

Original Manuscript



Moral distress, moral courage, and career identity among nurses: A cross-sectional study

Nursing Ethics 2023, Vol. 30(3) 358–369 © The Author(s) 2022 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/09697330221140512

journals.sagepub.com/home/nej



Mengyun Peng and Shinya Saito

Graduate School of Health Sciences, Okayama University, Japan

Hong Guan

Department of Nursing, The Second Hospital of Dalian Medical University, China

Xiaohuan Ma

Department of Nursing, The Second People's Hospital of Dalian, China

Abstract

Background: The concept of career identity is integral to nursing practices and forms the basis of the nursing professions. Positive career identity is essential for providing high-quality care, optimizing patient outcomes, and enhancing the retention of health professionals. Therefore, there is a need to explore potential influencing variables, thereby developing effective interventions to improve career identity.

Objectives: To investigate the relationship between moral distress, moral courage, and career identity, and explore the mediating role of moral courage between moral distress and career identity among nurses.

Design: A quantitative, cross-sectional study.

Methods: A convenient sample of 800 nurses was recruited from two tertiary care hospitals between February and March 2022. Participants were assessed using the Moral Distress Scale-revised, Nurses' Moral Courage Scale, and Nursing Career Identity Scale. This study was described in accordance with the STROBE statement.

Ethical consideration: Research ethics approval was obtained from the researcher's university and hospital where this study was conducted prior to data collection.

Findings: Moral distress is negatively associated while moral courage is positively associated with career identity among nurses. Moral courage partially mediates the relationship between moral distress and career identity ($\beta = -0.230$ to -0.163, p < 0.01).

Discussion: The findings reveal a relationship between moral distress, moral courage, and career identity among nurses.

Conclusion: By paying attention to nurses' moral distress and courage, healthcare providers can contribute to the development of effective interventions to improve career identity, and subsequently performance, among nurses.

Corresponding author:

Shinya Saito, Graduate School of Health Sciences, Okayama University, 2-5-1 Shikata-cho, Kita-ku, Okayama, Japan, Email: shinya@md.okayama-u.ac.jp

Keywords

Moral distress, moral courage, career identity, nurses, mediating effect

Introduction

Nursing in the 21st century has evolved with changes in values and fundamental philosophy. As the medical professionals acknowledge, nurses play a significant role in patient care. In addition, nursing is currently in the public eye with 2020 marking the bicentennial of Florence Nightingale's 200th birth anniversary and the COVID-19 pandemic, which has raised public awareness of the need for an accomplished and adequate nursing workforce. However, nurses typically have little impact on healthcare policy, and some of the more outdated stereotypes of nursing that still exist involve them performing tasks such as medication administration. This can influence nurses' career identity and even their intention to change occupations. Over time, nurses' perceptions of nursing professional roles have changed, and a positive and flexible career identity has become essential for high-level performance. Therefore, it is critical for nursing managers to develop and implement interventions to improve career identity among nurses.

Background

As a component of the self-image concept,⁵ career identity refers to a person's awareness of the social impact of their work and the significance of their profession, which forms the psychological basis for them to complete task proficiently and realize organizational goals.⁶ Confidence, compassion, commitment, competence, courage, and conscience are the main personal characteristics associated with nurses' career identity.⁵ Therefore, the development of a career identity for nurses is a dynamic system and includes professional and personal growth, which can be moral maturity.⁵ Self, role, and context are the three factors that affect nurses' career identity cognition.⁷ Organizational environment and culture⁸ along with career planning⁹ also affect career identity. Therefore, organizational and personal components make up the career identity outcome factors. Nurses with a strong sense of career identity are less likely to burnout¹⁰ or have turnover intention, ¹¹ and more likely to have higher subjective well-being. ¹²

Jameton¹³ considered moral distress is one who knows the right thing to do, but it unable to follow that path due to institutional constraints. In other words, moral distress is the stress experienced by professionals when, despite being aware of the right course of action, they are unable to perform it due to constraints or restrictions of the job environment, time, and/or authority. Nurses' moral distress is correlated with personal mental health, burnout, and intention rate. Furthermore, moral distress can result in reduced quality of care, challenge for improving patient safety, and is thought to be a significant issue in the nursing profession. McCarthy and Gastmans believe that the normative meaning of nurses' moral distress is associated with personal integrity and career identity. Thus, studies show that moral distress has negative consequences for both nurses and patients, and can affect nurses' careers both directly and indirectly, thereby negatively affecting their career identity. However, little is known about the actual impact of moral distress on career identity and a mediating relationship has not been explored.

