Abstract

Background: Nurses experience moral distress due to barriers in the workplace in the process of moral decision-making. It seems that the psychological ability of nurses in clinical environments can reduce their moral distress.

Objectives: The present study aimed to investigate the relationship of moral distress and psychological ability of nurses working in hospitals affiliated to Shahroud University of Medical Sciences in 2018.

Methods: In this descriptive-correlational study, all eligible nurses were included in the study through the convenience sampling method. Two questionnaires were used to collect the data, including Corley's Moral Distress Scale and Spritzer's Psychological Empowerment. Finally, data analysis was performed using descriptive and analytical statistics. SPSS software was used to analyze the data by descriptive and inferential statistics tests such as independent t-test, Pearson’s correlation, and unilateral analysis. (P-value <0.05).

Results: The average frequency and intensity of the moral distress in nurses were classified based on the upper floor as 2.41 ± 1.02 and 2.63 ± 0.86, and the psychological capacity of the nurses was placed in the middle class which was 31.88 ± 4.92. Based on the findings, the frequency of moral distress had an inverse relationship with the dimensions of independence and effectiveness and the total score of psychological ability (P<0.05). Eventually, there was a significant direct association between the average score of moral distress tension and the merit dimension of nurses’ psychological ability (P<0.05).

Conclusion: In general, a statistically significant relationship was found between moral distress and psychological ability in line with the interventions aimed at combating moral distress.

Keywords: moral distress, psychological empowerment, nurses

Introduction

Moral distress in nurses is one of the most important and challenging issues that can lead to a reduction in nurses’ job satisfaction and thus job-leaving decisions, and it is experienced when nurses are unable to implement their moral decisions in clinical situations [1]. Corley first addressed moral distress in nurses and reported that 80% of nurses experienced average to high levels of moral distress [2]. Since then, moral distress has been studied in different workplaces of nurses. According to Shoorideh Atashzadeh et al., the level of moral distress for nurses in the special care unit was high in the special parts of the educational hospitals in thirteen provinces of Iran [3]. In their study on nurses working in the internal medicine, surgery, intensive care unit, coronary care unit, and emergency departments of the educational and medical centers of Tehran University of Medical Sciences, Julaei et al. found that nurses experienced moderate intensity of moral distress [4]. Similarly, Ameri et al. widely reported nurses’ moral distress in the oncology department [5]. Evidence shows that nurses’
moral distress affects the quality of patient care and safety [6]. Numerous topics affect the experience of moral distress in nurses, including organizational and environmental factors, complexity and cultural diversity, the lack of resources, and other tensions in the workplace. Furthermore, nursing researchers believe that the lack of adequate independence of nurses in treatment processes is the source of many moral distressful situations [7]. Additionally, some stressors of hospital staff are the constant confrontation of nurses with patients, the high levels of their work responsibility, the lack of proper facilities, and confrontation with unpredictable situations and moral distresss [5]. Psychological empowerment is one of the factors that has a significant impact on people’s responses to stressors in the workplace, and increasing this factor can increase people’s mental strength to cope with stressful situations. In addition, psychological empowerment can be effective in managing workplace conflicts and reflects nurses’ feelings about their workplace [8]. From Spritzer’s viewpoint, psychological empowerment has several dimensions such as meaningfulness, competency, independence, and effectiveness. Meaningfulness represents the value of one’s career goals and their inner interest in the profession and competency refers to a person’s belief in their abilities and capacity to do things. Further, independence implies having the freedom of action in doing work and effectiveness is the ability to influence professional outcomes [9]. In their study in educational hospitals of Zanjan, Eskandari et al. reported high levels of the psychological ability of nurses and Zahednejad et al. demonstrated medium to high levels of this ability in their study in hospitals affiliated to Shahid Beheshti University of Medical Sciences [10, 11]. Furthermore, Barati et al. concluded that the psychological ability of nurses in Iran was at average levels [12]. The ability of nurses in the psychological dimension changes their attitudes and judgment about different individual and organizational issues and has different consequences for nurses. Moreover, the psychological ability of nurses creates a kind of force in them and increases their performance. Similarly, empowerment is an important factor in controlling job stress and increases people’s desire to control stress [13]. Considering that high moral distress in the nursing profession is regarded as one of the most important job stresses for nurses [4], investigating the psychological ability of nurses and its relation to moral distresss in clinical places is necessary. Only one study was found in this regard, the findings of which demonstrated a negative relationship between nurses’ moral distress and psychological ability [8]. Reviewing the literature, extensive search was found on information sources and nurses’ moral distress or empowerment. Nonetheless, only one study was available regarding determining the relationship between nurses’ moral distress and psychological ability in hospitals affiliated to Shahroud University of Medical Sciences.

