

DOI: 10.5455/msm.2021.33.88-93

Received: Apr 25 2021; Accepted: Jun 16, 2021

© 2021 Maria Malliarou, Athanasios Nikolentzos, Dimitrios Papadopoulos, Theodora Bekiari, Pavlos Sarafis

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ORIGINAL PAPER

Mater Sociomed. 2021 Jun; 33(2): 88-93

ICU Nurse's Moral Distress as an Occupational Hazard Threatening Professional Quality of Life in the Time of Pandemic COVID 19

Maria Malliarou¹, Athanasios Nikolentzos², Dimitrios Papadopoulos³, Theodora Bekiari⁴, Pavlos Sarafis⁵

¹Nursing Department, University of Thessaly, Greece

²Hellenic Open University, Greece

³General Hospital of Larisa, Greece

⁴Prefecture of Thessaly, Department of Public Health, Greece

⁵General Department, University of Thessaly, Greece

Corresponding author: Maria Malliarou
Associate Professor, Nursing Department, University of Thessaly, Gaiopolis, Larissa-Trikala Ring Road, zip 41100, Larissa, Greece. E-mail: malliarou@uth.gr.
ORCID ID: <https://orcid.org/0000-0002-6619-1028>.

ABSTRACT

Background: Moral distress is an unpleasant feeling that arises when one is forced to behave in such a way that it violates one's personal beliefs and values about what is right and what is wrong. Moral distress, unlike other forms of distress, contains an incompatible conflict between one's personal moral limitations and the acts that accompany it. **Objective:** to investigate moral distress and its effects on the ICU nursing staff, their professional quality of life as well as, related factors. **Methods:** The total sample of this cross-sectional study comprised of 258 ICU nurses working in reference hospitals for COVID 19 recruited online using google forms. The study tools are: a) "Measure of Moral Distress for Healthcare Professionals (MMD-HP)" to assess intensity and frequency of moral distress b) "Professional Quality of Life Scale (ProQOL-5)" to assess professional quality of life. Data were analyzed using IBM SPSS Statistics 25,0 (IBM Analytics, IBM Software Group Statistical Package). **Results:** Overall MMD-HP score ranged from 3 to 262 with a mean score of 116.52 (SD=68.56). Distress score ranged from 5 to 79 with a mean score of 43.67 (SD=17.44) while intensity score ranged from 3 to 108 with a mean score 52.04 (SD=22.69). Bivariate analysis showed there is a statistically significant positive correlation between the intensity of moral distress and overall moral distress score with years of service in ICU and age. Nurses' Assistants (m=48.1 p=0.021) scored higher than Registered nurses in distress and intensity score (m=54.1 p=0.020) while female also scored higher in overall MMD-HP (m=121.2 p=0.049). Multivariate logistic regression analysis, showed

that secondary trauma scale was independently associated with a higher distress scale score and a higher MMD-HP. **Conclusion:** Educational support that provide information about dealing with moral distress during the coronavirus pandemic and how ICU nurses should deal with ethical issues that may confront in the everyday professional life is essential. Hospitals should monitor moral distress and there should be workshops that could build moral resilience and maintain high professional quality of life.

Keywords: Moral Distress, Occupational Ethics, Work Satisfaction, Quality of Life, Nurses, Intensive Care Unit.

1. BACKGROUND

According to Jameton "Moral distress arises when one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action." (1) Moral distress (MD) occurs when one knows the morally correct action to take but feels unable to take this action (2). Campbell and al, broadened the definition of moral distress as one or more "negative self-directed emotions or attitudes that arise in response to one's perceived involvement in a situation that one perceives to be morally undesirable." (3) In 2017 CNA reported MD are "feelings of anger, frustration, or guilt when nurses are unable to act on their ethical judgment". It was already acknowledged that during a pandemic, nurses are obliged to take complex decisions weighing their duty and their own health, or their family's safety (4).

Although it has been suggested that MD is a response to morally troubling experiences that is natural, if one experiences it in its everyday working life, then it may instead be regarded as an occupational hazard that may impact on professional quality of life. Brunnquell & Michaelson used Moral hazard as a term to describe situations in which one party gets the decisions but another party bears the burden of those decisions (5). ICU nurses are commonly responsible for enacting the decisions of doctors and seem most likely to risk experiencing the moral hazard that is MD.