Nursing is ethical practice that requires nurses to have courage to take a moral stance and be assertive about what they believe is right, and to live by their values.²² Moral courage is the ability for nurses to conquer fear and confront problems that conflict with their core ethical principles.²³ Numminen et al.²⁴ identified that moral integrity, advocacy, responsibility, commitment, honesty, perseverance, genuine presence, and risk-taking as core of moral courage, and its consequences include empowerment, personal and professional development. Nurses with level of moral courage are able to decisively and confidently conquer fear and

refuse demands under unfair situations; they use their attributes for the patient's best interest.²⁵ However, nurses who act with moral courage also take risks in situations where they encounter horizontal violence, including sabotage, bullying, or even termination of employment.²⁶ Previous studies showed that moral courage is related to increased quality of care,²⁷ patient safety,²⁸ mutual support among colleagues, and workplace well-being.²⁹ Therefore, a relationship may exist between nurses' moral courage and career identity.

According to the conceptual analysis and hybrid model of professional identity proposed by Öhlén and Segesten,⁵ the development of professional identity is a continuous process of maturation that includes moral maturity. Based on this theoretical framework and other relevant literature reviewed above, this study aims to investigate the relationship between moral distress, moral courage, and career identity and, in the process, explores the mediating role of moral courage between moral distress and career identity among nurses. We propose the following three hypotheses. The hypothetical model we established is shown in Figure 1.

H1: Nurses' moral distress is negatively correlated with career identity.

H2: Nurses' moral courage is positively correlated with career identity.

H3: Nurses' moral courage mediates the association of moral distress and career identity.

Objectives

To investigate the relationship between moral distress, moral courage, and career identity, and explore the mediating role of moral courage between moral distress and career identity among nurses.

Methods

Study design

A quantitative, cross-sectional survey research design was adopted.

Study setting and sampling

This study was conducted in Liaoning Province, in the northeast of China. A convenient sample of nurses was recruited from two tertiary care hospitals from February to March 2022. The baseline characteristics such as working conditions, income, structure, and development were essentially the same for both hospitals. It is

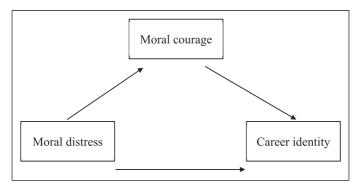


Figure 1. The hypothesized model.

well known that using larger samples in surveys produces more precise and representative results. MacCallum et al.³⁰ recommended that the minimum necessary sample size should be at least 100, or the sample size to variable number ratio should be at least 5. This study used 64 items to measure moral distress, moral courage, and career identity. As a result, the minimum sample size was 320. With a non-response rate of 10%, a sample size of 800 nurses was considered adequate.

The target participants were nurses with at least 1 year of work experience in hospital and willingness to take part in the study. Nurses who were now conducting their internship and/or training at other hospitals and nurses who were on sick or maternity leave were excluded. Of the 800 questionnaires, 19 were incomplete. A total of 781 questionnaires were analyzed (response rate: 97.63%).

Measures

In this study, data were collected using a nurse demographic information questionnaire, moral distress scale-revised (MDS-R), nurses' moral courage scale (NMCS), and nursing career identity scale (NCIS). After uploading the questionnaires to Wenjuanxing (an online questionnaire system), the research team sent the questionnaire link through WeChat (the largest Chinese social media platform) and invited nurses to fill in the questionnaires. Only eligible nurses who selected 'I agree to enroll in the study' were shown the separate electronic questionnaire.

Nurse demographic information

The information included gender, age, marital status, education status, position, duration of employment at the hospital, and working shift.

