0.05$). However, at the time immediately ($P<0.001$) and three months after the intervention ($P<0.001$), the average score of moral courage in the intervention group was significantly higher than the control group (Table 4).

Table 2. Demographic characteristics of the control and intervention groups before the intervention

Variables		Groups		*P* value
		Intervention (n=35)	Control (n=35)	
Age (y), Mean±SD		33.29±7.70	31.40±4.81	0.224[a]
History of attendance in the said department (month), Mean±SD		75.94±66.43	73.03±39.60	0.824[a]
Service history (month), Mean±SD		123.43±107.77	120.17±58.16	0.876[a]
Gender, No. (%)	Male	33 (94.3)	35 (100)	0.493[b]
	Female	2 (5.7)	0 (0)	
Employment status, No. (%)	Projective	11 (31.4)	1 (2.9)	>0.001[b]
	Contractual	1 (2.9)	14 (40)	
	Promissory	12 (34.3)	12 (34.3)	
	Official	11 (31.4)	8 (22.9)	
Marital status, No. (%)	Single	27 (77.1)	27 (77.1)	1.000[c]
	Married	8 (22.9)	8 (22.9)	
Shift work, No. (%)	Fixed	9 (25.7)	4 (11.4)	0.124[c]
	Rotating	26 (74.3)	31 (86.6)	

[a] Based on independent *t* test; [b] Fisher's exact test; [c] Chi-square test.

Table 3. Comparison of the professional commitment and its subscales in the study groups*

Variables	Time	Control Mean ± SD	Intervention Mean ± SD	*P* value[a]	*P* value	
					Time[b]	Time*groups[c]
Understanding of nursing	Baseline	15.8 ± 2.03	14.86 ± 2.98	0.25	<0.001	<0.001
	Post-test	15.54 ± 2.79	20.31 ± 1.6	<0.001		
	Follow-up	16.20 ± 2.89	25.20 ± 2.27	<0.001		
Satisfaction with nursing	Baseline	9.36 ± 2.56	8.29 ± 4.26	0.63	<0.001	<0.001
	Post-test	10.03 ± 3.02	16.34 ± 2.17	<0.001		
	Follow-up	9.37 ± 3.52	17.06 ± 1.43	<0.001		
Involvement with the nursing profession	Baseline	12.69 ± 4.21	12.31 ± 7.22	0.86	<0.001	<0.001
	Post-test	12.77 ± 4.34	24.57 ± 3.93	<0.001		
	Follow-up	13.60 ± 5.31	28.03 ± 1.93	<0.001		
Sacrifice for the nursing profession	Baseline	24.14 ± 5.81	22.46 ± 8.41	0.19	<0.001	<0.001
	Post-test	24.14 ± 5.53	37.11 ± 4.02	<0.001		
	Follow-up	24.43 ± 7.22	42.49 ± 2.09	<0.001		
Professional commitment Total score	Baseline	62.26 ± 12.67	57.91 ± 21.33	0.79	<0.001	<0.001
	Post-test	62.49 ± 12.29	98.34 ± 9.47	<0.001		
	Follow-up	63.60 ± 17.21	112.77 ± 4.24	<0.001		

[a] Independent t-test; [b] Effect of time by repeated measure analysis; [c] Effect of time and group.
*Analysis of variance of repeated measurement.

Table 4. Comparison of the moral courage and its subscales in the study groups*

Variables	Time	Control Mean ± SD	Intervention Mean ± SD	*P* value[a]	*P* value	
					Time[b]	Time*groups[c]
Moral agent	Baseline	1.82 ± 12.17	3.88 ± 12.03	0.98	>0.001	>0.001
	Post-test	1.76 ± 12.31	3.21 ± 18.63	>0.001		
	Follow-up	1.64 ± 12.31	0.74 ± 20.60	>0.001		
Multiple values	Baseline	3.72 ± 12.60	3.14 ± 12.31	0.73	>0.001	>0.001
	Post-test	4.08 ± 18.37	2.78 ± 12.14	>0.001		
	Follow-up	0.98 ± 19.97	2.46 ± 12.03	>0.001		
Threat tolerance	Baseline	3.99 ± 12.37	2.73 ± 12.89	0.29	>0.001	>0.001
	Post-test	3.71 ± 18.63	2.58 ± 12.43	>0.001		
	Follow-up	2.35 ± 19.31	2.72 ± 12.29	>0.001		
Go beyond the power	Baseline	4.34 ± 12.97	2.98 ± 12.74	0.5	>0.001	>0.001
	Post-test	3.23 ± 18.46	2.19 ± 12.17	>0.001		
	Follow-up	1.12 ± 20.09	3.09 ± 12.97	>0.001		
Moral purpose	Baseline	4.11 ± 13.20	2.96 ± 12.57	0.15	>0.001	>0.001
	Post-test	3.31 ± 18.74	2.22 ± 11.97	>0.001		
	Follow-up	1.30 ± 19.89	2.93 ± 12.74	>0.001		
Moral courage total score	Baseline	18.66 ± 63.17	11.41 ± 62.69	0.56	>0.001	>0.001
	Post-test	16.49 ± 92.83	8.76 ± 61.03	>0.001		
	Follow-up	4.26 ± 99.86	10.71 ± 62.34	>0.001		