Empirical research has concluded that MD has similar negative consequences such as compassion fatigue and burnout (6,7) that may lead to low professional quality of life or nursing shortage due to leaving profession. It is obvious that ICU is a clinical environment that nurses are a part of the decision-making process and need to be supported regarding ways facing the complex everyday clinical ethical issues. Chaikali in a Greek research in ICU nurses concluded that the main stressors identified are futility treatment, working with “incompetent” colleagues and hiding the truth, which are related to their intention to leave profession (8). Evaluating and improving the quality of professional life can increase staff productivity and improve exhaustion, with an effect on absences, workplace accidents, and turnover (9, 10). As the coronavirus pandemic rages on, healthcare personnel are in the difficult position of answering in ethical questions and come up to ongoing challenges such as who to prioritize in drug disposition when in scarcity, the use of Personal Protective Equipment (PPE) during times of supply chain shortage. Other ethical restraints for ICU nurses during pandemic covid 19 are witnessing patient's loneliness inability to contact the family–telephone communication, strictly limited hospital visit policies, which prevent nurses from involving families in care decisions, isolation measures that can lead to patients dying without the presence of their family. Adherence to hospital visitor restraint policies makes it difficult for health professionals to see patients suffer alone and know that there is nothing they can do to help them. Also, uncertainty, futile care without palliative care creates stressful feeling to ICU nurses as well (11). Lack of resources, time and staff makes it prohibitive to support families who mourn on their own without proper palliative care. Rathert et al supported that nurses need to be empowered in order to deal with pressures and ethical dilemmas that their working clinical environment poses to them (12). Secondary traumatic stress (STS) describes the psychological experience of caring for traumatized or suffering others, and it is work related as a natural consequence of caring for traumatized people (13). STS is closely related to compassion fatigue (CF) and burnout (14). Stamm proposed Professional Quality of Life (ProQOL) model and she defined compassion fatigue (CF) as comprising both STS and burnout (15).

2. OBJECTIVE

This cross-sectional study aims to examine moral distress in times of pandemic covid 19 and its correlation with professional quality of life of ICU nurses in Greece. Moreover, to find any correlations of moral distress with demographic characteristics of ICU nurses (age and level

of education) and work experience variables (years of experience) and to identify characteristics that may predict which nurses are at high risk for moral distress.

3. METHODS

This study used a cross-sectional survey design to explore the frequency and intensity of moral distress and potential relationships between moral distress and demographic characteristics as well as its correlation with professional quality of ICU nurses in the time of pandemic Covid 19. The opportunity to participate in this study was offered to ICU nurses working in reference hospitals for COVID 19 during lockdown in Greece. Recruitment was done through Hellenic regulatory body of nurses' site. The online link was available for 12 weeks in the time of lockdown for COVID 19.

3.1 Measures

MMD-HP

The MMD-HP is a substantial revision of the older Moral Distress Scale-Revised (MDS-R). Its scoring procedure is designed to measure current levels of moral distress. The level of moral distress experienced is a function of how often a situation occurs and how distressing it is when experienced. The MMD-HP has 27 items that identify causes of moral distress. Participants are asked to rank using a five-point Likert-type scale (0–4) the frequency of experiencing the identified cause and the intensity of moral distress experienced. MMD-HP coding creates scores: a distress score (0–108), and intensity score (0–108), an item-composite score based on multiplying frequency by intensity (0–16/item), and an overall moral distress score which is the sum of the 27-item scores (0–432) with higher scores indicating higher levels of moral distress. Items that have never been experienced or not seen as distressing do not contribute to the total moral distress score. The MMD-HP was translated and cross-culturally adapted for the Greek population after permission of original developers (16).

ProQOL-5

The Professional Quality of Life Scale is a self-report measure with 30 items which reflects the positive and negative effects of working with people who have experienced extremely stressful events. The ProQol is divided in three subscales: Secondary Traumatic Stress, Burnout and Compassion Satisfaction. Compassion Satisfaction measures positive aspect of a helper's professional quality of life. Burnout and Secondary Traumatic Stress subscales measure the negative aspects. The terms “compassion fatigue” and Secondary Traumatic Stress are used interchangeably (17).

Procedure

Permission to conduct the survey was approved by the Institutional Review Board. The developer of the Measure of Moral Distress for Healthcare Professionals (MMD-HP) granted permission to the researcher to use the instrument. ProQOL 5 questionnaire Greek version is available free by proqol organization. The MMD-HP as well as ProQOL 5 and a demographic form were distributed online to ICU nurses. Participants were also asked to indicate their history of or intention to leave their position based on moral distress (No, I have never considered leaving or left a position; Yes, I considered leaving, but did not leave; Yes, I left a position). Data were collected in the time of Greek lockdown

for pandemic COVID 19.

