




RESEARCH ARTICLE

Open Access



Moral courage and psychological empowerment among nurses

Zahra Khoshmehr¹, Maasoumeh Barkhordari-Sharifabad^{1*} , Khadijeh Nasiriani²  and Hossein Fallahzadeh³ 

Abstract

Background: Moral courage is one of the fundamental values of nursing profession and a powerful method of coping with ethical problems. Psychological empowerment is a suitable method of enabling individuals to coping mental pressures of the work environment. This study determined the correlation between moral courage and psychological empowerment of nurses.

Methods: This was a descriptive cross-sectional study. A total of 180 nurses employed in different wards were selected randomly. Data were collected by Demographics Questionnaire, Sekerka's Moral Courage Scale, and Spreitzer's psychological empowerment Scale and analyzed with SPSS16 using descriptive and inferential statistics.

Findings: The results indicated that the mean score of moral courage was 21.11 ± 69.90 and the greatest amount of moral courage was in the dimension of "going beyond compliance". The mean score of "psychological empowerment" was 30.9 ± 73.58 and the greatest mean belonged to "competence". There was a positive significant correlation between "psychological empowerment" and "moral courage and its dimensions" ($P < 0.05$).

Conclusion: The findings suggested a correlation between moral courage and psychological empowerment. Thus, nurses' moral courage could be enhanced by reinforcing their psychological empowerment leading to increased patient satisfaction and quality care.

Keywords: Ethics, Moral courage, Moral action, Psychological empowerment, Nurse

Background

Morality is an indispensable part of human life and a subset of practical philosophy looking for the right and wrong and determining good and bad in a collection of behaviors under certain conditions [1]. The nursing profession is one of the sciences with abundant illustrative ethical aspects in the past, present, and future [2, 3]. Since distinguishing the good and bad is in the body of ethics, the moral competency of the nursing profession may be rendered as equal to professional competency [3].

Indeed, nurses face some moral problems in their daily work that need to be resolved [4, 5]. Identification of ethical problems requires moral sensitivity [6], and also an awareness of ethical principles [7]. Nonetheless, mere moral sensitivity and knowledge will not suffice. Nurses ought to possess moral courage to perform on the basis of what is considered ethically right provided personal values and criteria correspond to the accepted healthcare values [4].

When a person is not able to act according to the correct ethical performance, moral courage helps them to try their best to achieve their ultimate goal regardless of its consequences. To do so, they consider moral principles and perform a correct act that is not easy to do [8]. Some studies have demonstrated that moral courage is related to concepts concerning assessment of ethics under certain conditions like sensitivity to justice [9],

* Correspondence: barkhordary.m@gmail.com

¹Department of Nursing, School of Medical Sciences, Yazd Branch, Islamic Azad University, Shohadaye Gomnam Blvd., Safaiyeh, Yazd Postal code: 8916871967, Iran

Full list of author information is available at the end of the article



© The Author(s). 2020 **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated in a credit line to the data.

perception of control on one's emotions and performance such as emotional self-regulation [10], and self-efficacy [11]. Moral courage predisposes to performing ethical norms regardless of social costs [12], helping patients reduce symptoms of pain and agony, communicating effectively with patients and their families, and cooperating with physicians [13], inclination for recognizing others' sufferings and sensitivity to them, expression of sympathy and kindness, helping the needy, doing something to decrease others' pains and sufferings, and challenging the current situation [14].

Stress, anxiety, fear of being scolded, and rejection by colleagues and seclusion are some of the negative consequences that may be created by moral courage [15]. Moral courage helps nurses overcome many barriers like fear, thence enabling them to defend the patient effectively [16]. In their study, Day reported the rate of moral courage as low in healthcare settings and mentioned many factors such as lack of occupational certainty as barriers to nurses' inclination for brave behaviors [17].