[a] Independent t-test; [b] Effect of time by repeated measure analysis; [c] Effect of time and group.
*Analysis of variance of repeated measurement.

Discussion

This study investigated the impact of assertiveness-based intervention on nurses' moral courage and professional commitment. The results show that nurses' professional commitment level has increased because of the intervention. These changes repeated three months after the intervention, which indicates the effectiveness of the assertive behavior-training program in increasing the professional commitment of nurses in the intervention group.

Considering the search of authors, no study examined the effect of assertiveness on moral courage and professional commitment. However, Wang and Yu in 2021 stated that one-week structured training, including expert lectures, visiting a hospital, an alumni salon, and submitting a reflection report, can enhance the

professional commitment of nursing bachelor students (29). Since the intervention based on assertiveness was also a structured training, and there are some similarities between the two programs (expert lectures and reflection reports), their study supports this study's results.

Chiang et al also stated that the spiritual health of nurses can increase their professional commitment (30). Moral virtues are always pleasing and spread goodness. Therefore, assertiveness as a moral virtue can affect professional commitment, too.

Contrary to the results of the present study, the results of the research conducted by Kang and Lee to determine the effect of bravery skill training on effective communication factors and factors related to leaving the nursing profession show that assertiveness skill training does not affect improving interpersonal relationships (31). The possible reason for this is that interpersonal communication strongly depends on cultural background. In non-Iranian societies, especially in the Far East, more attention is paid to frankness.

Based on the results, the lowest score is assigned to the item of job satisfaction, and the highest score is assigned to the item of dedication, which means ethical matters are more important in nurses.

For moral courage, control, and intervention groups were not significantly different before the intervention. However, immediately after the intervention and three months later, the moral courage score was reported to be higher in the intervention group, which means the intervention positively affected nurses' moral courage.

The results of Hoseini and colleagues' study in 2019 also show that the moral motivation program can increase the moral courage of nurses, and to maintain this effect, it is necessary to continue such interventions (32). We used the assertiveness-based program to motivate the people to state professional opinions. Then, Hoseini and colleagues' study supports the results of the present study.

In 2021, Pajakoski et al emphasized that professional communication and interdisciplinary collaborations are useful for strengthening the moral courage of nurses (33). Nursing is a profession with multidisciplinary communication. So, the study of Pajakoski and colleagues is in line with the results of the present study.

Assertiveness is a virtue that is desirable at any time and place, but in some cultures, frankness is not customary. Furthermore, some individuals misunderstand cultural or religious teachings and may mistake frankness as impolite behavior. Assertiveness is an actual need for such a people. This study was conducted in a short period due to the limitation of the study period of the master's student. Since the moral characteristics need a long time to change, conducting the study in a longer time may provide more generalizable results. Although personal protection protocols have been observed in this study, repeating the study in more stable health conditions and a complete face-to-face approach would lead to more accurate results.

Conclusion

This study showed that assertive behavior training can increase nurses' moral courage and professional commitment. The findings of this research can pave the way for useful efforts in teaching professional communication and better planning in nursing to decrease job distress, manage moral dilemmas, increase nursing satisfaction, promote nurses' health, and improve the quality of care.

Acknowledgments

This article was derived from a research project approved by the Research and Technology Deputy of the Shahrekord University of Medical Sciences (approval no. 3372). Hereby, the researchers gratefully thank the patients who participated in this study.