Methods
This descriptive-correlational study examined all nurses working in different parts of hospitals affiliated to Shahroud University of Medical Sciences and health services by using the accessible method (from March 2017 to May 2018). All nurses showing their willingness to participate in the research and having the characteristics of the studied people were included in this study. The characteristics of the samples were having work experiences of at least one year in the relevant department and having a bachelor’s degree or higher.

Two questionnaires were used in this study. The first questionnaire was the scale of Corley’s revised moral distress which was revised in 2010. It consisted of 21 phrases that measured the frequency and intensity of moral distress according to the Likert-type scale and included five parts, measuring frequency ranging from never (0) to daily [4] and intensity within the range of never (0) to very high [4]. The general moral distress for each statement was calculated by multiplying the score by the intensity of the moral distress and the frequency of the moral distress of that phrase. Therefore, the range of the total moral distress score in each phrase ranged from 0 to 16. Additionally, the overall moral distress score for intensity, frequency, and moral distress was obtained from the average of the total scores. Then, the obtained score of frequency and moral distress from the entire scale was classified.
into four categories of low (0-1), medium (1.01-2), high (2.01-3), and very high (3.01-4). Although the tools of ethical stress analysis were valid and reliable according to previous studies [5], the formal and content validity of the questionnaire was examined using the opinions of ten professors and experts of Shahroud University of Medical Sciences and their corrections and comments were applied on the questionnaire accordingly. In addition, the reliability of the questionnaire was investigated using the internal reliability method, which had a Cronbach’s alpha coefficient of 0.88.

The second instrument was the Spritzer’s psychological empowerment questionnaire. It encompassed 12 phrases regarding four dimensions of meaningfulness, competency, independence, and effectiveness based on a Likert-type scale ranging from completely opposite (score 1) to completely agree [5]. The average score of each dimension (from 1 to 5) and the total average score of all dimensions determined the total psychological ability score. This score varied from 4 to 20 and a higher score indicated higher levels of psychological ability [8]. The formal and content validity of the questionnaire was examined using the opinions of ten professors and experts of Shahroud University of Medical Sciences and their corrections and comments were applied accordingly. Finally, the reliability of the questionnaire was assessed using the internal reliability method, which demonstrated a Cronbach’s alpha coefficient of 0.84.

In addition to the above-mentioned questionnaires for data collection, nurses’ demographic and occupational information, including age, gender, marital status, level of education, employment status, clinical work experience, clinical work experience in the current department, and dominant work shift, as well as the names of sections and the amount of monthly incomes was collected as well. The research plan was approved by the researchers, and a license was obtained from the Ethics Committee of Shahroud University of Medical Sciences with the code of ethics 32/920. Then, the researchers referred to medical centers, entered the desired sections, obtained the permission of the head of the department, and introduced themselves. After explaining the research objectives and obtaining the consent of the participants, the researchers distributed the questionnaire and collected the desired data in the same shift or the next one. SPSS software was used to analyze the data by descriptive and inferential statistics tests such as independent t-test, Pearson’s correlation, and unilateral analysis. The significance level was considered to be 0.05. Finally, data normality was assessed using the Kolmogorov-Smirnov test, which was normal.

**Results**

Based on the findings of the present study, 106 (86.88%) and 16 (13.12%) people were female and male nurses, respectively (n=122). The age range of participants was 23 to 52 years with an average age of 32.62 ± 4.85 years. In addition, 54 nurses (44.26%) were in the age group of 31-40 years and all nurses had a bachelor’s degree (Table 1).

**Table 1: Demographic and Professional Characteristics of Nurses and its Relationship with Moral distress**

| Personal and occupational details | Frequency N (%) | Relationship with Moral distress | Relationship with Psychological Ability |
|----------------------------------|-----------------|----------------------------------|----------------------------------------|
| **Gende**                        |                 |                                  |                                        |
| Male                             | (13/12)16       | T-0/69                           | T=0/61                                 |
| Female                           | (86/88)106      | P-0/21                           | P=0/29                                 |
| **Age**                          |                 |                                  |                                        |
| 32/61 ± 4/85                     |                 | r-0/31                           | r-0/22                                 |
|                                  |                 | *P-0/001                         | **P-0/06                               |
| **Work experience**              |                 |                                  |                                        |
| 8 ± 2/52                         |                 | r-0/41                           | r-0/17                                 |
|                                  |                 | p-0/07                           | p=0/06                                 |
| **Workplace(Ward)**              |                 |                                  |                                        |
| Special                          | (31/15)38       |                                  | F-1/28                                 |
| Internal                         | (25/40)31       | *P-0/04                          | F-3/17                                 |
| Surgical                         | (22/96)28       |                                  | **P-0/06                               |
| Emergency                        | (20/49)25       |                                  |                                        |