Moral Distress Scale-Revised

The Moral Distress Scale (MDS) is a 38-item tool originally developed by Corley et al.³¹ and later revised by Hamric et al.³² to only 21 items. It measures the level of disturbance in situations. This self-report tool utilizes a Likert scale to measure the current intensity of moral distress, ranging from 0 (none) to 4 (great extent), and frequency of moral distress ranging from 0 (never) to 4 (very frequently). The intensity and frequency scores are multiplied to obtain each item score from 0 to 16, and are then added to obtain a total score between 0 and 336. Cronbach's alpha for the MDS-R was 0.89. The MDS-R was translated by Sun et al.³³ in China.

Nurses' Moral Courage Scale

The NMCS was developed by Numminen et al.²³ and has 21 items classified into four dimensions: compassion and true presence (5 items), moral responsibility (4 items), moral integrity (7 items), and commitment to good care (5 items). Each item is measured using a 5-point Likert scale (from 1 = Does not describe me at all to 5 = Describes me very well). Cronbach's alpha for the NMCS was 0.93. The NCMS was translated by Wang et al.³⁴ in China.

Nursing Career Identity Scale

The NCIS was developed by Takemura.³⁵ It aims to measure the level of nurses' career identity. It includes 21 items and seven dimensions: sense of grasp (3 items), sense of consistency (3 items), sense of significance (3 items), sense of self-efficacy (3 items), sense of self-decision-making (3 items), sense of organizational

influence (3 items), and sense of influence on patients (3 items). Each item is rated on a 7-point Likert scale (from 1 = totally disagree to 7 = totally agree). Cronbach's alpha for the NCIS was 0.84. The NCIS was translated by Zhao et al.³⁶ in China.

Data analysis

Data were analyzed using IBM SPSS ver. 19.0. Descriptive statistics were used to describe participant characteristics and variables. Pearson's coefficient was used to examine correlations between variables and a stepwise regression analysis was used to explore the mediating effect. In Step 1, career identity (dependent variable) was regressed on moral distress (independent variable). In Step 2, moral courage (mediator variable) was regressed on moral distress. In Step 3, career identity was regressed on moral courage and moral distress. When both moral distress and moral courage were entered into the final regression model, the mediating effect was said to be supported if the relationship between moral distress and career identity became less significant (partial mediator) or non-significant (complete mediator). The indirect effect was estimated using the bootstrap resampling method and 95% bias-corrected confidence interval (CI). The mediating effect could be considered significant if the 95% CI does not include zero. Model 4 was conducted using Process macro.³⁷ The *p*-value below 0.05 indicated statistical significance.

Ethical consideration

The study was approved by Okayama University and the Second Hospital of Dalian Medical University (with the codes 2109-017 and 20211019-01, respectively). In the consent form, we explained the aim and process of the study, the voluntary participation, and the potential for withdrawal. The survey was anonymous, subjects' privacy and confidentiality were respected, and responses were stored in a secure database on a password-protected computer that was only accessible to the study team.

Results

Participants

This study was conducted with 781 nurses of whom 774 were female (99.1%). The average age of the nurses was 33.22 years (SD = 7.22). The average duration of employment at the hospital was 11.16 years (SD = 7.91). More than half of the participants were undergraduates (87.2%) and married (64.9%). The detailed characteristics of the participants are presented in Table 1.

Descriptive statistics for variables of study

In general, participants showed moderate to high levels of career identity (mean = 116.51; SD = 22.372). The overall score for moral distress was low (mean = 54.55; SD = 45.27), and moral courage was high (mean = 82.02; SD = 16.19) (Table 2).

Correlations for variables of study.

As shown in Table 3, the correlation analysis showed that moral distress was negatively correlated with career identity (r = -0.230, p < 0.01) and moral courage (r = -0.117, p < 0.01), and moral courage was positively correlated with career identity (r = 0.589, p < 0.01).

Table 1. Characteristics of the participants (n = 781).

Characteristics	n	%	Mean	SD
Age (years)			33.22	7.22
Duration of employment (years)			11.16	7.91
Gender				
Female	774	99.1		
Male	7	0.9		
Marital status				
Single	263	33.7		
Married	507	64.9		
Divorced or widowed	11	1.4		
Education status				
≤Junior college	73	9.3		
Undergraduate	689	87.2		
≥Postgraduate	27	3.5		
Position				
Nurse	731	93.6		
Head nurse	50	6.4		
Working shift				
Day shift	278	35.6		
Night shift	31	4.0		
Day-night shift	472	60.4		

Table 2. Descriptive statistics for variables under study (n = 781).