On the other hand, courage is the token of a powerful nurse's good performance and quality care. Empowerment is a process completed by personal values and struggles and also by environmental factors [18]. Psychological empowerment is an appropriate solution for enabling individuals to cope with mental pressures and work stressors [19]. Studies have shown that psychological empowerment is correlated with professional satisfaction [20], exerting a predictive effect on emotional commitment [21]. The results of many studies have suggested that empowerment of personnel influences responsibility, productivity, and quality of care [22], diminishes costs, enhances organizational loyalty and confidence, and organizational entrepreneurship [23]. The findings of other studies also demonstrate that increased development and empowerment leads to reduced staff displacement, fatigue and work leave [24], promoted quality of nursing care [25], increased patient satisfaction [20], increased occupational satisfaction, and decreased turnover of nurses [26].

Observing professional ethics is an effective and powerful factor in nurses' development [27]. Ethic of care, that is one component of nursing performance, creates and promotes moral courage [7]. Although moral courage is rendered as an important element of nursing, little attention has been paid to it so that there are very few studies focusing on this topic. Hence, this study investigated the correlation between nurses' moral courage and psychological empowerment.

Methods

Design of the Study

This descriptive cross-sectional study was conducted in 2019. The study population consisted of all nurses

employed in Khatam-al-Anbia Hospital and Shahid Beheshti Hospital affiliated to Shahid Sadoughi University of Medical Sciences, Yazd, Iran. A total of 180 participants were selected randomly using sample volume formula with confidence interval of 95%, test power of 80% and the correlation coefficient of 0.18 according to the pilot study. The inclusion criteria were: holding at least a Bachelor of Science (BS) in nursing, at least 1 year of clinical nursing experience, and inclination for participation. The research instruments were distributed by the researcher in various work shifts and collected after completion.

Data collection instruments

Data were collected by Demographics Questionnaire, Sekerka's Moral Courage Scale, and Spreitzer's Psychological Empowerment Scale.

The Demographics Questionnaire included information on age, gender, employment status, literacy level, marital status, official position, and work experience.

The Moral Courage Scale was developed by Sekerka et al. [28]. This 15-item scale covers five aspects: moral agency, multiple values, endurance of threat, going beyond compliance, and moral goals. Each aspect includes 3 separate items. This instrument uses a 7-point Likert scale wherein each item receives 1–7 points (from never correct = 1 to always correct = 7). Thus, the score of each item may range from 3 to 21. The minimum and maximum total scores were 15 and 105, respectively. The mean score of items in each aspect and in the whole item was considered as the moral courage score [28]. The validity of Moral Courage Scale was reported as 81% in the study by Mohammadi et al. and its reliability was estimated to be 0.85 (Cronbach's α) using a sample volume of 30 nurses under study [29].

Spreitzer's Psychological Empowerment Scale was used to measure nurses' psychological empowerment [30]. This 15-item inventory uses a 5-point Likert scale (form completely disagree = 1 to completely agree = 5) to measure 5 aspects: meaningfulness, competence, self-determination, impact, and confidence so that 3 items are devoted to each aspect. The scores of this tool ranged from 15 to 75 and a higher score indicated higher perceived psychological empowerment [30]. Content and face validities were confirmed using a qualitative method by asking the opinions of 10 expert professors. The reliability of the instrument was reported as Cronbach's α = 0.84 [31].

Data analysis

The gleaned data were imported to SPSS16 and analyzed with descriptive statistics (frequency distribution, mean and standard deviation) and inferential statistics (independent t-test, ANOVA, and Pearson correlation coefficient). Normality of data distribution

was examined by Kolmogorov-Smirnov (KS) test ($P > 0.05$).

Results

All 180 questionnaires were returned and analyzed. The mean age of the participants was 33.55 ± 6.07 years with a mean work experience of 2.40 ± 1.51 years. Most participants were female (79.4%), were married (81.1%), held a BS in nursing (93.9%), formally employed (61.7%), and held the post of a nurse (96.7%) (Table 1).

