ORIGINAL RESEARCH

Moral Distress Healthcare Providers in Spain: Observational Study

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Objective: To evaluate the moral distress (MD)in health professionals of pediatric and adult units to show how the complexity of care in the pediatric field causes the professionals who carry out their activity in these units to present a higher level of moral distress and a worse climate ethical.

Design: Observational study with health professionals who currently work in Spanish Hospitals.

Methods: A 58-item questionnaire was electronically distributed which included sociodemographic and employment characteristics, the Spanish version of the Measure of Moral Unrest for Healthcare Professionals (MMD-HP-SPA) and the Hospital Ethical Climate Survey (HECS).

Results: A total of 169 health professionals completed the questionnaire. The moral distress was significantly higher among nurses than among physicians and nursing assistant care technicians. Focusing on the type of unit, moral distress it was only significantly higher for those physicians treating adult patients compared to those treating pediatric patients. Regarding the total score of the HECS survey, the medical group shows higher scores compared to the nursing group.

Conclusion: Statistically significant differences have been found only in the medical group that treats adult patients, presenting a higher level of moral unrests than the pediatrician group. The MMD-HP-SPA questionnaire is a valid and useful instrument to detect MD in our hospital units in order to be able to implement strategies/interventions that improve the ethical climate and other factors that can mitigate and prevent this MD.

Keywords: moral unrest, ethical climate, surveys, questionnaires, pediatrics

Background

In 1984, the philosopher Jameton[1] first defined the term moral suffering as the painful psychological imbalance that results from recognizing ethically appropriate action and yet not performing it, due to obstacles such as lack of time, supervisory reluctance, an inhibiting medical power structure, institutional policy, or legal considerations.

Addressing the concept of moral distress[2] can be understood as a 'very broad' term, a study on this reflects how, depending on the environment and the different groups of health professionals, it can be understood in different ways, using other terms such as dilemma or ethical confrontation instead of moral distress. Sometimes the difference between the two terms can be subtle: in moral dilemmas there are competing ethical principles, but no principle clearly trumps the other in that situation; On the contrary, in the case of moral distress, the correct course of action is clear, but there are barriers or limitations that prevent health professionals from taking this course of action.

Moral distress was originally studied in nurses[3,4] but it has been shown how all health professionals can face doubts about the appropriateness of decisions, treatments or procedures performed in their work,[5,6] causing them to question their behavior and how it affects the quality of the health care they provide.[7]

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Currently, several instruments have been developed and tested to measure the frequency and intensity of moral distress,[8] taking into account the importance of validation in different cultural contexts. Based on this idea, measurements of moral suffering have been carried out in European countries[8] and in different settings such as pediatric hospital units,[9] in which the appropriateness of use and expand the use of these instruments not only to show the degree of moral anguish they suffer but also to increase knowledge about this term.

After conducting a review and not having found in the scientific literature studies investigating moral distress in Spanish pediatric nurses, we present the following study. For that, the aim of this research will be to demonstrate that the complexity of care in the pediatric field causes the professionals who work in these units to present a higher level of moral distress and have a worse ethical climate compared to health professionals working in adult units.

Methods

Design

We conducted a cross-sectional observational study.

Sample Size

The sample size calculation was performed by the difference between two independent groups using the G * Power 3.1.9.2 software, proposing a one-tailed hypothesis, an effect size of 0.80, an error probability α of 0.05, and a β level of 20%. A desired power analysis of 80% (1-β error probability) and an allocation ratio (N2/N1) of 1 were used for sample size calculations. Therefore, a total sample size of 42 participants with at least 21 participants per group was calculated.

