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Original article

Moral distress in nursing students: Recognizing and addressing an overlooked challenge

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Abstract. *Introduction:* For nursing professionals, making decisions and taking actions in the face of illness can pose a new challenge each time, even though it is an expression of their professional role. At times, some decisions may go against customary practices, organizational policies, or institutional healthcare policies, causing moral distress. This phenomenon of moral distress also affects the population of nursing students, and it represents a critical threshold that should not be underestimated. *Materials and methods:* We conducted an online survey among Italian nursing students using a snowball sampling approach. The survey was conducted from January 2023 to April 2023, and social media platforms such as Facebook, Instagram, and WhatsApp were used as communication channels. *Results:* A total of 350 nursing students enrolled in various nursing programs across Italy participated in the study. The majority of participants were female, aged between 19 and 42 years (average = 23.21). The study results revealed that students can experience moral distress, with a correlation between moral distress and nursing student clinical placements. There was a stronger association with the potential harm factor compared to the factor of futility, indicating that students were significantly affected by moral and ethical work conditions. *Conclusions:* The students who participated in the study showed that not only were they unaware of the concept of moral distress, but they experienced it unknowingly and on a daily basis during clinical practice. Given the widespread nature of this phenomenon, it is of paramount importance to promote educational strategies for nursing students from their first year of studies to help them cope with moral distress during their clinical training. (www.actabiomedica.it)

Key words: Moral distress, students, nurse formation

Introduction

Moral distress (MD) is a complex phenomenon that characterizes the modus operandi of healthcare professionals, impacting the physical, psychological, and emotional well-being of nurses and the quality of their work (1–8). Over the past decade, there has been growing interest in researching the experiences of

moral distress among healthcare professionals (9,10). Jameton (11) defined moral distress as a painful feeling and/or psychological imbalance that occurs when nurses are aware of the most morally appropriate course of action in a situation but are unable to carry it out due to institutional barriers. These barriers may include time constraints, lack of managerial support, the exercise of medical power, and limitations imposed by institutional and legal policies . A study (12) emphasized that moral distress requires a triad of elements, including an ethical dilemma or conflict, moral values, and the inability to act during training (12). The psychological processes that occur in individuals when making ethical and moral decisions are described by Rest (13) in his "Four-Component Model," which includes the development of moral reasoning, moral judgment, moral intention, and moral competence. Barlem and Ramos (10) describe moral distress as a phenomenon that arises in clinical practice within microspaces of power, closely linked to the development of ethical and moral competencies throughout one's life. This was emphasized especially in the difficult moment of COVID-19 (6). These are related to moral uncertainty and inherent to human existence and social life (10), with possible causes including reduced interest, diminished resilience, and feelings of powerlessness. In recent years, interest in this topic has grown, allowing for the identification of various causes that lead to moral distress. Mealer and Moss (14) identified specific factors related to patient care, as well as internal and external constraints on nurses, such as religious conflicts and staffing shortages, as potential causes. A literature review (15) revealed that the main reasons for moral distress include working with incompetent staff, delivering care deemed futile, a shortage of nurses, and uncooperative behavior from patients and/or their families. Nurses can experience moral distress in two main ways: either they react in defense of the patient, which can still lead to frustration due to the consequences of their actions, or they experience feelings of powerlessness, demoralization, despair, anger, sorrow, and guilt due to the failure of what was initially intended (16). Various nursing practice situations that generate moral distress have been identified through several studies (17–19). Moral distress, characterized by moral suffering or psychological imbalance, can also affect nursing students at various stages of their educational journey. One such phase is marked by experiences in clinical settings, where ethical and moral values are frequently questioned (20) According to a targeted survey conducted in Brazil in 2014 (21), the main cause of distress among nursing students is the incompetence of the healthcare team. This, in turn, negatively affects students. When they suggest changes and improvements in healthcare practices, their input is often ignored, leading to prejudice and resistance from professionals. This can result in negative feelings such as frustration, discouragement, and ultimately moral distress (12). A study by Monrouxe et al. (22) highlighted how students, once introduced to hospital settings, reported witnessing violations of patient dignity or safety, experiencing workplace abuse, or witnessing abuse by other healthcare workers. Furthermore, due to the frequency of such incidents, students tend to become desensitized or disturbed, especially when the events are not related to educational objectives (22). Corley (23) argues that "nursing students are not prepared to label their feelings and identify effective ways to prevent or manage moral distress". Considering the widespread nature of this phenomenon, the combination of these factors can burden students to the extent that it irreparably influences their experience, potentially leading them to abandon their educational path (24). The objective of this research is to assess the knowledge, frequency, and impact of Moral Distress on nursing students during their academic journey.