3.2 Data analysis

Focusing on the added items, the analysis included descriptive statistics: frequency, mean, median, standard deviation (SD) and range. T-test and Pearson's chi-squared test was employed to identify the differences between various exposures and the category of moral distress. Multivariate analysis was also performed. P-values < 0.05 were considered statistically significant. The internal consistency of both scales was calculated using Cronbach's alpha and found to be 0.921 for MMD-HP and 0.827 for ProQOL 5.

4. RESULTS

The sample was predominantly female (82.8%) with mean age 42.3 years and 18.8 years of service and half of them spent in ICU. Most participants were married (62.5%), with 2 children (35,9%) (table 1). Mean values, standard deviations (SD), and highest and lowest values of the scales of the study are presented in Table 2.

Characteristics	N (%)
Gender	Female 213 (82.8)
	Male 44 (17.2)
Marital status	Single-divorced 97 (37.5)
	Married 161 (62.5)
Registered ICU nurses	174 (67.4)
ICU Nurse assistants	84 (32.6)
Age (y)	42.3 ± 18.8
Professional experience	20.1±9.77

Table 1. Demographics of the sample

Overall MMD-HP score ranged from 3 to 262 with a mean score of 116.52 (SD= 68.56). Distress score ranged from 5 to 79 with a mean score of 43.67 (SD=17.44) while intensity score ranged from 3 to 108 with a mean score 52.04 (SD=22.69). (table 2) After thorough examination of individual items (range from 0 to 16/item) it was found that mean scores ranged from a low of 0.67 to a high of 9,47 for "Be required to care for more patients than I can safely care for".

	min	max	Mean	SD
MMD-HP Distress score	5.00	79.00	43.67	17.44
MMD-HP Intensity score	3.00	108.00	52.04	22.69
MMD-HP overall	3.00	262.00	116.52	68.56
ProQOL 5 compassion satisfaction	16.0	50,00	37.93	7.07
ProQOL secondary trauma scale	11.00	46.00	23.47	6.70
ProQOL burnout	17.00	55.00	33.13	5.17
ProQOL 5 total score	51.00	134.00	93.76	13.29

Table 2.

Bivariate analysis examined the correlation (Pearson's r) between moral distress (overall MMD-HP, distress and intensity scores) and age, years of service and years of service in ICU (table 3). We found significant positive correlations between the intensity of moral distress and overall moral distress score with years of service in ICU and age respectively (r = - 0.188, p = 0.031, r =0.181 and p = 0.036).

		age	Years of service	Years of service in ICU
MMD-HP Distress score	r	.033	.019	.081
	p	.708	.824	.349
MMD-HP Intensity score	r	.093	.094	.188*
	p	.294	.281	.031
MMD-HP overall	r	.181*	.133	.131
	p	.036	.122	.130
ProQOL 5 total	r	.102	.091	.044
	p	.246	.296	.610

Table 3. Pearson's r correlation between moral distress (overall MMD-HP, distress and intensity scores) ProQOL 5 and demographic characteristics. Pearson correlation *p<0.05, **p<0.01

Bivariate analysis examined the correlation (Pearson's r) between moral distress (overall MMD-HP, distress and intensity scores) and ProQOL 5. (table 4) Positive correlation was found between nurses' moral distress and the quality of professional life-total score but secondary trauma scale and burnout subscales as well.

		MMD-HP Distress score	MMD-HP Intensity score	ProQOL 5 total score	MMD-HP overall
MMD-HP Distress score	r		.627**	.378**	
	p		.000	.001	
MMD-HP Intensity score	r			.361**	.771
	p			.000	.000
ProQOL 5 total score	r				.512**
	p				.000
ProQOL 5 compassion satisfaction	r	.100	.230*		.186
	p	.336	.032		.082
ProQOL 5 secondary trauma scale	r	.422**	.398**		.473**
	p	.000	.000		.000
ProQOL 5 burnout	r	.380**	.457**		.497**
	p	.000	.000		.000

Table 4. Pearson's r correlation between moral distress (overall MMD-HP, distress and intensity scores) and ProQOL 5. Pearson correlation *p<0.05, **p<0.01

Table 5 displays the t-test and ANOVA results for the Moral distress (distress, intensity and overall scores) for each of the demographic characteristics. Gender and nursing role was found to correlate statistically significant with moral distress subscales scores and overall score. Nurses' Assistants (m=48.1 p=0.021) scored higher than Registered nurses in distress and intensity score (m=54.1 p=0.020) while female also scored higher in overall MMD-HP (m=121.2 p=0.049).