Sample

Questionnaires were collected from health professionals who work in Hospitals in Madrid. We selected a population with similar characteristics to the study carried out by Lazzarin et al[9]; therefore, we follow the following inclusion and exclusion criteria. Inclusion consisted of working in pediatric units, pediatric day hospitals, and/or pediatric ICUs, or working in adult hospital units and adult ICUs and willingness to complete the questionnaires. The exclusion criteria consisted of health professionals who started working in the unit less than a month ago, health professionals who had already delivered the maternity notice to the preventive medicine service in the period of administration of the questionnaires, and/or health professionals on leave of absence.

Sociodemographic Characteristics

Participants were asked to provide sociodemographic and employment information on their age, weight, height, sex, marital status, descent, profession, years of profession, years of experience in their units, number of beds in their hospital, financing system of their hospital and type of unit, either pediatric or adult.

Questionnaires

The questionnaire was electronic and distributed via email. Due to the difficulty involved in collecting informed consent through online surveys, an exemption from collecting this document was requested. Participation was addressed to different professionals voluntarily and anonymously. In addition, the study was carried out using data that was not of a personal nature or included in medical records (not allowing the identification of the participants). Finally, as it is an observational study, the design did not imply risks for them.

For this reason, a statement from the investigator of compliance with the organic law on the protection of personal data and guarantee of digital rights 3/2018, of December 5, and law 41/2002, of November 14, basic regulation of patient autonomy and rights and obligations regarding clinical information and documentation.

Information about the study and data protection were included in a cover letter at the beginning of each survey; an identification code was provided with the scale for each respondent. All participants were informed that they could withdraw from the study at any time. They were also informed of the exclusion criteria for participating in the study.

We used a 58-item questionnaire that included sociodemographic and work-related characteristics, the Measured Scale of Moral Distress-Healthcare Professionals (MMD-HP-SPA) and the Spanish version of the Hospital Ethical Climate Survey-version (HECS) for nurses and for doctors.

Moral Distress Assessment Instrument

Previous studies have evaluated the reliability of the MMD-HP-SPA. Cronbach's α calculations suggested a good reliability of the MMD-HP-SPA for the general sample (Cronbach's α = 0.97) and for each group of professionals; α Cronbach in nurses = 0.97 and α Cronbach in doctors = 0.94. In addition, the calculation of the ordinal alpha also showed a good reliability of the MMD-HP-SPA for the general sample (ordinal alpha = 0.98) and for each group of professionals; ordinal alpha in nurses = 0.98 and ordinal alpha in doctors = 0.98 al.[10]

The MMD-HP-SPA is a 27-item questionnaire that measures moral unrest (MD) in specific situations. Participants rated each item on a Likert scale for how often they experience MD in their practice (frequency: 0 = never, 4 = very often) and how distressing these situations are when they occur (distress: 0 = none, 4 = very distressing). The frequency score (f) is multiplied by the distress score (d) to create a composite score ("f × d", range 0–16) for each item. These item composite scores are added to create an overall MMD-HP-SPA score (range 0–432), with higher scores indicating higher levels of MD.

Because there is no suggested range in the literature at this time to classify the severity of moral distress, this study divided the highest possible MMD-HP-SPA score (432) into thirds to classify the levels as high, moderate, or low moral distress (11). In addition, the authors of this scale ask two additional questions to study the intention to leave work: (a) Have you ever left or thought about leaving a clinical position due to moral distress? (b) Are you considering leaving your position now due to moral issues? A third question has been added to study the MD as a possible cause of temporary medical disability: (c) Have you ever needed or thought you needed temporary medical leave due to moral distress? Written items are not included in the composite score work.[6]

Ethical Climate Assessment Instrument

Using a measure of ethical climate, researchers can study the influence of the workplace on the ethical practice of health professionals; the way they perceive their work environment can affect their attitudes about ethical issues, the role they take when ethical issues arise, and their ethical decision-making.[11]

The English version of the abbreviated HECS scale has a Cronbach's alpha of 0.77 for the sample of physicians and 0.87 for the sample of nurses in previous studies (13). It is a 14-item Likert scale instrument with a score range from 14 to 70, where higher scores indicate a greater positive ethical climate. Parallel versions were used for nurses and doctors.[6]

Ethical Considerations

Octubre Research Institute (i+12) has assessed and approval of this research in accordance with the current regulations All the ethical principles for medical research in human beings of the Declaration of Helsinki adopted at the 18th Assembly of the World Medical Association,[12] were followed.