Methods

Design

An observational, multicenter, cross-sectional study using snowball- sampling method was conducted from January 2023 to April 2023. The social channels used for data collection are Facebook, Instagram, and WhatsApp.

Research instruments

As considered for the Modified MDS-II Scale validated by Badolamenti et al (25), questionnaire

items can be divided into two sections: the first factor is labeled "futility" because it refers to items related to clinical actions that nurses can consider as futile, and are items from 1 to 6. The second factor is labeled "potential damage," and it refers to items that nurses can report as potentially injurious to the physical, physiological integrity of a patient (25), and refers to the last five items of the questionnaire.

Data collection procedures

Data collection was carried out through an ad hoc constructed questionnaire, subsequently computerized through the Google forms platform. The questionnaire, placed on an online platform and sent through the most common social platforms (WhatsApp, Facebook and Instagram) allowed participants to answer the questions directly from their own devices, as the purpose requires reaching a large number of participants. Data collection was carried out using Google Forms during the period from January 2023 to April 2023. Through the online distribution of the questionnaire, a total of 350 responses were collected. The data collected was processed in accordance with the regulations related to Good Clinical Practice (26) as well as the current data protection laws in effect (Law 31 December 1996, No. 675, 676, Official Gazette of 08/01/1997, Article 7 of Legislative Decree June 30, 2003, No. 196, and the European General Data Protection Regulation - GDPR) governing the handling of personal data and ensuring privacy.

Criteria for inclusion and exclusion from the study

All nursing students who agreed to participate in the study, of any age and gender, located in Italian universities, belonging to the first year, second year, third year, and those out of course, were included in the study; whereas all nursing students who did not agree to participate in the study and students not attending an Italian university were excluded.

Ethical considerations

The ethical characteristics of the study were set out in the questionnaire presentation and it was designed in accordance with the principles of the Italian data protection authority (DPA). Within the questionnaire presentation, the ethical characteristics of the study were stated. Those interested in

Table 1. Characteristics of the sample (n=350).

Baseline and working characteristics	**N**	**%**
Gender		
Female	271	77
Male	76	22
Unknown	3	1
Age (y)		
Range	18-42	
Mean	23.21	
STD	3.32	
Region of residence		
North	126	36
Centre	61	17
Sud and Isles	163	46
Year of Course		
First year	18	5
Second year	116	33
Third year	170	49
Out of course	46	13
Region of the internship		
North	108	31
Centre	73	21
Sud and Isles	169	48
Internship institution		
Public	311	89
Public and Private	5	1
Private	15	4
Affiliate	19	5
Operative Units of the internship		
Medium-low level of working intensity area	113	32
High level of working intensity area	237	68
Knowledge of 'moral distress'		
Yes	98	28
No	252	72
If you answered yes to the previous question, please indicate in which field		
During the internship	20	6
During lectures	61	17
During the internship and lectures	11	3
Never	250	1
Social network	8	2

Table 2. Psychometric characteristics of each item of the Modified Moral Distress Scale (MDS-II)) questionnaire items (25) divided by Frequency, Intensity, and Item score (Frequency x Intensity). Mean and Standard Deviation (SD) were provided.

	Frequency		Intensity		Item score	
Questionnaire	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Q1 Provide less than optimal care due to pressure from administrators to reduce costs	2.86	1.05	3.76	1.29	11.54	6.21
Q2 Witness healthcare providers giving "false hope" to patient or a family	2.28	1.05	3.57	1.49	8.98	6.03
Q3 Follow a family's wishes to continue life support even though it is not the best interest of the patient	2.60	1.25	3.44	1.45	9.87	6.70
Q4 Initiate extensive life-saving actions when I think they only prolong death	2.56	1.27	3.27	1.46	9.16	6.53
Q5 Follow a family's request not to discuss death with a dying patient who ask about dying	2.32	1.23	3.28	1.57	8.64	6.67
Q6 Carry out physician's order for what I consider unnecessary tests and treatments	3.54	1.13	2.29	1.36	10.79	6.56
Q7 Continue to participate in care for a hopelessly ill person who is being sustained on a ventilator, when no one will make a decision to withdraw support	2.29	1.27	3.14	1.58	8.33	6.87
Q8 Avoid taking action when I learn that a nurse colleague has made a medication error and does not report it	2.54	1.18	3.60	1.45	10.23	6.82
Q9 Assist a physician who, in my opinion, is providing incompetent care	2.39	1.21	3.70	1.60	10.02	7.08
Q10 Be required to care for patients I don't feel qualified to care for	3.07	1.10	3.96	1.27	13.03	6.66
Q11 Witness some medical students perform painful procedures on patients solely to increase their skill	2.44	1.38	3.37	1.67	9.51	7.69