*Note:* A statistically significant relationship at P<0.05 level; T independent; *Pearson’s coefficient; **One-way analysis of variance
Further, the average frequency of moral distress in nurses was 2.41 ± 1.02 and the mean intensity of moral distress was 2.63 ± 0.86. Furthermore, the average score of moral distress was equal to 6.87 ± 2.76 and the mean intensity of moral distress was 2.63 ± 0.86. The highest and lowest mean scores of psychological empowerments were related to the competency dimension with a mean (SD) of 9.64 ± 1.16 and the independence dimension with a mean (SD) of 6.89 ± 1.22 (Table 2).

Table 2: Scope of Scores, Average, and Standard Deviation Dimensions of Psychological Empowerment and Moral distress of Nurses

| Range of Scores | Average and Standard Deviation |
|-----------------|-------------------------------|
| Total psychological ability | 60-12 |
| Meaningfulness | 15-3 |
| Competency | 15-3 |
| Independence | 15-3 |
| Effectiveness | 15-3 |
| Total moral distress | 16-0 |
| Abundance | 4-0 |
| Intensity | 4-0 |

According to Pearson’s correlation test, there was a statistically significant positive relationship between moral distress and nursing age (P = 0.001, r = 0.31). Moreover, the one-way analysis of variance represented that the mean score of nurses’ moral distress in different work environments had a statistically significant difference (P = 0.04, P = 1.28). Nurses working in the intensive care unit and surgical wards showed the highest and the lowest moral distress, respectively. Other demographic and professional variables did not have a statistically significant relationship with moral distress. Additionally, the mean scores of nurses’ psychological ability did not differ significantly in different work environments (P = 0.06, F = 3.17), the details of which are presented in Table 1. The relationship between moral distress and psychological ability of nurses was examined based on Pearson’s correlation coefficient. Based on the findings, the mean of the frequency scores of situations leading to moral distress demonstrated a significant and negative correlation with the mean scores of the dimensions of independence (P = 0.021, r = 0.0143), effectiveness (P = 0.041, r = -0.166), and the total score of psychological ability (P = 0.039, r = -0.150). In addition, a significant and positive correlation was found between the mean score of moral distress intensity and the competency dimension of the psychological ability of nurses (P = 0.048, r = 0.136), the related data are shown in (Table 3).

Table 3: Relationship between Psychological Empowerment and Moral distress of Nurses

| Psychological Empowerment | Moral distress of Nurses | Dimensions of Psychological Empowerment |
|---------------------------|-------------------------|-----------------------------------------|
|                           | Total Score             |
|                           | Significance            | Eligibility                              | Independence | Being effective |
| Frequency                 | r = -0/151              | r = 0/034                                | r = -0/143   | r = -0/166      | r = -0/150      |
|                           | p = 0/08                | p = 0/21                                 | *p = 0/021   | *p = 0/041      | *p = 0/039      |
| Intensity                 | r = -0/071              | r = 0/136                                | r = 0/057    | r = 0/011       | r = 0/021       |
|                           | p = 0/11                | *p = 0/048                               | p = 0/12     | p = 0/92        | p = 0/17        |