The results revealed that nurses enjoy a high level of moral courage so that the greatest mean belonged to “going beyond compliance” and the least mean pertained to “multiple values”. Moreover, the findings demonstrated that the rate of nurses’ psychological empowerment was moderate so that the greatest mean belonged to “competence” and the smallest mean pertained to “confidence” (Table 2).

The findings indicated a positive significant correlation between “psychological empowerment” and “moral courage and its dimensions” ($P < 0.05$). Besides, there was a significant correlation between moral courage and all dimensions of psychological empowerment except for “confidence” ($P < 0.05$) (Table 3).

The results of Pearson Correlation Coefficient Test showed a significant correlation between age and moral courage ($r = 0.230, P = 0.002$) and between work experience and moral courage ($r = 0.181, P = 0.015$) so that moral courage increased with increasing age and work experience (Table 4).

The rate of moral courage and psychological empowerment was higher among the married, those with MSc degree, head nurses/supervisors, and formally employed personnel. Moral courage score was greater in males whereas psychological empowerment score was

Table 2 Mean and SD of moral courage and psychological empowerment and its dimensions

Variable	Mean	SD
Moral courage	90.69	11.21
Moral agency	18.21	2.51
Multiple value	17.72	2.68
Endurance of threat	17.97	2.86
Going beyond compliance	18.48	2.31
Moral goal	18.30	2.58
Psychological empowerment	58.73	9.30
Competence	13.32	1.72
Self-determination	12.85	1.59
Impact	11.60	2.38
Meaning	11.35	2.35
Confidence	9.60	4.83

higher in females, albeit, the difference was not statistically significant ($P > 0.05$) (Table 4).

Discussion

This study determined the correlation between nurses’ moral courage and psychological empowerment. The findings showed that the participating nurses had a high degree of moral courage. This is consistent with the results of the study by Mahdaviseresht et al. [8], that reported a high mean score of nurses’ moral courage (90.36 ± 10.56). The studies by Taraz et al. [32], and Moosavi et al. [33], also reported a high rate of moral courage among nurses. Nonetheless, the study by Mohammadi et al. [29], reported nurses’ moral courage at the moderate level. In Day’s study, the rate of this variable was low [17]. The diversity of results in different studies may be attributed to disparities in work environment, ethical atmosphere, organizational culture, organizational and managerial support, fear of social seclusion, collective thought, and lack of acceptance by the organization [34].

In the present study, the highest score of moral courage belonged to “going beyond compliance” and the lowest score pertained to “multiple values”. Some studies reported the greatest amount of moral courage in “moral agency” [8, 32, 34]. This is not consistent with our results. Yet, consistent with our findings, in the studies by Mahdaviseresht et al. [8], and Taraz et al. [32], the lowest score of this variable pertained to “multiple values”. Nonetheless, in the study by Aminizadeh et al. [34], the lowest score of moral courage belonged to “endurance of threat”.

The high score of “going beyond compliance” indicates that nurses do not merely consider laws and regulations; rather, they progress beyond their internal capacity and consider doing what is correct and ideal [28, 35], suggesting nurses’ responsibility for their profession and patients. The low score of “multiple values” indicates nurses’

Table 1 Sociodemographic characteristics of study participant

Variables	M (SD)	n (%)
Age	33.55 (6.07)	
Work Experience	2.40 (1.51)	
Gender		
Female		143 (79.4)
Male		37 (20.6)
Marital Status		
Single		34 (18.9)
Married		146 (81.1)
Level of Education		
Bachelor’s Degree		169 (93.9)
Master’s Degree		11 (6.1)
Employment status		
Formal		111 (61.7)
Compulsory service course		36 (20)
By contract		33 (18.3)
Formal position		
Nurse		174 (96.7)
Supervisor and head nurse		6 (3.3)

Table 3 Correlation between moral courage and its dimensions with psychological empowerment and its dimensions