participating were given an informed consent form, which reminded them of the voluntary nature of participation, as well as the confidentiality and anonymous nature of the information. In addition, to ensure that the questionnaires were anonymous and to allow for identification of participants, a sequential identification (ID) number was given to each registered participant. Each questionnaire, therefore, had an ID number that corresponded to the database ID.

Data analysis

Descriptive statistics (mean, standard deviation, frequencies, and percentages) of sample sociodemographic variables were calculated. For each item of the MDS-II, we computed mean, standard deviation, skewness, and kurtosis to evaluate the type of distribution.

The relationship between the variables was reported using Spearman's correlation between the questionnaire items and baseline characteristics.

A p-value < 0.05 was considered statistically significant. All data were analyzed with MATLAB software.

Characteristics of the sample

Questionnaires were filled by 350 students. The majority of the respondents were female (77%) and ranged from 19 to 42 years old (mean = 23.21). Half of the students (49%, n= 170) attended the third year, 33% (n=16) the second year and 18% (n=5) the first year of university. Thirteen percent (n=46) were out-of-course. Half of the respondents also attended the internship in the South Italy or isles (48%, n=69); 31% in the North (n=108) and 21% only (n=73) in the Centre of Italy. This internship was also held at a public institution for the majority of cases (89%, n=311) (Table 1).

Table 2 shows the results of the item analysis. A non-Gaussian distribution was revealed from the Skewness and Kurtosis indexes calculated for each item. The mean of frequency items ranged from 2.28 (item 2) to 3.54 (item 6), indicating that students may be exposed to moral distress conditions. The mean for intensity items ranged from 2.29 (item 6) to 3.96 (item 19), suggesting that students were considerably affected by moral and ethical working conditions. The mean for the score item ranged from 8.33 (item 7) to 13.03 (item 10), indicating a moderate level of moral distress.

To assess whether respondents were more affected by the futility factor than by the potential damage factor, the mean of both the factors were compared. As shown in Table 3, the mean of the potential damage dimension was higher than the mean of the futility dimension (10.22 vs 9.83). Friedman's test showed a significance difference between this two factor ($p<0.001$), suggesting that students were more affected by potential damage.

Spearman's correlation between questionnaire items and baseline characteristics was reported for assessing relationship between variables (Table 4).

Discussion

This study has revealed a correlation between moral distress and the clinical internship experiences of nursing students. Specifically, moderate moral distress was evident, with a greater emphasis on potential harm factors compared to futility factors. This suggests that students were significantly affected by moral and ethical work conditions. While the clinical environment offers students opportunities for learning, hands-on experience, and autonomy, it can also lead to internal conflicts with ethical dilemmas, particularly in their interactions with clinical preceptors (27,28). Sala Defilippis et al.'s study (28) identified a primary source of moral distress among nursing students as "poor teamwork" resulting from inadequate communication. Poor communication can increase the likelihood of experiencing moral distress up to fivefold (29), as previously observed in Wojtowicz et al.'s study (24) in which nursing students reported significant moral distress related to a medical hierarchy and preceptors'

Table 3. Correlation between Futility and Potential damage as two factors of Moral distress. A p value <0.05 was considered statistically significant (*p<0.05; **p<0.01; ***p<0.001).

	Mean	SD	Skewness	Kurtosis	p-value
Futility	9.83	1.13	0.49	1.75	**p < 0.001*** **
Potential Damage	10.22	1.73	0.80	2.60	

Table 4. Spearman's correlation between questionnaire items and baseline characteristics. A p value <0.05 was considered statistically significant (*p<0.05; **p<0.01; ***p<0.001).