Demographics	MMD-HP Distress score		MMD-HP Intensity score		MMD-HP overall	
	Mean (SD)	p	Mean (SD)	p	Mean (SD)	p
sex		0.057*		0.089*		0.049*
male	33.1 ± (10.2)		37.7 ± (14.8)		64.5 ± (38.7)	
female	44.7 ± (17.7)		53.1 ± (22.9)		121.2 ± (68.8)	
Marital status		0.984**		0.343**		0.642**
single	40.9 ± (16.2)		41.7 ± (22.6)		91.1 ± (72.7)	
married	2.9 ± (17.6)		49.5 ± (21.7)		108.9 ± (67.8)	
divorced	42.8 ± (15.2)		60.0 ± (27.6)		129.8 ± (69.7)	
widowed	43.0 ± (9.9)		53.5 ± (23.3)		120.0 ± (31.1)	
Nursing role		0.021*		0.020*		0.065
Registered Nurse	41.9 ± (18.67)		51.5 ± (24.7)		110.0 ± (71.6)	
Nurses' Assistant	48.1 ± (14.2)		54.1 ± (16.9)		± (56.6)	

Table 5. Correlation between demographics and MMD-HP. *t-test, ** One - Way Anova

		Distress scale			Intensity scale			MMD-HP		
		β+	SE++	P	β+	SE++	P	β+	SE++	P
gender	male (reference)									
	female	6.12	7.03	0.388	9.17	9.77	0.352	21.27	27.27	0.438
age		-0,35	0.48	0.469	-0.03	0.62	0.967	-0.90	1.76	0.611
Years of service		0,05	0.38	0.891	0.13	0.48	0.789	0.67	1.35	0.624
Intention to leave clinical position due to moral distress	no, I have no intention (reference)									
	yes, I have	13.16	8.02	0.106	11.98	10.29	0.249	52.98	28.68	0,070
ProQOL 5 compassion satisfaction		0,28	0.34	0.414	0.47	0.45	0.300	1.75	1.23	0.163
ProQOL 5 secondary trauma scale		0,72	0.34	0.039	0.41	0.48	0.397	2.76	1.24	0.029
ProQOL 5 burnout		0,51	0.42	0.230	1.22	0.70	0.084	2.97	1.53	0.057

Table 6. Multivariate logistic regression analysis. +Dependence coefficient ++standard error

At multivariate logistic regression analysis, secondary trauma scale resulted to be independently associated with a higher distress scale score and a higher MMD-HP (table 6).

5. DISCUSSION

Death is not a phenomenon that ICU nurses are not used of but in times of covid 19 the circumstances are different. Why death is different in dealing in Covid 19 pandemic? Because ICU nurses feel they cannot deal with the new reality of dying a person alone, without his own family, without a kissing goodbye, without time or space to mourn. They have to fulfill the demand for creating a caring environment, for providing emotional support to people dying alone although they know that this could end with their emotional exhaustion. The COVID-19 crisis creates unprecedented challenges for those healthcare professionals on the front lines of care. AACN stated that during this COVID-19 pandemic, nurses are facing unique situations that they may not have encountered before. ICU nurses experience new challenges because during this COVID-19 pandemic, they face situations that do not meet usual stan-

dards every time a patient dies, every time difficult ethical issues nurses deal with. Kanaris (18), an intensivist stated «what kept us awake at night during the pandemic was moral distress». Morley et al (19) highlighted that ethical priorities during COVID 19 changed and this heightened the potential for moral distress in caring. They gave as an example that although bedside caregivers were assured that they were not obligated to provide care if their own safety was threatened (eg, not available adequate PPE) this may create moral-conflict distress for them if they feel that maintaining their own safety would lead to substandard care. The present findings indicate that ICU nurses' overall MMD-HP score ranged from 3 to 262 with a mean score of 116.52 (SD= 68.56). Distress score ranged from 5 to 79 with a mean score of 43.67 (SD=17.44) while intensity score ranged from 3 to 108 with a mean score 52.04 (SD=22.69). The hypothesis that age and years of experience in ICU will correlate positively with moral distress was supported in the data. This finding is consistent with previous research findings (20).