Variables	Psychological empowerment		Competence		Self-determination		Impact		Meaning		Confidence	
	r	P	r	P	r	P	r	P	r	P	r	P
Moral courage	0.29	0.00 ^a	0.22	0.002 ^a	0.31	0.00 ^a	0.26	0.00 ^a	0.29	0.00 ^a	0.10	0.16
Moral agency	0.23	0.002 ^a	0.23	0.002 ^a	0.24	0.001 ^a	0.12	0.09	0.20	0.006 ^a	0.12	0.10
Multiple value	0.36	0.00 ^a	0.18	0.01 ^a	0.28	0.00 ^a	0.40	0.00 ^a	0.37	0.00 ^a	0.15	0.03 ^b
Endurance of threat	0.19	0.009 ^a	0.17	0.02 ^b	0.23	0.001 ^a	0.17	0.02 ^b	0.19	0.008 ^a	0.05	0.49
Going beyond compliance	0.21	0.004 ^a	0.21	0.004 ^a	0.33	0.00 ^a	0.19	0.009 ^a	0.01	0.83	0.23	0.001 ^a
Moral goal	0.26	0.00 ^a	0.19	0.009 ^a	0.27	0.00 ^a	0.22	0.002 ^a	0.27	0.00 ^a	0.09	0.19

^aCorrelation is significant at the 0.01 level (2-tailed)

^bCorrelation is significant at the 0.05 level (2-tailed)

inability in ethical decision-making and coping with organizational constraints that may predispose to their moral apprehension, finally affecting their quality of care [28, 32, 35]. This needs to be noted by the responsible authorities. Also organizations must accept moral virtues such as courage and direct organizational culture towards supporting the nurses with moral courage. Some of the consequences are the right decision making, the right action, the patient’s safety and comfort, and playing the role of care [16].

The findings of the present study revealed that the mean score of nurses’ psychological empowerment was at the moderate level. The results of other studies are

consistent with this finding [36–40]. Ouyang et al. reported in their study the Chinese nurses’ psychological empowerment at the moderate level [38]. Moreover, another study in Egypt, suggested a moderate level of nurses’ psychological empowerment [37]. Furthermore, the findings of a systematic review demonstrated that Iranian nurses’ psychological empowerment is moderate [39]. Yet, the study by Mirkamli et al. reported Iranian nurses’ psychological empowerment at a high level [41].

In the present study, the highest score of psychological empowerment pertained to “competence” whereas the lowest score belonged to “confidence”. In the study by Zahednezhad et al., the highest mean score belonged to

Table 4 Determining the correlation between moral courage and psychological empowerment scores and demographic variables

Variables		Moral courage	Psychological empowerment
Age	r	0.230	0.120
	P	0.002 ^a	0.110
Work Experience	r	0.181	0.115
	P	0.015 ^b	0.123
Gender	Female	Mean (SD)	90.58 (11.36)
	Male	Mean (SD)	58.86 (9.55)
		P	91.10 (10.73)
Marital Status	Single	Mean (SD)	58.24 (8.35)
	Married	Mean (SD)	0.802
		P	0.717
Level of Education	Bachelor’s Degree	Mean (SD)	87.88 (14.96)
	Master’s Degree	Mean (SD)	91.34 (10.09)
		P	0.206
Employment status	Formal	Mean (SD)	57.32 (13.41)
	Compulsory service course	Mean (SD)	59.06 (8.08)
	By contract	Mean (SD)	0.471
		P	0.206
Formal position	Nurse	Mean (SD)	90.57 (11.34)
	Supervisor and head nurse	Mean (SD)	58.68 (9.35)
		P	92.50 (6.28)
		P	0.689
Employment status	Formal	Mean (SD)	91.71 (9.66)
	Compulsory service course	Mean (SD)	59.30 (7.94)
	By contract	Mean (SD)	88.97 (15.40)
		P	89.15 (10.65)
Formal position	Nurse	Mean (SD)	0.305
	Supervisor and head nurse	Mean (SD)	0.572
		P	0.572
Formal position	Nurse	Mean (SD)	90.63 (11.34)
	Supervisor and head nurse	Mean (SD)	58.60 (9.33)
		P	92.50 (6.28)
	P	0.592	0.315

^aCorrelation is significant at the 0.01 level (2-tailed)

^bCorrelation is significant at the 0.05 level (2-tailed)

“competence” while the lowest mean score pertained to “self-determination” [31], which is consistent with our study in maximal score. In the study by Mirkamli et al., the maximal mean pertained to “meaningfulness” whereas the minimal score belonged to “confidence” [41], that is consistent with our study in the minimal dimension.