Variable	Score range	Mean ± SD		
Total moral distress	0 ~ 352	54.55 ± 45.27		
Individual responsibility	0 ~ I28	16.84 ± 17.06		
Not in patient's best interest	0 ~ 80	13.21 ± 11.36		
Values conflicts	0 ~ 96	17.71 ± 13.81		
Harm to patient's interest	0 ~ 48	6.80 ± 7.10		
Total moral courage	21 ~ 105	82.02 ± 16.19		
Compassion and true presence	5 ~ 25	19.91 ± 4.11		
Moral responsibility	4 ~ 20	15.77 ± 3.22		
Moral integrity	7 ~ 35	27.52 ± 5.48		
Commitment to good care	5 ~ 25	18.82 ± 4.11		
Total career identity	21 ~ 147	116.51 ± 22.372		
Sense of grasp	3 ~ 21	17.68 ± 3.57		
Sense of consistency	4 ~ 28	22.28 ± 4.42		
Sense of significant	3 ~ 21	16.53 ± 3.46		
Sense of self-efficacy	3 ~ 21	17.71 ± 3.515		
Sense of self-decision-making	3 ∼ 2I	16.28 ± 3.79		
Sense of organizational influence	2 ~ 14	9.74 ± 2.76		
Sense of influence on patients	3 ~ 21	16.29 ± 3.72		

Variable	Career identity	Moral distress	Moral courage	
Career identity	1			
Moral distress	−0.230 **	1		
Moral courage	0.58 9 ***	−0.117 ***	1	

Table 3. Correlations for variables of study (n = 781).

Regression analysis for variables of study

The mediating effect of moral courage on the relationship between moral distress and career identity is presented in Table 4. Moral distress predicted career identity ($\beta = -0.230, p < 0.01$) in Step 1. In Step 2, moral distress also predicted moral courage ($\beta = -0.117, p < 0.01$). When both moral distress and moral courage were considered for the prediction of career identity, the standardized regression coefficient for the relationship between moral courage and career identity decreased from $\beta = -0.230$ to -0.163 (p < 0.01).

Mediation analysis

Table 5 shows the path coefficients of the direct (-0.081) and indirect (0.033) effects of moral distress on career identity and suggests that moral courage partially mediates the relationship between the two.

Discussion

As far as we know, this is the first study to investigate the associations between moral distress, moral courage, and career identity among nurses. We found that moral distress was negatively correlated with career identity, while moral courage and career identity were positively correlated. Additionally, we found that moral courage partially mediates the relationship between moral distress and career identity.

The average score indicated a moderate to high level of career identity among nurses, which is consistent with previous studies. ^{10,11} This may be a result of the increase in public recognition and changing view of nurses and the nursing profession; nurses feel more valued at work. Similar findings have also been reported in other countries. In Iran, 91.2% of the nurses reported their career identity at good (47.2%) and very good (44%) levels. ³⁸ A Turkish study reported that nurses had a strong sense of career identity which in turn was an important factor influencing nurses' intention to leave the profession. ³⁹ Nursing career identity is a crucial component in the clinical practice that positively influences not only nurses but also patients care and other healthcare professionals, that is, how nurses think about the value of their work and the experience it brings them may impact patient care, work engagement, and their intention to leave. ^{40,41} Previous studies demonstrated that providing nurses to with professional activities and support for their education contributes to career identity. ^{4,42} Therefore, nursing managers should devise strategies to improve nurses' career identity.

At present, the average score of moral distress among nurses is lower than that of Italian and Iranian nurses, ^{43,44} but higher than that reported in a previous study in China. ⁴⁵ The reasons for the lower moral distress among nurses in China, compared with other countries, may lie in different cultural settings, organizational contexts, and personal characteristics of the sample. Chinese hospitals tend to provide nurses with a positive ethical climate for practice, which results in lower moral distress. ⁴⁶ However, the higher moral distress in this study as compared to a previous study in China may be caused by burnout. A cross-temporal

^{**}p < 0.01

^{*}p < 0.05.