Statistical Analyses

First, a descriptive analysis was performed. Categorical variables were expressed with frequencies and percentages. Continuous variables were expressed with mean and standard deviation, or median and interquartile range, according to their adjustment to a normal distribution (Shapiro–Wilk test). Comparisons between groups were analyzed using the Mann–Whitney test for two groups or the Kruskal–Wallis test in the case of variables with three or more independent groups.

The relationship between the moral distress score and quantitative variables such as age, height, and weight were calculated using the student 's T test for independent samples. HECS scores were correlated with MMD-HP-SPA scores following Spearman correlation coefficient.

To examine the relationship between the different groups of professionals who present moral distress, a chi squared test was carried out.

Data were analyzed using SPSS processing software and a p value < 0.05 was considered statistically significant for all analyses.

Results

A total of 169 health professionals from public hospitals in the Autonomous Community of Madrid completed the questionnaires, of whom 75 were nurses (43.1%), 46 Nursing Auxiliary Care Technicians (NACT) (28.7%) and 48 physicians (28.2%). The characteristics of the study participants are shown in Table 1.

Table 2 shows the total scores of the MMD-HP-SPA and HECS questionnaires in the three groups of professionals. In the MMD-HP-SPA questionnaire, significantly higher scores were found in the nursing group compared to the NACT group (p = 0.01). The medicine group presents higher values of moral unrest in contrast to the NACTS group (p = 0.04).

In the total score of the HECS survey, the medical group shows higher scores compared to the nursing group (P < 0.01).

In Table 3 we can see how, when comparing the moral distress scores according to the type of unit where the different groups of professional's work, the doctors who deal with adult patients present a higher score compared to those who work with pediatric patients (p = 0.034).

With respect to the ethical climate in their unit, the group of professionals in which significant differences have been found when making a comparison is the NACT group, reflecting a better score for the personnel who care for pediatric patients (p = 0.021).

Table 4 shows the results obtained by performing the chi-squared test to examine the relationship between the different groups of professionals studied who present moral distress, finding that there are no differences between them (P = 0.166).

Finally, 34.6% of the medical group and 53.4% of the nurses considered leaving or left their position in the past due to moral distress. In addition, it was found that 26.5% of doctors and 42.4% of nurses have needed or thought they needed temporary medical leave due to moral distress.

Discussion

When we carry out a review of the scientific literature on moral unrest, the investigations are based on three important points: the causes of moral distress, the relationship between the level of this unrest and the environment where professionals work and finally, the development of interventions to recognize and prevent it.

In our country, researchers seek to discover valid and reliable tools to explore the causes of MM among health professionals in order to develop these possible interventions in the future. After a review of the different existing questionnaires,[13] the newest instrument created by Epstein et al[10] and validated into Spanish by Rodriguez-Ruiz et al.[6]

In our study, MD was present in all health professionals with a median of MMD-HP-SPA similar to the latest studies carried out in Spain[14] and Sweden.[15]

It is important to emphasize that this study carried out in Spain was the first to observe a higher score among doctors and that it could reflect the differences that we found in the different clinical settings, since it was carried out exclusively among health personnel who cared for adult patients in Units of Intensive Care.

If we compare with the means of other studies carried out in different countries, the figures are similar to ours, with the MMD-HP scores being higher for nurses than for doctors.[15]

When contrasting the moral distress scores according to the type of unit: pediatric or adult, there is a statistically significant difference in the group of physicians, with the group of professionals who treat adult patients presenting higher scores, thus rejecting the main hypothesis of our research. In addition, significant differences have been found with respect to the level of MD in the nursing and medical staff compared to the NACT group, being lower in the latter. According to a study carried out in 2019,[15] with similar results, the total MD scores among nurses compared to the NACT group could be related to different care responsibilities, since nurses have the overall responsibility for care and provide care. More advanced, such as pain relief, and consequently are more frequently exposed to morally distressing situations.