The low score of nurses’ “confidence” in our study indicates that they are not sure that the powerful authorities will behave justly, honestly, and equally towards them; in other words, they do not feel any personal safety and security. Hence, nursing managers ought to pay due attention to this issue.

In our study, there was a direct significant correlation between psychological empowerment and its dimensions so that increased psychological empowerment resulted in nurses’ enhanced moral courage. No study was found to have exactly investigated the association between these two variables though some studies have indirectly implied it. For instance, LaSala et al. emphasize that all nurses in all roles and all work environments ought to commit themselves to creating a structurally powerful environment that supports moral courage [7]. ZahedBabelan et al. also revealed that moral behavior, with its high psychological empowerment path coefficients, can be considered as an influential and powerful factor in empowering or developing nurses [27]. Furthermore, Sadooghiasl et al. refer to ethical and scientific competence, self-construction, and rationalism as antecedents of moral courage. They also refer to protective environment and ethical climate of the organization as a factor contributing to moral courage [16]. Kuokkanen et al. describe courage, tenacity, and self-esteem as qualities of an empowered nurse. An empowered nurse is able to act under pressure, resist criticism, and act in their performance and professional positioning without any fear. Such a nurse accepts responsibility with courage in decision-making [18].

To clarify this finding, it may be said that since increasing psychological empowerment may lead to reduced mental pressures and work environment stressors, and enhance the power of decision-making and performing moral behavior by the nursing staff [42–44], it can ultimately result in the creation of moral courage in nurses. Having a sense of control, competency, autonomy, positive impact, and increased motivation in relation to work affects the moral courage of nurses. In these circumstances, nurses, as moral agency, can properly manage moral dilemmas. This will improve the quality of care.

The findings showed no significant correlation among demographic variables, moral courage and psychological empowerment except that moral courage was significantly promoted with increasing age and work

experience. The study by Mohammadi et al. [29], and Moosavi et al. [33], further demonstrated a positive significant correlation between moral courage and work experience that is consistent with our study. With increasing age, individuals’ awareness of a situation is enhanced and their capacity for recognizing behaviors [45]. Aultman believes that moral courage is learned over time by observing the courageous behaviors of others. The occurrence of courageous behaviors is enhanced by increasing work experience and frequent encounters with therapeutic challenges [46]. Murray also states that as the work experience of nurses increases, the impact of barriers in the work environment on nurses’ performance decreases and moral courage increases [5]. Generally, moral courage and the decisive behaviors of nurses are enhanced with increasing age and work experience and familiarity with the work environment. Using experienced nurses as role modeling for junior nurses can be an effective factor in promoting nurses’ courageous behaviors.

Limitations of the study

This study used self-reporting instruments for data collection. These instruments suffer from possibility of respondents’ fatigue and impatience in responding or shortage of time. Thus, some nurses may have not provided real answers. Another limitation was lack of control over intervening variables such as factors affecting personnel’s concentration that might have confounded the results.

Conclusion

Given the correlation found between psychological empowerment and moral courage, it may be concluded that promotion of nurses’ psychological empowerment can increase their moral courage. Consequently, organizations and nursing managers are obliged to provide some strategies like changing managerial style in clinical wards, nurses’ contribution to decision-makings, and expanding a suitable organizational culture to move towards promoting nurses’ mental power and its various aspects as far as possible. Providing the necessary prerequisites for promoting nurses’ psychological empowerment can lead to increased morally courageous behaviors, ultimately ending in improved nursing quality care.

