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ORIGINAL ARTICLE

Effect of Moral Distress on Decision Making among Nurses in Intensive Care Units

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ABSTRACT

Background: Moral distress, as one of the most important issues in the nursing profession, can negatively affect the healthcare system

Objectives: To examine the effect of moral distress on decision making.

Methodology: A descriptive cross-sectional study a non-probability sampling method was used and a total sample collected was (126) ICU nurses

Result: Moral distress among ICUs nurses were moderate and decision making was good Conclusion: Although nurses in ICUs perceive good decision making but suffered from moderate MD which affected their decision making. MD is still an important issue that nurses may face in ICUs

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Keyword: moral distress, decision making, ICU nurses

INTRODUCTION

A stressful environment exists in an intensive care unit (ICU) due to high patient mortality and morbidity, everyday encounters with ethical challenges, and a tension-filled atmosphere[1] .The intensive care unit (ICU) is a particularly complex and challenging work environment for critical care nurses[1]. Critical care nurses are repeatedly exposed to work-related stressors, such as engagement in end-of-life discussions, artificial support device extension, and the possibility of providing ineffective treatment, When nurses face these difficult situations, they may feel helpless, unable to provide treatment according to their own convictions, and hence subject to moral suffering[1]

Moral distress (MD) is the distress that a health care provider experiences when he or she is certain of an ethical course of action but is unable to take it[2].Moral distress happens when an individual knows the proper course of action but is unable to carry it out due to institutional restraints[1] .Suffering on a moral level requires three conditions: (1) A morally acceptable action is necessary; (2) the individual chooses a suitable strategy based on their moral convictions; and (3) the individual is eventually unable to carry out their plan of action due to internal and/or external constraints[3].

Clinical decision-making (CDM) is a fundamental concept in nursing that has an effect on the treatment and recovery of patients[4].

METHODOLOGY

The research sampled ICU nurses working in Iraq's intensive care units. The sample was chosen using a non-probability (purposive) sampling technique. There were 180 nurses employed in intensive care units.

The questionnaire included the MD and CDMN scales, as well as demographic information such as age, gender, marital status, educational level, years of experience, and shift type.

Emil acquired permission from the copyright holder. Each item is scored on two dimensions: frequency and intensity. Each section has a 5-point Liker scale, and the score for each item may range from one to twenty-five by multiplying frequency by intensity. MDS-11 has a total score range of one to 275. (25x11). Brisling's back translation approach was used to convert the MDS-11 into Arabic, Cronbach's alpha coefficient was 0.91, indicating dependability. The average technique yielded a content validity index of 0.98 [6].

The study was done in five intensive care units (ICUs) located in five different hospitals in four Iraqi governorates. These hospitals included Karbala's Imam Hussain Medical City, Babylon's Al Hillah surgical hospital, Najaf's Al Furat and Al Sader hospitals, and Al Diwaniah hospital in Al Diwaniah City. The data collection period began in early January 2022 and ended in late February 2022. The data collection instrument was a printed questionnaire sent to the research sample. The questionnaire took between ten and fifteen minutes to complete for each participant.

MD and CDMNS mean and standard deviation were computed. The Pearson correlation coefficient, Spearman's rank correlation coefficient, analysis of variance (ANOVA), and linear regression model were used to assess the correlation between variables. SPSS version 2021 was used to determine the correlation between variables. The level of significance was set at p0.05.

RESULTS

According to Table 1, the mean age of nurses in the study was 25.3 years, with a standard deviation of 0.832. Females made up more than half of the participants (56.9 %). The mean number of years of experience for participants was 8.2, with a standard deviation of 0.60662. The majority of participants held a bachelor's degree (45.9 %). Additionally, 62.4 percent of nurses worked morning shifts. Additionally, more than half of nurses in this survey (56.0 percent) were single.

Table 1: Demographic Characteristics among the Study Sample

Characteristics	F	%
Age M ± SD 25.3 ± 0.832		
Gender	43.1	47
Male	56.9	62
Female Total	100.0	109
Years of experience M ± SD 8.2 ± .60662		
Level of education	16.5	18
Nursing school graduate	33.9	37
Diploma	45.9	50
Bachelor's degree	3.7	4
Master's or Ph. D Total	100.0	109
Shift	62.4	68
Morning	37.6	41
Night Total	100.0	109
Marital status		
Single	56.0	61
Married	43.1	47
Divorce	.9	1
Widow Total	0	0

f. = Number of frequency, %=Percentage.

The overall score for each item and the total score for moral distress are shown in Table 2. With a mean of SD 13.614 and SD of 7.61809, participants scored better on item seven "Continue to participate in care for a hopelessly ill person who is being sustained on the ventilator, when no one will make a decision to withdraw support". Item nine "Assist a physician who, in my opinion, is providing incompetent care" is followed by a mean and standard deviation of 12.192 and 7.69376. The lowest score was on question two, "Witness healthcare providers giving false hope" with a mean and standard deviation of 6.2202 and 4.57319, respectively. The research sample's mean MD score was 101.4128 32.74486, indicating considerable moral distress.