Despite studies that acknowledge that moral distress occurs in other health disciplines, nurses remain the main focus of empirical research. Prentice et al[16] discuss this imbalance and stress that, in the medical literature, there is a tendency not to use the term moral distress, using the terms "dilemma" or "ethical confrontation" instead.

Another authors[16,17] expose the most widespread idea as an argument, 'nurses are particularly vulnerable due to the nature of nursing as a moral effort, the intimacy of the nurse-patient relationship and the role of nurses" in addition to fulfilling the objectives of "saving lives" and "promote the advancement of science'. This would support the idea that this

Table 1 Descriptive Data of the Study Participants

Variables	Total Sample (N=169)		Nursing (n=75)		NACT (n=46)		Medicine (n=48)		Nursing vs NACT	Nursing vs Medicine	NACT vs medicine
	Mean ± SD (95% CI)	Median (95% CI)	Mean ± SD (95% CI)	Median (95% CI)	Mean ± SD (95% CI)	Median (95% CI)	Mean ± SD (95% CI)	Median (95% CI)	p-value	p-value	p-value
Age (years)	37.68 ±10.48 (36.08–39.27)	37.00 (35.27–38)	36.16±10.10 (33.84–38.48)	36.00 (32–38)	43.91±11.58 (40.47–47.35)	45.00 (40–51.11)	34.08±6.98 (32.06–36.11)	34.00 (31–36)	<0.01	0.35	<0.01
Weight (kg)	63.65 ±12.04 (61.82–65.48)	60.00 (58–63)	63.77±11.11 (61.22–66.33)	63.00 (58–68)	65.76±12.97 (61.90–69.60)	62.5 (59.77–68.22)	61.46±12.41 (57.85–65.06)	57.00 (55–60.5)	0.57	0.16	0.06
(Size M)	1.64 ±0.072 (1.63–1.66)	1.64 (1.63–1.66)	1.64±0.06 (1.63–1.66)	1.64 (1.62–1.65)	1.65±0.07 (1.62–1.67)	1.65 (1.6–1.67)	1.65±0.08 (1.63–1.68)	1.63 (1.61–1.67)	0.81	0.79	0.89
BMI (kg/m^2)	23.42±3.74 (22.85–23.35)	22.60 (22.19–23.35)	23.57±3.70 (22.72–24.42)	22.89 (22.06–24.41)	24.27±4.18 (23.02–25.5)	23.47 (22.26–25.34)	22.37±3.15 (21.46–23.29)	21.57 (20.92–22.72)	0.41	0.12	0.01

Notes: Student 's T were applied for independent samples. In all analyses, $p < 0.05$ (with a 95% Confidence Interval [CI]) was considered statistically significant.
Abbreviations: NACT, Nursing Auxiliary Care Technician; BMI, Body Mass Index; Kg, Kilograms; M, meters; SD, standard deviation; CI, confidence interval.

Table 2 Moral Unrest and Climate Scores Ethical Hospitable in Nursing Groups, Care Technicians Nursing and Medicine Assistants

Test	Nursing (n=75)		NACT (n=46)		Medicine (n=48)		p-value*		
	Mean ± SD (95% CI)	Median (95% CI)	Mean ± SD (95% CI)	Median (95% CI)	Mean ± SD (95% CI)	Median (95% CI)	Nursing vs NACT	Nursing vs Medicine	NACT vs Medicine
MMD-HP-SPA Total Score	154.20±97.32 (131.81–176.59)	159.00 (117.62–176.46)	102.02±100.16 (72.28–131.77)	67.50 (27.00–132.67)	130.37±81.93 (106.58–154.16)	103 (82.74–144.28)	<0.01	0.206	0.041
HECS Full Score	45.83±8.24 (43.93–47.72)	45.00 (43.54–48.46)	47.02±9.92 (44.04–50.00)	46.00 (43.00–50.54)	49.26±9.80 (46.45–52.08)	52.00 (48.00–53.83)	0.389	<0.01	0.129