Dependent variables	Independent variables	β	t	Þ	F	R ²	Þ
Career identity	Moral distress	-0.230	-6.597	<0.001	43.525	0.053	<0.001
Moral courage	Moral distress	-0.117	-3.297	0.001	10.872	0.014	0.001
Career identity	Moral distress	-0.163	-5.709	<0.001	231.421	0.373	<0.001

19.930

< 0.001

0.570

Table 4. Regression analysis among variables of study (n = 781).

Moral courage

Table 5. Mediating effect of moral courage between moral distress and career identity (n = 781).

		95% CI	
Model pathways	Estimated effect	Lower	Upper
Direct effect			
Moral distress → moral courage	-0.042	-0.074	-0.016
Moral distress → Career identity	-0.08I	-0.112	-0.046
Moral courage → career identity	0.787	0.667	0.911
Indirect effect			
Moral distress → moral courage→career identity	-0.033	-0.060	-0.012

CI: confidence interval.

meta-analysis found that Chinese nurses' burnout increases gradually over time. ⁴⁷ Many studies have demonstrated that higher burnout is correlated with higher moral distress, ⁴⁴ suggesting that healthcare managers should gain further insight into this issue. Additionally, COVID-19 patient volumes and personal protective equipment workarounds also increase moral distress. ¹⁸

Our study demonstrates that moral distress is negatively correlated with career identity. Moral distress is a widespread phenomenon that adversely affects nurses, the outcomes of which may include low job satisfaction, psychological symptoms, and increased turnover. ^{16,18,19} It is often proposed that moral distress is influenced by both internal and external causes. ⁴⁸ Shen et al. ⁴⁹ found that when nurses suffer from moral distress, they may question and feel powerless about their work and doubt its value, which could reduce their career identity. Guzys⁵⁰ also refers to the evolution of career identity from personally held morals and values to its impact of adhering to professional standards. These findings are consistent with those of this study. Hence, to increase nurses' career identity, their moral distress should be decreased. Hospital managers should create and maintain a desirable ethical climate, and enhance nurses' ethical awareness and knowledge. A systematic review found that educational interventions, facilitated discussions, and specialist consultation services offer a promising direction for mitigating moral distress. ⁵¹

This study revealed high moral courage among nurses. This result was consistent with past research done in Finland⁵² and Iran.²⁸ This is possibly because research on moral courage is increasing, and nurses' moral awareness and sensitivity have improved.⁵³ Nurses recognize the value of standing up for what they think is right, no matter how challenging that may be. Moreover, moral courage has been called a virtue, making it desirable to be morally courageous,⁵² including for nurses. The universal goal of nursing is to care for the patient, embodying principles such as treatment without discrimination and provision of quality care.⁵⁴ Therefore, when nurses encounter moral problems in clinical work, courage and understanding its implications are critical. Previous studies have shown that moral courage can be enhanced through ethics

^{*}Empirical 95% confidence interval does not overlap with zero.

education, self-learning, and support from organizations and managers. ^{55,56} Accordingly, individual nurses should be committed to developing their own moral courage and providing ethical care, and managers should be committed to providing moral support to promote nurses' morally courageous behavior.

In this study, moral courage was positively correlated with career identity. This indicates that nurses with higher moral courage exhibited higher career identity. To the best of our knowledge, despite certain studies' indirect hints, no study has explicitly explored the relationship between these two variables. For example, Lindh et al.⁵⁷ emphasized that morally courageous nurses were confident in ethical situations, which supported them in overcoming obstacles in their careers. Sadooghiasl et al.⁵⁶ also found that moral courage promotes nurses' growth of profession and career paths. Numminen et al.²⁴ revealed that the positive outcomes of moral courage include personal and professional development, and empowerment. Moral courage has been widely regarded as essential in nursing for promoting patients' quality of life and ethical care.^{27,28} Furthermore, with moral courage, nurses can improve their own well-being at work and develop their careers.⁵⁶ As a profession, nursing is characterized by moral courage, such as overcoming fear and speaking up for patients despite personal risks, the recognition of which may increase nurses' appeal for the vocation.²³ Therefore, moral courage may positively affect nurses' career identity. We urge healthcare providers to develop enabling structures and sensitive leadership to strengthen moral courage in clinical practice.