Abbreviations

MSc: Master of science; BS: Bachelor of science; SD: Standard deviation; ANOVA: Analysis of variance; KS: Kolmogorov-Smirnov

Acknowledgments

The authors give their special thanks to all authorities and nurses that supported them in all stages of the study.

Authors' contributions

All authors (ZKH, MB-SH, KHN, and HF) have participated in the conception and design of the study. ZKH and MB-SH contributed the data collection and prepared the first draft of the manuscript. MB-SH and KHN critically revised and checked closely the proposal, the analysis and interpretation of the data and design the article. MB-SH and HF carried out the analysis, interpretation of the data and drafting the manuscript. MB-SH and KHN has been involved in revising the manuscript critically. All authors read and approved the final manuscript.

Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

Availability of data and materials

The datasets generated and analyzed during the current study are not publicly available due to an agreement with the participants on the confidentiality of the data but are available from the corresponding author on reasonable request.

Ethics approval and consent to participate

This study was approved by Committee of Ethics in Human Research at Islamic Azad University, Yazd Branch with code of ethics no.: IR.IAU.KHUISF.REC.1398.235. Having obtained the required permissions from the university and hospitals authorities, the questionnaires were distributed to study units. Ethical considerations were observed as to principles of information anonymity and confidentiality, voluntary participation, obtaining informed written consent, and explaining research goals and procedures to the participants.

Consent for publication

The article does not contain any individual's details and consent for publication is not applicable.

Competing interests

The authors declared no conflicts of interest with respect to the research, authorship, and/or publication of this article.

Author details

¹Department of Nursing, School of Medical Sciences, Yazd Branch, Islamic Azad University, Shohadaye Gonnab Blvd., Safaiyeh, Yazd Postal code: 8916871967, Iran. ²Department of Nursing, Nursing and Midwifery Research Center, Research Center for Neonate & Mother, Shahid Sadoughi University of Medical Sciences and Health Services, Yazd, Iran. ³Department of Biostatistics and Epidemiology, Faculty of Health, Shahid Sadoughi University of Medical Sciences and Health Services, Yazd, Iran.