Notes: *p-value of Kruskal–Wallis test. In everyone the analysis, p < 0.05 (with a 95% confidence interval) was considered statistically significant.
Abbreviations: MMD-HP-SPA, Measured Scale of Moral Distress-Healthcare Professionals - Spanish version; HECS, Spanish adaptation of the Hospital Ethical Climate Survey-short version; NACT, Auxiliary Nursing Care Technician; SD, standard deviation; CI: confidence interval.

Table 3 Scores of Moral Distress and Climate Ethical Hospital in Professional Groups Depending on Their Unit

MMD-HP-SPA Total Score.	Adults		Pediatrics		
	Mean ± SD (95% CI)	Median (95% CI)	Mean ± SD (95% CI)	Median (95% CI)	*p-value*
Nursing	155.13±95.43 (124.19–186.06)	159.00 (106.68–187.25)	153.19±100.67 (119.13–187.26)	151.50 (102.98–188.80)	0.932**
NACT	129.78±109.08 (82.6–176.95)	115.00 (31.88–200.30)	74.26±83.72 (38.06–110.46)	29.00 (15.70–98.14)	0.059*
Medicine	155.67±91.46 (116.54–193.79)	147.50 (92.71–204.36)	105.58±63.79 (78.65–132.52)	95.00 (69.75–11.84)	0.034**
HECS Full Score	**Mean ± SD (95% CI)**	**Median (95% CI)**	**Mean ± SD (95% CI)**	**Median (95% CI)**	***p-value***
Nursing	44.18±88.66 (41.37–46.98)	42.00 (39.00–47.08)	47.61±7.49 (45.08–50.14)	48.00 (45.00–50.00)	0.071**
NACT	43.59±11.19 (38.63–48.55)	41.50 (38.00–46.28)	50.30±7.37 (47.11–53.49)	50.00 (46.35–53.65)	0.021**
Medicine	48.24±10.03 (44.10–52.38)	50.00 (44.15–53.00)	50.33±9.65 (47.49–55.25)	53.00 (47.49–55.25)	0.351*

Notes: Moral Distress Measurement Scale-Healthcare professionals - version Spanish; HECS, Spanish adaptation of the Hospital Ethical Climate Survey-short version; NACT, Auxiliary Nursing Care Technician; * U Mann–Whitney p-value; ** Independent Student 's t-test. In all analyses, p < 0.05 (with a 95% CI) was considered statistically significant.
Abbreviations: SD, standard deviation; CI: confidence interval; IR: range interquartile.

Table 4 Comparisons Between Percentages Moral Distress Totals and Categories Professionals

		Nursing (n=75)	NACT (n=46)	Medicine (n=48)	*p-value*
MMD-HP-SPA Categories	Under	35 (46.66%)	31 (67.39%)	31 (64.58%)	0.166*
	Moderate	32 (42.66%)	12 (26.08%)	14 (29.16%)	
	High	8 (19.668%)	3 (6.52%)	3 (6.25%)	

Notes: Frequency, percentage (%) and * Chi-square test (2) were used. MMD-HP-SPA were divided as follows: (1) 0 to 144 points: low, (2) 145 to 288 points: moderate, (3) 289 to 432 points: high. In all analyses, p < 0.05 (with a 95% confidence interval) was considered statistically significant.
Abbreviations: MMD-HP-SPA, Moral Distress Measured Scale-Healthcare professionals - version Spanish; NACT, Auxiliary Nursing Care Technician.