Questionnaire items		Gender	Age	Year of Course (3° year vs other)	Region of the internship	Internship institution (public vs other)	Operative Units of the internship
1. Futility	**Q1**						
	ρ	-0.1625	0.2196	0.0401	0.1400	0.0052	0.0977
	p-value	**<0.01****	**<0.001*****	0.4	**<0.01****	0.9	0.06
	Q2						
	ρ	-0.1902	0.1706	0.0763	0.1448	0.0199	0.1185
	p-value	**<0.001*****	**<0.001*****	0.1	**<0.01****	0.7	**<0.05***
	Q3						
	ρ	-0.1717	0.1016	0.0233	0.809	0.0823	0.0607
	p-value	**0.001*****	**<0.05***	0.6	0.1	0.1	**0**.2
	Q4						
	ρ	-0.1342	0.1827	0.0553	0.1285	0.0681	0.1096
	p-value	**0.01****	**<0.001*****	0.3	**0.01*****	0.2	**<0.05***
	Q5						
	ρ	-0.1556	0.1946	0.1586	0.1621	0.0452	0.2396
	p-value	**<0.01****	**<0.001*****	**<0.01****	**<0.01****	0.3	**<0.001*****
	Q6						
	ρ	-0.0918	0.1403	0.1508	0.0737	0.0317	0.1730
	p-value	**0.08**	**<0.01****	**<0.01****	0.1	0.5	**<0.001*****
2. Potential damage	**Q7**						
	ρ	-0.1621	0.2079	0.0798	0.2046	0.1421	0.1279
	p-value	**<0.01****	**<0.001*****	0.1	**<0.001*****	**<0.01****	**0.01****
	Q8						
	ρ	-0.1843	0.1548	0.0839	0.2404	0.1226	0.1445
	p-value	**<0.001*****	**<0.05***	0.1	**<0.001*****	**<0.05***	**<0.01***
	Q9						
	ρ	-0.1611	0.1063	0.0503	0.1432	0.1140	0.1182
	p-value	**<0.01****	**<0.05***	0.3	**<0.01****	**<0.05***	**<0.05***
	Q10						
	ρ	-0.0496	0.0827	0.0389	0.1728	0.0135	0.1241
	p-value	0.3	0.1	0.4	**0.001*****	0.8	**<0.05***
	Q11						
	ρ	-0.0850	0.1533	0.0817	0.1305	0.0625	0.1854
	p-value	0.1	**<0.05***	0.1	**0.01****	0.2	**<0.001*****

inability to support ethical change within the unit. Students, in fact, possess moral sensitivity, recognizing moral situations and feeling themselves as "patient advocates" (30). However, this moral sensitivity often lacks the "moral courage," which is frequently absent in students when they find themselves in situations of ethical and moral irregularities. This inability to take a stance and express their viewpoint even when they know the best practice to follow leads to moral distress (31). It is moral courage that can reduce moral distress, leading to personal and professional growth, as well as empowerment (30). In contrast, moral distress can lead students to alter their self-concept, affecting how they perceive themselves as nurses. A positive self-concept is associated with higher job satisfaction and reduced experiences of stress, while a negative perception can

lead to burnout (32). The impact of moral distress on the health and well-being of nurses can manifest as emotions such as guilt, insecurity, loss of self-confidence, anger, and frustration. Regarding newly graduated nurses, predictors of job satisfaction turn negative in the presence of incivility from colleagues and supervisors, and such incivility toward newly graduated nurses can negatively impact their self-esteem and confidence (33,34). However, the effects of moral distress on the health, well-being, and intention to stay among nursing students have not yet been widely reported in the literature (35,36).

The role of the clinical preceptor is crucial in the process of shaping professional identity. As observed in Yao et al.'s study (36), professional identity and self-efficacy could have a positive impact on competence. Professional identity also influences the student's transition from an academic approach to a professional one, including their willingness to remain in the nursing profession (37). In this context, the preceptor plays a vital role for students who are entering the clinical setting and the working world for the first time. They should possess certain characteristics, as outlined by Driscoll et al. (38) and Wilson et al. (39), such as having high levels of moral autonomy and responsibility to take morally correct actions for a patient.

The findings of this study demonstrate significant correlations between moral distress and several demographic and contextual variables, suggesting that both individual characteristics and the environment in which clinical training occurs play a critical role in shaping nursing students' experiences. Gender differences emerged as a significant factor, with correlations observed between gender and specific items related to the "futility" and "potential harm" dimensions of moral distress. These results align with prior research, which has highlighted the influence of gendered perceptions and socialization in ethical decision-making and professional experiences (31). Male and female students may approach and internalize moral and ethical challenges differently, which could account for these disparities. Future studies are encouraged to explore how gendered expectations within the nursing profession may exacerbate or mitigate moral distress during clinical internships.