Authors' Contribution

Conceptualization: Shirmohammad Davoodvand, Azadeh Nouroozi.
Data curation: Shirmohammad Davoodvand, Azadeh Nouroozi.
Formal analysis: Fatemeh Deris.
Investigation: Shirmohammad Davoodvand, Azadeh Nouroozi, Shahram Etemadifar.
Methodology: Shirmohammad Davoodvand and Fatemeh Deris.
Project administration: Shirmohammad Davoodvand
Software: All authors.
Supervision: Shirmohammad Davoodvand, Shahram Etemadifar
Visualization: All authors.
Writing–original draft: Azadeh Nouroozi.
Writing–review & editing: Shirmohammad Davoodvand, Shahram Etemadifar.

Competing Interests

The authors declare that there is no conflict of interest.

Ethical Approval

Ethical considerations in this study included obtaining permission from the Ethics Committee of Shahrekord University of medical sciences (Ethical IR.SKUMS.REC.1400.243) and obtaining written consent to participate in the study from the participants. during the intervention, health protocols were followed due to the spread of the COVID-19 disease.

Funding

Shahrekord University of Medical Sciences, Shahrekord, Iran.

References

1. Beogo I, Rojas BM, Gagnon MP, Liu CY. Psychometric evaluation of the French version of the Clinical Nursing Competence Questionnaire (CNCQ-22): a cross-sectional study in nursing education in Burkina Faso. Nurse Educ Today. 2016;45:173-8. doi: 10.1016/j.nedt.2016.08.007.
2. Monks J, Flynn M. Care, compassion and competence in critical care: a qualitative exploration of nurses' experience of family witnessed resuscitation. Intensive Crit Care Nurs. 2014;30(6):353-9. doi: 10.1016/j.iccn.2014.04.006.
3. Teng CI, Lotus Shyu YI, Chang HY. Moderating effects of professional commitment on hospital nurses in Taiwan. J Prof Nurs. 2007;23(1):47-54. doi: 10.1016/j.profnurs.2006.10.002.
4. Lee K, Carswell JJ, Allen NJ. A meta-analytic review of occupational commitment: relations with person- and work-related variables. J Appl Psychol. 2000;85(5):799-811. doi: 10.1037/0021-9010.85.5.799.
5. Ebadi A, Sadooghiasl A, Parvizy S. Moral courage of nurses and related factors. Iran J Nurs Res. 2020;15(2):24-34. [Persian].