group of professionals perform their assigned interventions beyond their comfort level, causing harm rather than comfort and dignity to patients at the end of their lives, but also, it would present nurses as victims of 'aggressive care' in which the doctor is the cause, responsible for the treatment plan Such distinctions between medical and nursing staff would not be justified and we can observe it in recent studies where they are involved different groups of healthcare professionals.[18]

The main causes of moral unrest in these investigations were the care burden perceived as disproportionate and not focused on the interest of the patient; in addition to a perceived incapacity on the part of professionals to provide medical care that goes in defense of the patient.[19] However, possible underlying causes relate to the ethical climate within the unit.[20]

In the total score of the Hospital Ethical Climate survey, the medical group shows higher scores compared to the nursing group (P < 0.01). A study conducted in pediatric cancer units in Sweden found similar results and identified peer support as a contributing factor to physician resilience.[19] These high scores could be explained by the experience that doctors gain throughout their training and career, since they are "forced" to deal with ethical issues and assume

a considerable amount of responsibility and for this reason, it is believed that they have developed procedures for discussing difficult problems with their peers and their multidisciplinary team and rate this collaboration as more favorable than nurses.[13] If we look at the type of patients with whom they work, the pediatric care group obtains higher scores in the HECS survey, thus rejecting the hypothesis of the presence of a worse ethical climate in these units. This could be due to greater communication between the professionals who care for the pediatric population, based on a higher score in this group, for example, in item 1: My colleagues listen to my concerns about patient care. In addition, we found higher scores in item 10: I work with competent colleagues; which can indicate a greater specialization in these professionals, highlighting the existence of the Pediatric Nursing Specialty in Spain since the approval of the training program in 2010. Due to the type of work and patient treatment that may involve difficult ethical issues, a good ethical climate is crucial to prevent moral suffering and staff turnover, as well as the quality of patient care.

Regarding these potential negative consequences, the probable association between MD and the propensity to leave a job has been discussed,[14] being relevant that in our sample, more than a third of the doctors and more than half of the nurses considered quit or left their position in the past because of this distress. In addition, a notable percentage of doctors and nursing staff who had needed or thought they needed temporary medical leave due to MD was obtained. Moral distress, therefore, challenges personal moral integrity, resulting in negative consequences for caring for themselves and the patients they treat.[16]

Our study has some limitations to take into account, as we have exposed previously and despite the large amount of literature on the increase, the term moral distress is not commonly used in clinical practice, which makes empirical research and direct inquiry difficult, since that the term 'ethical confrontations' is also mentioned. In addition, we have not included results on causal associations between MD, perception of ethical climate and factors analyzed that will be studied in future research.

Conclusion

In the study sample, significantly higher moral distress scores were found in nursing and followed by medicine when comparing both professionals to the nursing auxiliary care group. However, focusing on the aim of this research, when comparing the scores according to the type of unit, only the group of medical professionals who treat adult patients have higher scores, with no differences being found in the rest of the groups. The items of the MMD-HP scale are related to responsibility and competencies. The fact that the group of nurses has higher levels of moral distress may be related to their role in close continuous care of patients, the degree of exposure to morally distressing situations and lastly with the ethical climate in their units. This last idea is reflected in the assessment of the ethical climate by health professionals, with the medicine group reporting a better score compared to the nursing group and according to the unit, finding differences with better scores in the group of auxiliary nurses that serve pediatric patients.

Data Sharing Statement

Under reasonable request to corresponding author.

Disclosure

The authors report no conflicts of interest in this work.