Our research results showed a positive correlation be-

tween nurses' moral distress and the quality of professional life. Moral distress may lead to physical, psychological, social, and professional problems that may result in nurses leaving the profession of nursing. (21-27)

Another finding of our research was that gender and nursing role correlated statistically significant with moral distress subscales scores and overall score with Nurses' Assistants to score higher than Registered nurses in distress and intensity score and female scored higher in overall MMD-HP than men. One possible explanation why Registered nurses score lower in distress and intensity score might be that they have been trained on values clarification, communication skills, and an understanding of the system in which healthcare is delivered which are some of the tools necessary to address conflicts between the internal and external environments (2). O'Connell's (28) findings agreed with this research findings that female report higher moral distress scores than male.

One last finding of this research was a result of multivariate logistic regression analysis, that showed secondary trauma scale (compassion fatigue) was associated independently with a higher distress scale score and a higher MMD-HP. Previous research (29), has shown that moral distress can contribute to the development of compassion fatigue and is a problem for nurses in high-stress areas and identified moral distress and secondary traumatic stress syndrome, as occupational hazards for health professionals providing care in highly stressful work environments. Literature review shows that there are a lot of things in the profession of nursing that can contribute to the development of compassion fatigue that may develop when nurses internalize pain in their work environment. Compassion fatigue impairs nurses and their performance. Impaired nurses risk patient safety as they become complacent and distracted which may an important occupational hazard resulting to low quality of care, occupational accidents, absence from work and quitting profession. Negative professional quality of life can have a negative impact on nurses' mental health and well-being resulting in lack of caring, unable to provide compassionate patient-centered care.

6. CONCLUSION

During this COVID-19 pandemic ICU nurses experience new challenges. Moral distress is evident in that clinical environment with contributing factors the gender, the nursing role, the age and years of experience in ICU. Positive correlation was found between nurses' moral distress and the quality of professional life. Educational support that provides information about dealing with moral distress during the coronavirus pandemic and how ICU nurses should deal with ethical issues that may confront in the everyday professional life is essential. Hospitals should monitor moral distress and there should be workshops that could build moral resilience and maintain high professional quality of life.

- **Author's contribution:** All authors were involved in the preparation of this article. All authors have read and approved the manuscript.
- **Conflict of interest:** The authors declare no conflict of interest.
- **Financial support and sponsorship:** None.

REFERENCES

1. Jameton A. *Nursing Practice: The Ethical Issues*. Englewood Cliffs, NJ: Pearson College Div, 1984.
2. Epstein E, Delgado S. Understanding and Addressing Moral Distress. *The Online Journal of Issues in Nursing*. 2010; 15(3): 1. doi: 10.3912/OJIN.Vol15No03Man01.
3. Campbell SM, Ulrich CM, Grady CA. Broader Understanding of Moral Distress. *Am J Bioeth*. 2016; 16(12): 2-9. doi:10.1080/15265161.2016.1239782
4. Canadian Nurses Association. *Nurses' ethical considerations during a pandemic*. nurses-ethical-considerations-during-a-pandemic_e.pdf (cna-aiic.ca) 2017.
5. Brunnequell D, Michaelson CM. Moral hazard in pediatrics. *American Journal of Bioethics*. 2016; 16(7): 29-38. <https://doi.org/10.1080/15265161.2016.1180441>.
6. Maiden J, Georges J.M, Connelly, CD. Moral distress, compassion fatigue, and perceptions about medication errors in certified critical care nurses. *Dimensions of Critical Care Nursing*. 2011; 30(6): 339-345. doi: 10.1097/DCC.0b013e31822fab2a
7. Rushton CH, Batcheller J, Schroeder K, Donohue P. Burnout and resilience among nurses practicing in high-intensity settings. *American Journal of Critical Care*. 2015; 24(5): 412-420. doi: 10.4037/ajcc2015291.
8. Chaikali S. *Moral distress and its consequences for nurses of critically ill patients*. Doctoral dissertation. Nursing Department. National and Kapodistrian University of Athens, 2011.
9. Khani A, Jaarfarpour M, Dyrekvandmogadam A. Quality of nursing work life. *Journal of Clinical and Diagnostic Research*. 2008; 2(6): 1169-1174.
10. Boonrod W. Quality of working life: perceptions of professional nurses at Phramongkutklo Hospital. *J Med Assoc Thai*. 2009; 92, Suppl 1: S7-15.
11. Cacchione PZ. *Moral Distress in the Midst of the COVID-19 Pandemic*. *Clin Nurs Res*. 2020; 29(4): 215-216. <https://doi.org/10.1177/1054773820920385>
12. Rathert C, May DR, Chung HS. Nurse moral distress: A survey identifying predictors and potential interventions. *Int J Nurs Stud*. 2016; 53:39-49. doi 10.1016/j.ijnurstu.2015.10.007
13. Christodoulou-Fella, M., Middleton, N., Papanthanasoglou, E., & Karanikola, M. (2017). Exploration of the Association between Nurses' Moral Distress and Secondary Traumatic Stress Syndrome: Implications for Patient Safety in Mental Health Services. *BioMed research international* 1908712. <https://doi.org/10.1155/2017/1908712>
14. Epstein EG, Haizlip J, Liaschenko J, Zhao D, Bennett R, Marshall MF. Moral Distress, Mattering, and Secondary Traumatic Stress in Provider Burnout: A Call for Moral Community. *AACN Adv Crit Care*. 2020 Jun 15;31(2):146-157. doi: 10.4037/aacnacc2020285.
15. Stamm BH. *The Concise ProQOL Manual*. 2nd Ed. Pocatello, ID: ProQOL.org 2010.
16. Epstein EG, Whitehead PB, Prompahakul C, Thacker LR, Hamric AB. Enhancing Understanding of Moral Distress: The Measure of Moral Distress for Health Care Professionals. *AJOB Empir Bioeth*. 2019; 10(2): 113-124. doi: 10.1080/23294515.2019.1586008.
17. Figley C. *Compassion Fatigue: Coping with Secondary Traumatic Stress Disorders in Those Who Treat the Traumatized*. London: Brunner-Routledge, 1995.
18. Kanaris C. *Moral distress in the intensive care unit during*