Another major finding of this study was that moral courage partially mediates the relationship between moral distress and career identity in nurses. The decreased effect of nurses' moral distress on career identity lies in the mediating effects of moral courage. Our study supports the conceptual model of moral distress leading to low career identity and low moral courage proposed by previous studies. Moral distress is described as the psychological imbalance when nurses find themself failing to do the right thing, and it is a major problem in the profession. Numerous healthcare situations call for moral courage. As a professional virtue, courage would enable nurses to speak out against inappropriate regulations and unacceptable practices. Nurses may not experience moral distress if they have enough moral courage, which provides the best opportunity to form and shape career identities. This study provides evidence for an intervention program to instill moral courage and enhance career identity among nurses.

Limitations

First, the cross-sectional design did not demonstrate a causal relationship between moral distress, moral courage, and career identity. Qualitative and longitudinal studies are required to further strengthen the current results and reveal more aspects of this phenomenon. Moreover, participants were recruited to the study using convenience sampling, and the majority were female, which may have resulted in a selection bias and limited generalizability of our results. Finally, we used self-report data, which may have resulted in recall and reporting bias.

Conclusion

This study demonstrated that moral distress and courage were essential correlated factors of career identity among nurses and that moral courage partially mediated the relationship between moral distress and career identity, which increased our understanding of the relationship between these three variables. This suggests that interventions decreasing moral distress and increasing moral courage may have potential benefits in improving career identity among nurses. Nursing managers in clinical practice are advised to create a positive ethical climate and provide ethics education to nurses to enhance their moral competency. In addition, this study drew attention to and provided a model for improving nurses' career identity and retaining nurse manpower in other countries.

Acknowledgments

We would like to thank all participants who agreed to participate in this research study.

Declaration of conflicting interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

ORCID iD

Mengyun Peng https://orcid.org/0000-0001-8999-992X

References

- 1. Delamaire M and Lafortune G. *Nurses in Advanced Roles: A Description and Evaluation of Experiences in 12 Developed Countries*. Paris: Organization for economic co-operation and development, 2010.
- 2. van der Cingel M and Brouwer J. What makes a nurse today? a debate on the nursing professional identity and its need for change. *Nurs Philos* 2021; 22(2): e12343.
- Hallam J. Nursing the Image: Media, Culture and Professional Identity. London and New York: RoutledgeRoutledge, 2012.
- 4. Johnson M, Cowin LS, Wilson I, et al. Professional identity and nursing: contemporary theoretical developments and future research challenges. *Int Nurs Rev* 2012; 59(4): 562–569.
- 5. Öhlén J and Segesten K. The professional identity of the nurse: concept analysis and development. *J Adv Nurs* 1998; 28(4): 720–727.
- 6. Zhang W, Meng H, Yang S, et al. The influence of professional identity, job satisfaction, and work engagement on turnover intention among township health inspectors in China. *Int J Environ Res Public Health* 2018; 15(5): 988.
- 7. Rasmussen P, Henderson A, Andrew N, et al. Factors influencing registered nurses' perceptions of their professional identity: an integrative literature review. *J Contin Educ Nurs* 2018; 49(5): 225–232.
- 8. Fitzgerald A. Professional identity: a concept analysis. Nurs Forum 2020; 55(3): 447–472.
- 9. Wei LZ, Zhou SS, Hu S, et al. Influences of nursing students' career planning, internship experience, and other factors on professional identity. *Nurs Educ Today* 2021; 99: 104781.
- 10. Ren Z, Zhang X, Sun Y, et al. Relationships of professional identity and psychological reward satisfaction with subjective well-being among Chinese nurses. *J Nurs Manage* 2021; 29(6): 1508–1516.
- 11. Hu H, Wang C, Lan Y, et al. Nurses' turnover intention, hope and career identity: the mediating role of job satisfaction. *BMC Nurs* 2022; 21(1): 1–11.
- 12. Ren Z, Zhang X, Li X, et al. Relationships of organisational justice, psychological capital and professional identity with job burnout among Chinese nurses: a cross-sectional study. *J Clin Nurs* 2021; 30(19–20): 2912–2923.
- 13. Jameton A. Nursing Practice, the Ethical Issues. Upper Saddle River, NJ: Prentice-Hall, 1984, p. 6.
- 14. Corley MC, Minick P, Elswick RK, et al. Nurse moral distress and ethical work environment. *Nurs Ethics* 2005; 12(4): 381–390.
- 15. Woods M. Moral distress revisited: the viewpoints and responses of nurses. Int Nurs Rev 2020; 67(1): 68-75.
- Dzeng E and Wachter RM. Ethics in conflict: moral distress as a root cause of burnout. J Gen Intern Med 2020; 35(2): 409–411.
- 17. Laurs L, Blaževičienė A, Capezuti E, et al. Moral distress and intention to leave the profession: Lithuanian nurses in municipal hospitals. *J Nurs Scholarsh* 2020; 52(2): 201–209.