The regional context of the internship also proved to be a determinant in moral distress levels. Students in Southern Italy and the islands reported higher levels of moral distress compared to their counterparts in Northern regions. This could be attributable to systemic and organizational disparities between these areas, including resource availability, healthcare infrastructure, and cultural approaches to healthcare delivery. Studies conducted in similar contexts have noted that resource-constrained environments amplify ethical dilemmas by placing additional pressures on students to act in ways that may conflict with their moral judgments (15,24). The operational intensity of clinical units also emerged as a critical factor, with high-intensity units being associated with greater levels of moral distress. Such environments, often characterized by increased patient acuity, rapid decision-making, and limited supervisory support, may heighten students' sense of vulnerability and ethical conflict (28). These findings underscore the need for structured mentorship and ethical training tailored to the demands of these settings.

The correlations between moral distress and internship characteristics, including the type of healthcare institution, further support the significance of contextual influences. Students placed in public healthcare institutions reported higher distress levels, likely due to the systemic pressures and resource limitations that are often more pronounced in public settings (38). The alignment of these results with theoretical frameworks, such as Rest's Four-Component Model, provides additional evidence of their validity. Rest's model emphasizes the interplay between moral awareness, moral reasoning, and the capacity to act within ethical constraints, all of which are evidently affected by the clinical context in which students operate.

A potential limitation of this study is the variability in training plans across different universities, including differences in the clinical internship areas covered during each year of the course. These discrepancies could result in differing levels of exposure to moral and ethical challenges, potentially influencing the reported levels of moral distress. For example, universities that introduce high-intensity clinical experiences earlier in the curriculum may inadvertently expose students to ethical dilemmas before they have

fully developed the skills and competencies needed to navigate them. Addressing this limitation in future studies would require detailed mapping of training plans and an analysis of how these variations influence moral distress outcomes. Standardizing certain aspects of clinical training across universities could also help mitigate these disparities and provide a more uniform educational experience for nursing students.

It is particularly notable that students in their later academic years experienced higher levels of moral distress, as indicated by the significant correlation between moral distress and year of study. This trend could reflect the increased exposure to clinical environments and ethical dilemmas as students advance in their training. However, it also suggests a potential gap in preparatory education regarding moral courage and ethical resilience, as highlighted by Corley et al. (39) and Koskinen et al. (30). Educational interventions that build ethical competence and foster moral courage, beginning in the early stages of nursing education, could mitigate these challenges and better prepare students for the realities of clinical practice.

Despite the insights gained from this study, limitations such as its cross-sectional design must be acknowledged. While the significant correlations observed provide valuable evidence, they cannot establish causality. Longitudinal studies are needed to examine how moral distress evolves over time and to further explore the causal relationships between demographic, contextual, and experiential factors. Additionally, qualitative approaches may provide a deeper understanding of the lived experiences of nursing students facing moral distress and the strategies they employ to cope with ethical conflicts.

Conclusions

Healthcare professionals, in their daily practice, rely on a set of ethical principles that justify the morality and integrity of the care they provide. Nurses who experience moral distress find themselves in a situation of significant discomfort. They recognize the most appropriate course of action for the clinical situation, but for various reasons, they are unable to implement it, leading them to act in opposition to their professional values. Research on moral distress has mainly been conducted on nurses.

This study has revealed a correlation between moral distress and the clinical internship experiences of nursing students. The analysis performed confirmed that the majority of interviewed students not only lack awareness of the existence of this phenomenon but also experience it unknowingly and on a daily basis during their clinical practice. For these reasons, educational training should provide students with all the necessary tools to safely and effectively carry out their clinical internships in hospital settings. Given the pervasiveness of the phenomenon, it would be of paramount importance to promote, from the very first year of nursing degree programs, educational strategies that help student interns develop greater ethical and moral competence to reduce the level of moral distress.

Despite the potentially widespread presence of moral distress in healthcare settings, the significance of the resulting consequences has often been underestimated. In conclusion, as indicated by the author Badolamenti (25), identifying the frequency and intensity of moral distress could serve as a crucial incentive for the well-being of healthcare workers. This includes nursing students who represent the future of the nursing profession.

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