- the pandemic: the burden of dying alone. *Intensive Care Med.* 2021; 47(1): 141-143. doi: 10.1007/s00134-020-06194-0.
19. Morley G, Sese D, Rajendram P, Horsburgh C. (2020) Addressing caregiver moral distress during the COVID-19 pandemic. *Cleveland Clinic Journal of Medicine*, doi: 10.3949/ccjm.87a.ccc047.
 20. Dodek PM, Wong H, Norena, M, Ayas N, Reynolds SC, Keenan SP, Hamric A, Rodney P, Stewart M, Alden L. Moral distress in intensive care unit professionals is associated with profession, age, and years of experience. *Journal of critical care.* 2016; 31(1): 178-182. <https://doi.org/10.1016/j.jcrc.2015.10.011>.
 21. Davis S, Schrader V, Belcheir MJ. Influencers of ethical beliefs and the impact on moral distress and conscientious objection. *Nursing Ethics.* 2012;19(6): 738-749. doi:10.1177/0969733011423409.
 22. Elpern EH, Covert B, Kleinpell R. Moral distress of staff nurses in a medical intensive care unit. *Am J Crit Care.* 2005; 14(6): 523-530.
 23. Ferrell BR. Understanding the moral distress of nurses witnessing medically futile care. *Oncol Nurs Forum.* 2006; 33(5): 922-930. doi: 10.1188/06.ONF.922-930.
 24. Huffman DM, Rittenmeyer L. How professional nurses working in hospital environments experience moral distress: a systematic review. *Crit Care Nurs Clin North Am.* 2012; 24(1): 91-100. doi: 10.1016/j.ccell.2012.01.004.
 25. Schluter J, Winch S, Holzhauser K, Henderson A. Nurses' moral sensitivity and hospital ethical climate: a literature review. *Nurs Ethics.* 2008;15(3): 304-321. doi: 10.1177/0969733007088357.
 26. Varcoe C, Pauly B, Webster G, Storch J. Moral distress: tensions as springboards for action. *HEC Forum.* 2012 Mar; 24(1): 51-62. doi: 10.1007/s10730-012-9180-2.
 27. Wiegand DL, Funk M. Consequences of clinical situations that cause critical care nurses to experience moral distress. *Nurs Ethics.* 2012; 19(4): 479-487. doi: 10.1177/0969733011429342.
 28. O'Connell CB. Gender and the experience of moral distress in critical care nurses. *Nursing ethics.* 2015; 22(1): 32-42. <https://doi.org/10.1177/0969733013513216>.
 29. Jenkins B, Warren N. Concept analysis: compassion fatigue and effects upon critical care nurses. *Critical Care Nursing Quarterly.* 2012; 35: 388-395 35: 388-395.