18. Lake ET, Narva AM, Holland S, et al. Hospital nurses' moral distress and mental health during COVID-19. *J Adv Nurs* 2021; 78(3): 799–809.

- 19. Burston AS and Tuckett AG. Moral distress in nursing: contributing factors, outcomes and interventions. *Nurs Ethics* 2013; 20(3): 312–324.
- 20. McAndrew NS, Leske J and Schroeter K. Moral distress in critical care nursing: the state of the science. *Nurs Ethics* 2018; 25(5): 552–570.
- 21. McCarthy J and Gastmans C. Moral distress: a review of the argument-based nursing ethics literature. *Nurs Ethics* 2015; 22(1): 131–152.
- 22. Lachman VD. Moral courage: a virtue in need of development? Medsurg Nurs 2007; 16(2): 131.
- 23. Numminen O, Katajisto J and Leino-Kilpi H. Development and validation of nurses' moral courage scale. *Nurs Ethics* 2019; 26(7–8): 2438–2455.
- Numminen O, Repo H and Leino-Kilpi H. Moral courage in nursing: a concept analysis. Nurs Ethics 2017; 24(8): 878–891.
- 25. Day L. Courage as a virtue necessary to good nursing practice. Am J Crit Care 2007; 16(6): 613-616.
- 26. LaSala CA and Bjarnason D. Creating workplace environments that support moral courage. OJIN 2010; 15(3).
- 27. Pohjanoksa J, Stolt M, Suhonen R, et al. Wrongdoing and whistleblowing in health care. *J Adv Nurs* 2019; 75(7): 1504–1517.
- 28. Khodaveisi M, Oshvandi K, Bashirian S, et al. Moral courage, moral sensitivity and safe nursing care in nurses caring of patients with COVID-19. *Nurs Open* 2021; 8(6): 3538–3546.
- 29. Gallagher SM. Bullying, moral courage, patient safety, and the bariatric nurse. *Bariat Nurs Surg Pat Care* 2012; 7(4): 156–159.
- 30. MacCallum RC, Widaman KF, Zhang S, et al. Sample size in factor analysis. Psychol Methods 1999; 4(1): 84–99.
- 31. Corley MC, Elswick RK, Gorman M, et al. Development and evaluation of a moral distress scale. *J Adv Nurs* 2001; 33(2): 250–256.
- 32. Hamric AB, Borchers CT and Epstein EG. Development and testing of an instrument to measure moral distress in healthcare careers. *AJOB Prim Res* 2012; 3(2): 1–9.
- 33. Sun X, Cao F, Yao J, et al. Research in validity and reliability of the Chinese version of moral distress scale. *Chin J Pract Nurs* 2012; 36: 52–55.
- 34. Wang XY, Wei LL, Zhang Y, et al. Development and validation of nurses' moral courage scale. *J Nurs Sci* 2019; 34(21): 92–95.
- 35. Takemura Y. Measurement of "career identity" of nursing and care personnel in long-term care hospitals. *J Health Care Soc* 2005; 14(4): 83–98.
- 36. Zhao H, Lu TT, Zhang CY, et al. Testing for reliability and validity of Chinese version of the nurse's career identity scale. *Chin Nurs Manage* 2010; 10(11): 49–51.
- 37. Hayes AF. Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. Guilford publications, Newyork, NY, USA 2017.
- 38. Mohtashami J, Rahnama H, Farzinfard F, et al. A survey of correlation between professional identity and clinical competency of psychiatric nurses. *Open J Nurs* 2015; 5(9): 765–772.
- 39. Sabanciogullari S and Dogan S. Relationship between job satisfaction, professional identity and intention to leave the profession among nurses in Turkey. *J Nurs Manage* 2015; 23(8): 1076–1085.
- 40. Kunhunny S and Salmon D. The evolving professional identity of the clinical research nurse: A qualitative exploration. *J Clin Nurs* 2017; 26(23–24): 5121–5132.
- 41. Cao Y, Liu J, Liu K, et al. The mediating role of organizational commitment between calling and work engagement of nurses: A cross-sectional study. *Int J Nurs Sci* 2019; 6(3): 309–314.
- 42. Sabanciogullari S and Dogan S. Effects of the professional identity development programme on the professional identity, job satisfaction and burnout levels of nurses: A pilot study. *Int J Nurs Pract* 2015; 21(6): 847–857.