Received: 28 March 2020 Accepted: 18 May 2020

Published online: 24 May 2020

References

- Mahmoodi Shan G, Alhani F, Kazemnejad A. Ethics in nurses' lifestyle: a qualitative study. *Iran J Med Ethics Hist Med.* 2009;2(4):63–78 (in Persian).
- Numminen O, Repo H, Leino-Kilpi H. Moral courage in nursing: a concept analysis. *Nurs Ethics.* 2017;24(8):878–91.
- Borhani F, Alhani F, Mohammadi E, Abbaszadeh A. Professional ethical competence in nursing: the role of nursing instructors. *J Med Ethics Hist Med.* 2010;3:1–8.
- Kleemola E, Leino-Kilpi H, Numminen O. Care situations demanding moral courage: content analysis of nurses' experiences. *Nurs Ethics.* 2020;27(3): 714–25.
- Murray JS. Moral courage in healthcare: acting ethically even in the presence of risk. *Online J Issues Nurs.* 2010;15(3). Available from: <https://ojin.nursingworld.org/MainMenuCategories/EthicsStandards/Resources/Courage-and-Distress/Moral-Courage-and-Risk.html>.
- Weaver K, Morse J, Mitcham C. Ethical sensitivity in professional practice: concept analysis. *J Adv Nurs.* 2008;62(5):607–18.
- LaSala CA, Bjarnason D. Creating workplace environments that support moral courage. *Online J Issues Nurs.* 2010;15(3). Available from: <https://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol152010/No3-Sept-2010/Workplace-Environments-and-Moral-Courage.a>.
- Mahdaviseresht R, Atashzadeh-Shoorideh F, Borhani F. Correlation between moral sensitivity and moral courage in nurses of selected hospitals affiliated to Tabriz University of Medical Sciences in 2014. *Iran J Med Ethics Hist Med.* 2015;8(3):27–39 (in Persian).
- Baumert A, Halmburger A, Schmitt M. Interventions against norm violations: dispositional determinants of self-reported and real moral courage. *Personal Soc Psychol Bull.* 2013;39(8):1053–68.
- Brandstätter V, Jonas KJ, Koletzko SH, Fischer P. Self-regulatory processes in the appraisal of moral courage situations. *Soc Psychol.* 2016;47(4):201–13.
- Sekerka LE. Ethics is a daily deal: choosing to build moral strength as a practice. New York: Springer; 2015.
- Hawkins SF, Morse J. The praxis of courage as a foundation for care. *J Nurs Scholash.* 2014;46(4):263–70.
- Grace PJ, Willis DG. Nursing responsibilities and social justice: an analysis in support of disciplinary goals. *Nurs Outlook.* 2012;60(4):198–207.
- Lindh I-B, Barbosa da Silva A, Berg A, Severinsson E. Courage and nursing practice: a theoretical analysis. *Nurs Ethics.* 2010;17(5):551–65.
- Corley MC, Minick P, Elswick R, Jacobs M. Nurse moral distress and ethical work environment. *Nurs Ethics.* 2005;12(4):381–90.
- Sadooghiasl A, Parvizy S, Ebadi A. Concept analysis of moral courage in nursing: a hybrid model. *Nurs Ethics.* 2018;25(1):6–19.
- Day L. Courage as a virtue necessary to good nursing practice. *Am J Crit Care.* 2007;16(6):613–6.
- Kuokkanen L, Leino-Kilpi H. The qualities of an empowered nurse and the factors involved. *J Nurs Manag.* 2001;9(5):273–80.
- Tangney JP, Stuewig J, Mashek DJ. Moral emotions and moral behavior. *Annu Rev Psychol.* 2007;58:345–72.
- Casey M, Saunders J, O'HARA T. Impact of critical social empowerment on psychological empowerment and job satisfaction in nursing and midwifery settings. *J Nurs Manag.* 2010;18(1):24–34.
- Rafiee F, Zare ZG, Adib-Hajbaghery M, Zade SB. Internet addiction and psychological strain in nursing and midwifery students. *Nurs Midwifery Stud.* 2020;9(1):36.
- DiMeglio K, Padula C, Piatek C, Korber S, Barrett A, Ducharme M, Lucas S, Piermont N, Joyal E, DeNicola V. Group cohesion and nurse satisfaction: examination of a team-building approach. *JONA: J Nurs Adm.* 2005;35(3): 110–20.
- Boudlaie H, Koshkijahromi A, Satarinasab R. Organizational learning and trust, moderating rings between psychological empowerment and organizational commitment. *Q J Manage Dev Process.* 2012;24(1):67–93 (in Persian).
- Han S-S, Moon SJ, Yun EK. Empowerment, job satisfaction, and organizational commitment: comparison of permanent and temporary nurses in Korea. *Appl Nurs Res.* 2009;22(4):e15–20.
- Yamin AE, Boulanger VM, Falb KL, Shuma J, Leaning J. Costs of inaction on maternal mortality: qualitative evidence of the impacts of maternal deaths on living children in Tanzania. *PLoS One.* 2013;8(8):e71674.
- Seibert SE, Wang G, Courtright SH. Antecedents and consequences of psychological and team empowerment in organizations: a meta-analytic review. *J Appl Psychol.* 2011;96(5):981.
- Zahed Babelan A, Gharibzadeh R, Gharibzadeh S, Mortezaazadeh Giri AA. The role of mediator psychological empowerment, the relationship between professional ethics and work engagement of nurses. *J Educ Ethics Nurs.* 2016;5(2):55–62 (in Persian).
- 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.
- 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 (in Persian).
- Spreitzer GM. Psychological empowerment in the workplace: dimensions, measurement, and validation. *Acad Manag J.* 1995;38(5):1442–65.
- Zahednezhad H, Manoochehri H, Zaghari Tafreshi M, Farokhnezhad Afshar P, Ghanei Gheshlagh R. Relationship between organizational justice and nurses' psychological empowerment. *Iran J Nurs.* 2015;28(93):78–86 (in Persian).
- Taraz Z, Loghmani L, Abbaszadeh A, Ahmadi F, Safaviabiat Z, Borhani F. The relationship between ethical climate of hospital and moral courage of nursing staff. *Electron J Gen Med.* 2019;16(2):em109.