Table 2: The MD Rate among the Participants

N.	Items	Frequency		Intensity		Item's score	
		Mean	SD	Mean	SD	Mean	SD
1	Provide less than optimal care due to pressure from administrators to reduce costs.	2.30	1.23	2.75	1.25	7.0183	6.23904
2	Witness healthcare providers giving “false hope” to a patient or a family	2.28	1.06	2.59	1.07	6.2202	4.57319
3	Follow a family’s wishes to continue life support even though it is not the best interest of the patient.	2.16	1.17	2.77	1.23	6.2936	5.10501
4	Initiate extensive life-saving actions when I think they only prolong death	2.98	1.30	3.15	1.27	10.137	7.26033
5	Follow a family’s request not to discuss death with a dying patient who asks about dying.	2.69	1.41	2.80	1.33	8.4037	6.77703
6	Carry out physician’s order for what I consider unnecessary tests and treatments.	2.97	1.44	3.14	1.24	10.275	7.68942
7	Continue to participate in care for a hopelessly ill person who is being sustained on ventilator, when no one will make a decision to withdraw support.	3.51	1.41	3.66	1.15	13.614	7.61809
8	Avoid taking action when I learn that a nurse colleague has made a medication error and does not report it.	2.42	1.30	3.01	1.24	7.9174	6.05091
9	Assist a physician who, in my opinion, is providing incompetent care	3.20	1.40	3.62	1.24	12.192	7.69376
10	Be required to care for patients I don’t feel qualified to care for	2.70	1.39	3.37	1.23	9.7890	6.77833
11	Witness some medical students perform painful procedures on patients solely to increase their skills.	2.80	1.24	3.14	1.15	9.5505	6.64090
Total		101.4128 ±32.74486					

M = Means, SD = Stander deviation. Interval: F= 1-5, I = 1-5, F *I = 1-25, Total = 11- 275

Table 3: Respondents’CDMNS Scores

Subscale	M	SD
Subscale A: Search for Alternatives and Options	33.513	4.8944
Subscale B: Canvassing of Objectives and Values	33.825	4.4427
Subscale C: Evaluation and Reevaluation of Consequences	32.541	4.0655
Subscale D: Search for Information and Unbiased Assimilation	32.055	4.1374
Total decision making	131.91	13.158

Table 4 shows the higher rate was in subscale B "canvassing of objectives and values" with mean and SD of 33.8257± 4.4427. On the other hand, the lowest rate was in subscale D "search for information and unbiased assimilation" with mean and SD of 32.0556 ±4.1374. The mean and SD of subscale A "search for alternatives and options" were 33.513±4.8944 and for subscale C "evaluation and reevaluation of consequences" were 32.541± 4.0655, respectively. The total score for the scale was of (Mean ± SD 131.91 ± 13.158) which indicates good decision making.

Table 4: The Correlation between Moral Distress and Decision Making

	Decision making									
	A		B		C		D		Total	
Moral distress	P. value	Cc	P. value	Cc	P. value	Cc	P. value	Cc	P. value	Cc
	.096	.136	.015	.149	.038	.76	.027	.083	.029	.102

P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05

Table 4 shows there was a significant correlation between moral distress and subscales B, C, and D (p=.015, .038, and .027) respectively. Regarding the total score of decision making, there was a significant correlation between moral distress and total decision making (p=.029).

Table 5 **:**Correlation between Nurses' demographics' and Moral Distress, Professional Quality of Work Life and Decision Making

	Moral distress		Decision making	
	P. value	Cc =	P. value	Cc =
Age	.043	.201	.045	.170
Gender	.206	F = 1.254	.061	F = 3.593
Years of experience	.034	Cc = .354	.034	Cc = .160
Level of education	0.42	F = 2.243	.043	F = 2.298
Shift	.749	Cc = .095	.166	Cc = 1.941
Marital status	.764	F = .267	.027	F = 3.741

P=probability value, NS: Non-Significant at P > 0.05, S: Significant at P < 0.05

At P-values of.043 and.045, respectively, Table 5 demonstrates a strong link between age and moral distress and decision making. Additionally, it demonstrates that there are no statistically significant differences between males and females in terms of moral distress and decision-making (p-values=.206 and.061, respectively). The findings indicate a substantial link between moral distress and decision making and the number of years of experience of nurses (p-value.034 and.044, respectively). The findings indicate that there is no statistically significant relationship between nurses' years of experience and (CS) p=.126. According to Table 5, there is a significant relationship between nurses' educational level and moral distress and decision-making (p=.042 and.043, respectively). There are no statistically significant variations in moral distress or decision-making for nurses' work shifts (p =.749 and.166, respectively). Table 5 demonstrates that decision-making is considerably different depending on the marital status of nurses (p=.027). The findings indicated that there are no statistically significant associations between moral distress and marital status among nurses (p=.764).