6. Maheshwari SK, Gill KK. Relationship of assertiveness and self-esteem among nurses. Int J Health Sci Res. 2015;5(6):440-9.
7. Nogueras DJ. Occupational commitment, education, and experience as a predictor of intent to leave the nursing profession. Nurs Econ. 2006;24(2):86-93.
8. Lu H, While AE, Barriball KL. Job satisfaction among nurses: a literature review. Int J Nurs Stud. 2005;42(2):211-27. doi: 10.1016/j.ijnurstu.2004.09.003.
9. Shali M, Joolaee S, Hooshmand A, Haghani H, Masoumi H. The relationship between incidence of patient falls and nurses' professional commitment. J Hayat. 2016;22(1):27-37. [Persian].
10. Lachman VD. Moral courage: a virtue in need of development? Medsurg Nurs. 2007;16(2):131-3.
11. Lachman VD. Strategies necessary for moral courage. Online J Issues Nurs. 2010;15(3):1. doi: 10.3912/OJIN.Vol15No03Man03.
12. Karampourian A, Nasirizadeh R, Khatiban M, Khazaei S. Relationship between moral distress and moral courage in nurses working in selected hospitals of Hamadan University of Medical Sciences during the COVID-19 pandemic. Avicenna J Nurs Midwifery Care. 2023;31(1):18-28. doi: 10.32592/ajnmc.31.1.18.
13. World Health Organization (WHO). Global Strategic Directions for Strengthening Nursing and Midwifery 2016-2020. WHO; 2016.
14. Mohebi S, Sharifirad GH, Shahsiah M, Botlani S, Matlabi M, Rezaeian M. The effect of assertiveness training on student's academic anxiety. J Pak Med Assoc. 2012;62(3 Suppl 2):S37-41.
15. McCabe C, Timmins F. How nurse managers let down staff. Nurs Manage. 2006;13(3):30-5. doi: 10.7748/nm2006.06.13.3.30.c2054.
16. Lyndon A. Social and environmental conditions creating fluctuating agency for safety in two urban academic birth centers. J Obstet Gynecol Neonatal Nurs. 2008;37(1):13-23. doi: 10.1111/j.1552-6909.2007.00204.x.
17. Vivar CG. Putting conflict management into practice: a nursing case study. J Nurs Manag. 2006;14(3):201-6. doi: 10.1111/j.1365-2934.2006.00554.x.
18. Trapani J, Scholes J, Cassar M. Dual agency in critical care nursing: balancing responsibilities towards colleagues and patients. J Adv Nurs. 2016;72(10):2468-81. doi: 10.1111/jan.13008.
19. Baghani R, Keyghobadi F, Tabaraei Y. Factors affecting nursing and midwifery students' decisiveness in 2013. J Sabzevar Univ Med Sci. 2014;20(5):674-80. [Persian].
20. Deltsidou A. Undergraduate nursing students' level of assertiveness in Greece: a questionnaire survey. Nurse Educ Pract. 2009;9(5):322-30. doi: 10.1016/j.nepr.2008.08.002.
21. McCartan PJ, Hargie OD. Assertiveness and caring: are they compatible? J Clin Nurs. 2004;13(6):707-13. doi: 10.1111/j.1365-2702.2004.00964.x.
22. Seyedfatemi N, Moshirabadi Z, Borimnejad L, Haghani H. Relationship between problem solving and assertiveness skills among nursing students. J Hayat. 2013;19(3):70-81. [Persian].
23. Motahari M, Mazlom SR, Asgharipour N, Maghsoudi Poor Zaid Abadi S, Ghiassi Ajgan M. The effect of the assertiveness skill training on the surface of nurse's assertiveness in workplace. J Sabzevar Univ Med Sci. 2016;23(4):644-51. [Persian].
24. Nemati Z, Maghsoudi S, Mazlom SR, Kalatemolaei M. Evaluating effect of assertive training program on assertiveness communication and self-concept of nurses. J Sabzevar Univ Med Sci. 2022;29(2):243-54. [Persian].
25. Lachman R, Aranya N. Job attitudes and turnover intentions among professionals in different work settings. Organ Stud. 1986;7(3):279-93. doi: 10.1177/017084068600700305.
26. Jolaee S, Shali M, Hooshmand A, Haghani H. The relationship between incidence of medication errors and nurse's professional commitment. Med Ethics. 2014;8(28):101-19. [Persian].
27. Sekerka LE, Bagozzi RP, Charnigo R. Facing ethical challenges in the workplace: conceptualizing and measuring professional moral courage. J Bus Ethics. 2009;89(4):565-79. doi: 10.1007/s10551-008-0017-5.
28. Mohammadi S, Borhani F, Roshanzadeh M. Relationship between moral distress and moral courage in nurses. Iran J Med Ethics Hist Med. 2014;7(3):26-35. [Persian].
29. Wang L, Yu P. Impact of exemplar education program on the professional commitment of nursing students: a quasi-experimental study. Nurs Educ Today. 2021;107:105118. doi: 10.1016/j.nedt.2021.105118.
30. Chiang YC, Lee HC, Chu TL, Han CY, Hsiao YC. The impact of nurses' spiritual health on their attitudes toward spiritual care, professional commitment, and caring. Nurs Outlook. 2016;64(3):215-24. doi: 10.1016/j.outlook.2015.11.012.
31. Kang MJ, Lee H. [The effect of assertiveness training on communication related factors and personnel turnover rate among hospital nurses]. Taehan Kanho Hakhoe Chi. 2006;36(5):681-90. doi: 10.4040/jkan.2006.36.5.681. [Korean].
32. Hoseini M, Ebadi M, Farsi Z. The effect of ethical motivational program on nurses' moral courage in Mashhad's military hospitals. J Mil Med. 2022;21(4):410-7. [Persian].
33. Pajakoski E, Rannikko S, Leino-Kilpi H, Numminen O. Moral courage in nursing – an integrative literature review. Nurs Health Sci. 2021;23(3):570-85. doi: 10.1111/nhs.12805.

Cite this article as: Nouroozi A, Etemadifar S, Deris F, Davoodvand S. The effect of assertiveness-based empowerment on professional commitment and moral courage of nurses working in shahrekord educational hospitals. Journal of Multidisciplinary Care. 2023;12(3):111–116. doi: 10.34172/jmdc.1230