References

1. Jameton A. *Nursing Practices: The Ethical Issues*. Englewood Cliffs, NJ: Prentice-Hall; 1984.
2. Morley JE, Kusmaul N, Berg-weger M. Meaningful engagement in the nursing home. *J Gerontol Soc Work*. 2021;64(1):33–42. doi:10.1080/01634372.2020.1864543
3. Corley MC, Elswick RK, Gorman M, Clor T. Development and evaluation of a moral distress scale. *J Adv Nurs*. 2001;33(2):250–256. doi:10.1046/j.1365-2648.2001.01658.x
4. 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
5. Ulrich CM, Hamric AB, Grady C. Moral distress: a growing problem in the health professions? *Hastings Cent Rep*. 2010;40(1):20–22. doi:10.1353/hcr.0.0222

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6. Rodriguez-Ruiz E, Campelo-Izquierdo M, Estany-Gestal A, Hortas AB, Rodríguez-Calvo MS, Rodríguez-Núñez A. Validation and psychometric properties of the Spanish version of the measure of moral distress for health care professionals (MMD-HP-SPA). *Med Intensiva*. 2022;46 (3):169–170. doi:10.1016/j.medine.2022.02.001

7. Losa Iglesias ME, Becerro de Bengoa Vallejo R, Salvadores Fuentes P. Moral distress related to ethical dilemmas among Spanish podiatrists. *J Med Ethics*. 2010;36(5):310–314. doi:10.1136/jme.2009.034322

8. Tian X, Jin Y, Chen H, Jiménez-Herrera MF. Instruments for detecting moral distress in clinical nurses: a systematic review. *Inquiry*. 2021;58:46958021996499. doi:10.1177/0046958021996499

9. Lazzarin M, Biondi A, Di Mauro S. Moral distress in nurses in oncology and haematology units. *Nurs Ethics*. 2012;19(2):183–195. doi:10.1177/0969733011416840

10. 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

11. Olson LL. Hospital nurses' perceptions of the ethical climate of their work setting. *Image J Nurs Sch*. 1998;30(4):345–349. doi:10.1111/j.1547-5069.1998.tb01331.x

12. World Medical Association. World Medical Association Declaration of Helsinki. Ethical principles for medical research involving human subjects. *Nurs Ethics*. 2002;9(1):105–109. doi:10.1191/0969733002ne486xx.

13. Hamric AB, Blackhall LJ. Nurse-physician perspectives on the care of dying patients in intensive care units: collaboration, moral distress, and ethical climate. *Crit Care Med*. 2007;35(2):422–429. doi:10.1097/01.CCM.0000254722.50608.2D

14. Girela-López E, Beltran-Aroca CM, Boceta-Osuna J, et al. Study of the psychometric properties of the Spanish version of the measure of moral distress for health care professionals (MMD-HP-SPA). *Int J Environ Res Public Health*. 2022;19(23):15649. doi:10.3390/ijerph192315649

15. Pergert P, Bartholdson C, Blomgren K, Af Sandeberg M. Moral distress in paediatric oncology: contributing factors and group differences. *Nurs Ethics*. 2019;26(7–8):2351–2363. doi:10.1177/0969733018809806

16. Prentice T, Janvier A, Gillam L, Davis PG. Moral distress within neonatal and paediatric intensive care units: a systematic review. *Arch Dis Child*. 2016;101(8):701–708. doi:10.1136/archdischild-2015-309410

17. Angel S, Vatne S. Vulnerability in patients and nurses and the mutual vulnerability in the patient-nurse relationship. *J Clin Nurs*. 2017;26(9–10):1428–1437. doi:10.1111/jocn.13583

18. Dodek PM, Cheung EO, Burns KEA, et al. Moral distress and other wellness measures in Canadian critical care physicians. *Ann Am Thorac Soc*. 2021;18(8):1343–1351. doi:10.1513/AnnalsATS.202009-1118OC

19. Pergert P, Bartholdson C, Af Sandeberg M. The ethical climate in paediatric oncology-A national cross-sectional survey of health-care personnel. *Psychooncology*. 2019;28(4):735–741. doi:10.1002/pon.5009

20. Corley MC, Minick P, Elswick RK, Jacobs M. Nurse moral distress and ethical work environment. *Nurs Ethics*. 2005;12(4):381–390. doi:10.1191/0969733005ne809oa