DISCUSSION

Nurses' MD was moderate in this study with a total mean score of 101.4 and SD 32.7. In comparison with other studies, Study done in Treviso, Italy[6]. The findings indicated moderate level of MD

among nurses who worked in medical, surgical, and intensive-care settings [6]. Also another study findings of moderate MD among nurses[7]. Furthermore, study found that nurses had moderate moral distress [8]. The researcher believes that ICU nurses feel distressed because they deal with critical patients, and they work difficult that expose them to many hard situations and events[1]

The CDMNS score was found significant, with a mean and standard deviation of (131.9113.158). The four CDMNS subscales yielded the following results: Subscale A: search for alternatives and Options (33.5134.8944), subscale B: canvassing of objectives and values (33.8254.4427), subscale C: evaluation and reevaluation of Consequences (32.5414.0655), and subscale D: information seeking and unbiased assimilation (32.0554.1374), this finding corroborates with two study[8 9] that demonstrated a high CD. Another study, found that the overall and subscale scores were significantly higher in this study[11]. Another research conducted at two pandemic hospitals in Istanbul to assess nurses' clinical decision-making abilities[12]. The researchers discovered that nurses' mean scores on the CDMNS subscales "Search for alternatives or options," "Canvassing of objectives and values," "Evaluation and reevaluation of consequences," and "Search for information and unbiased assimilation of new information" were 37. 644. 46, 35. 985. 18, 34. 343 45, and 34. 264. 04, respectively. The mean CDMNS score of the nurses was 142. 2214. 57, which is consistent with the study outcomes. ICU nurses must be able to think critically and make sound judgments since they work with critically ill patients[12].

The findings indicate that there is a link between moral distress and CDMNS (p=.0029). This conclusion corroborates previous research, which established a link between moral discomfort and decision-making[13 14]. ICU nurses feel moral discomfort as a result of the ICU atmosphere, patient care, and unexpected ICU emergencies, among other causes. This moral anguish will influence nursing care decision-making[15].

The finding demonstrates a statistically significant relationship between moral discomfort and age. This discovery is consistent with two studies [16 17]. The negative association between age and moral anguish exists because responsibility increases with age, as seen by Borhani et al [18].Additionally; the study indicates a substantial relationship between age and decision-making. This conclusion is consistent with study which discovered about the effect of age on decision-making[4]. Nurses' thinking matures with age, that agree with study[19].

There are no significant differences in moral distress and decision-making based on the gender of nurses, which is consistent with study which discovered no variations in moral distress by gender[20], while study discovered no significant connection between gender and CDMNS[21]. There are no variations between genders experiencing moral distress and those experiencing CDMNS. Males and females have the same degree of mind and gender; there is no difference in thought or patient care, as supported by research done by Azizi et al[22]. The conclusion demonstrates a substantial relationship between moral anguish and decision-making and the number of years of experience of nurses; this relationship is comprised with study which discovered a clear correlation between years of experience and moral anguish[2].

Another study discovered that job experience significantly influenced clinical decision-making[21] .Nursing experience enhances one's thoughts, abilities, and ability to provide high-quality care. The study demonstrates a substantial relationship between moral discomfort, decision-making, and the degree of education attained by nurses. This conclusion is shared with study which discovered a substantial relationship between moral discomfort and educational attainment[2]. According to Sirilla et al, education exhibited no significant relationship with MDS-R results[23]. Study discovered a substantial relationship between CDMNS and amount of education[24], whereas study discovered no such relationship[21]. The overall level of education had an effect on the development of thinking and the ability of nurses to deal with situations and make sound nursing care judgments[25].

The study discovered no statistically significant relationship between moral distress and decision-making with nurse's shift. This finding is comparable to study which discovered that there were no significant changes across shifts[26].Study observed no significant differences between shifts and CDMNS in another investigation[21]. The type of shift has no effect on the nurse's personality, effectiveness at work, or ability to make appropriate decisions regarding the patient's care if the shift is scheduled regularly and has an adequate number of nurses[27]. The study demonstrates the strong relationship between decision-making and the marital status of nurses. Ludin discovered no statistically significant associations between CDMNS and marital status. Marital status had no effect on my work as an ICU nurse, but perhaps married nurses have greater responsibility, which influences decision-making[21].

CONCLUSION

While CDMN was good among ICU nurses, they also experienced moderate MD. It remains a serious concern that nurses may encounter in intensive care units. Clinical decision-making capacity is a critical talent for nurses to acquire and practice in order to guarantee patient safety and effective care delivery. Despite the fact that nurses in ICUs have a variety of jobs and responsibilities (as they care for critically ill patients), MD can be a problem. MD and CDMN were both influenced by age and education level.

Recommendations: Increased collaboration, nurse autonomy, and interdisciplinary respect will almost certainly result in a stronger appreciation for nursing input and a decrease in moral suffering. It is advised that initiatives be developed to minimize MD and, as a result, nurse satisfaction and patient care. The findings imply that nurses should get specialized training in making clinical judgments using a variety of techniques.

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