43. Lusignani M, Giannì ML, Re LG, et al. Moral distress among nurses in medical, surgical and intensive-care units. *J Nurs Manage* 2017; 25(6): 477–485.

- 44. Ajoudani F, Baghaei R and Lotfi M. Moral distress and burnout in Iranian nurses: The mediating effect of workplace bullying. *Nurs Ethics* 2019; 26(6): 1834–1847.
- 45. Wenwen Z, Xiaoyan W, Yufang Z, et al. Moral distress and its influencing factors: A cross-sectional study in China. *Nurs Ethics* 2018; 25(4): 470–480.
- 46. Hou Y, Timmins F, Zhou Q, et al. A cross-sectional exploration of emergency department nurses' moral distress, ethical climate and nursing practice environment. *Int Emerg Nurs* 2021; 55: 100972.
- 47. Huang J. Changes of job burnout in Chinese nurses over 2004–2013: cross-temporal meta-analysis. *Curr Psychol* 2018; 37(3): 583–590.
- 48. Ramos FRS, Barlem ELD, Brito MJM, et al. Conceptual framework for the study of moral distress in nurses. *Texto & Contexto-Enfermagem* 2016; 25(2): e4460015.
- 49. Shen Z, Zhong Z, Zheng F, et al. Relationship between nurses' moral distress and professional identity. *Nurs J Chin PLA* 2018; 35(18): 34–38.
- 50. Guzys D. Moral distress: A theorized model of influences to facilitate mitigation and resilience. *Nurs Health Sci* 2021; 23(3): 658–664.
- 51. Morley G, Field R, Horsburgh CC, et al. Interventions to mitigate moral distress: A systematic review of the literature. *Int J Nurs Stud* 2021; 121: 103984.
- 52. Hauhio N, Leino-Kilpi H, Katajisto J, et al. Nurses' self-assessed moral courage and related socio-demographic factors. *Nurs Ethics* 2021; 28(7–8): 1402–1415.
- 53. Lee C, Kim S, Choe K, et al. Effect of ethics seminar on moral sensitivity and ethical behavior of clinical nurses. *Int J Environ Res Public Health* 2021; 18(1): 241.
- 54. World Health Organization. Global Health Ethics Key Issues: Global Network of WHO Collaborating Centres for Bioethics, World Health Organization 2015, Geneva, Switzerland.
- Kleemola E, Leino-Kilpi H and Numminen O. Care situations demanding moral courage: content analysis of nurses' experiences. Nurs Ethics 2020; 27(3): 714–725.
- 56. Sadooghiasl A, Parvizy S and Ebadi A. Concept analysis of moral courage in nursing: A hybrid model. *Nurs Ethics* 2018; 25(1): 6–19.
- 57. Lindh IB, Severinsson E and Berg A. Nurses' moral strength: a hermeneutic inquiry in nursing practice. *J Adv Nurs* 2009; 65(9): 1882–1890.
- 58. Savel RH and Munro CL. Moral distress, moral courage. Am J Crit Care 2015; 24(4): 276–278.