33. Moosavi SS, Borhani F, Abbaszadeh A. The moral courage of nurses employed in hospitals affiliated to Shahid Beheshti University of Medical Sciences. *J Hayat*. 2017;22(4):339–49 (in Persian).
34. Aminizadeh M, Arab M, Mehdipour R. Relationship moral courage to moral distress in nurses the intensive care unit. *Iran J Med Ethics Hist Med*. 2017; 10(1):131–40 (in Persian).
35. Hannah ST, Avolio BJ, Walumbwa FO. Relationships between authentic leadership, moral courage, and ethical and pro-social behaviors. *Bus Ethics Q*. 2011;21(4):555–78.
36. Azizi SM, Heidarzadi E, Soroush A, Janatolmakan M, Khatony A. Investigation the correlation between psychological empowerment and assertiveness in nursing and midwifery students in Iran. *Nurse Educ Pract*. 2020;42:102667.
37. Ibrahim MM, El-Magd MHA, Sayed HY. Nurse's psychological empowerment and perceived autonomy in university and teaching hospitals at Menofia governorate/Egypt. *J Nurs Educ Pract*. 2014;4(9):59.
38. Ouyang Y-Q, Zhou W-B, Qu H. The impact of psychological empowerment and organisational commitment on Chinese nurses' job satisfaction. *Contemp Nurse*. 2015;50(1):80–91.
39. Royan S, Alikhani M, Mohseni M, Alirezaei S, Khosravizadeh O, Moosavi A. Nurses' psychological empowerment in Iran: a systematic review and meta-analysis. *Ann Trop Med Public Health*. 2017;10(6):1558.
40. Wagner JL, Cummings G, Smith DL, Olson J, Anderson L, Warren S. The relationship between structural empowerment and psychological empowerment for nurses: a systematic review. *J Nurs Manag*. 2010;18(4): 448–62.
41. Mirkamli S, Nastiezaie N. The relationship between psychological empowerment and job satisfaction of nursing staff. *J Urmia Nurs Midwifery Fac*. 2010;8(2):104–13 (in Persian).
42. Chang L-C, Shih C-H, Lin S-M. The mediating role of psychological empowerment on job satisfaction and organizational commitment for school health nurses: a cross-sectional questionnaire survey. *Int J Nurs Stud*. 2010;47(4):427–33.
43. Laschinger HKS, Finegan J, Shamian J, Wilk P. Workplace empowerment as a predictor of nurse burnout in restructured healthcare settings. *Longwoods Rev*. 2003;1(3):2–11.
44. Martin S, Hatcher T, Akroyd D. The relationship between nurses' environmental and psychological empowerment on psychological strain in critical care nursing work environments. North Carolina: North Carolina State University; Unpublished dissertation; 2007.
45. Flesner MK, Rantz MJ. Mutual empowerment and respect: effect on nursing home quality of care. *J Nurs Care Qual*. 2004;19(3):193–6.
46. Aultman J. Moral courage through a collective voice. *Am J Bioeth*. 2008;8(4): 67–9.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Ready to submit your research? Choose BMC and benefit from:

- fast, convenient online submission
- thorough peer review by experienced researchers in your field
- rapid publication on acceptance
- support for research data, including large and complex data types
- gold Open Access which fosters wider collaboration and increased citations
- maximum visibility for your research: over 100M website views per year

At BMC, research is always in progress.

Learn more biomedcentral.com/submissions