Pearson’s r coefficient*

Discussion

According to the research findings, there was a significant relationship between the frequency of nursing moral distress situations and its intensity and some dimensions of psychological empowerment. The nurses’ moral distress and psychological ability were at high and moderate levels, respectively. In the study of Barati et al.,
the average psychological ability of nurses was moderate [12]. Similarly, Ghamari Zare et al. assessed the ability of nurses at a good level [13]. The highest and lowest moral distresses were observed in nurses who worked in the intensive care unit and surgery ward, respectively. In other studies by Atashzadeh Shooreideh et al. and Browning, the special parts of 13 educational provinces of the country and the special parts experienced higher moral distress [3,8] and stress. Likewise, Lusignani et al. and Celine et al. reported that the moral distress of nurses was low in the internal medicine and surgery departments [14,15]. The average scores of the psychological ability of studies in the country were compared with those of foreign studies. Accordingly, the average scores among nurses attending the annual conference of orthopedic nurses at Western Reserve University were higher in some foreign studies such as Browning, Stewart et al., and DiNapoli et al. [16,17,8] compared to domestic studies like Barati et al., Zahednejad et al., and BonyadCharismi and et al in Mashhad [18,11,12]. It seems that several factors such as cultural and social differences and the applied research tools play a role in creating this difference. In the current study, the highest average score in the psychological ability of nurses was related to the competency dimension while the lowest average belonged to the independence dimension, which is consistent with the findings of Ebrahimi et al [19]. Moreover, Zahedenjad et al. demonstrated that the lowest average in terms of nurses’ psychological ability was related to the independence dimension [11]. Barati and et al (2012) concluded that although hospital staff feel competent enough to do their tasks, they feel that they are not useful enough in other dimensions such as trust and independence. The findings of Ghamari Zare et al. in six educational hospitals in Qom also showed that effectiveness has the least role in understanding the research units of psychological empowerment, implying that nurses feel less effective in their work units and their opinions do not receive much attention in in-house decisions [13]. In this study, moral distress was directly and positively related to the age of nurses. Thus, it seems that the higher level of nurses’ moral distress in the older age group can be due to an increase in the moral sensitivity of nurses over time. The above-mentioned data regarding such a relationship is in line with the findings of Lusignani et al., Atashzadeh Shooreideh et al., and Ameri et al. [3,5,14]. However, in studies by July et al. and Altaker in California, age was inversely related to the intensity of moral distress [4,20]. In the current study, none of the demographic and occupational factors of nurses had a statistically significant relationship with psychological ability. In Browning’s study, nurses’ age and work history represented a statistically significant relationship with their psychological ability [8]. Additionally, Eskandari et al. reported that some dimensions of nurses’ psychological ability like independence had a statistically significant relationship with work experience [10]. In another study, Zahednejad et al. found no significant statistical relationship between age, gender, and marital status, and the dimensions of psychological empowerment. It seems that the discrepancies in this regard can be related to differences in the statistical population [11]. Based on the evaluation of the relationship between moral distress and psychological ability in the present study, the frequency of situations leading to moral distress in the work environment was higher in nurses who had less independence, effectiveness, and psychological ability. The study by Browning was the only one that examined the relationship between the two variables in the past [8]. In the mentioned study, the relationship between the frequency of moral distress and various dimensions of psychological empowerment was similar to that of the present study. Part of the clinical situation with moral distress arises from the individual responsibilities of the nurse herself [2]. It can be indicated that the performance of nurses with higher psychological ability is such that they are less exposed to such situations in the work environment. In addition, in the present study, the experience of moral distress was more severe for nurses who felt more qualified in their work environment. In the study by Browning, the intensity of moral distress in some stressful situations had a significant and positive statistical relationship with dimensions such as meaning, independence, effectiveness, and overall score [8]. Experiencing moral distress in clinical settings is inevitable [1]. Thus, although the incidence of stressful situations was lower for nurses with higher psychological abilities, nurses who felt more qualified in their...
work environment experienced more severe stress when facing such situations. Moral distress is one of the most important ethical issues in the nursing profession, and efforts to identify influential factors will be valuable and practical.

Conclusions
In this study, the psychological ability of nurses and all its dimensions in relation to moral distress were analyzed in addition to considering demographic factors, and the findings were mentioned accordingly. It seems that paying more attention to the psychological ability of nurses in the clinical environment can be considered as one of the important approaches in controlling moral distress in clinical settings, especially more stressful environments. Therefore, it is suggested that further studies be conducted to increase the psychological capacity of nurses and their effect on their moral distress.

One of the limitations of this study was the dependence of data accuracy on the patience and accuracy of the participants in the study. The researchers attempted to reduce this limitation to some extent by allocating enough time to complete the questionnaire. Eventually, the findings of this study should be cautiously generalized to larger communities since this study was implemented in a specific spatial range.

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References
1. Rathert CH, R. May D, Chung H. Nurse moral distress: A survey identifying predictors and potential interventions. Int J Nurs Stud. 2016; 53: 39-49.
2. Corley MC, Minick P, Elswick RK, Jacobs M. Nurse moral distress and ethical work environment. Nurs Ethics. 2005; 12(4): 381-90.
3. Atashzadeh Shorideh F, Ashktorab T, Yaghmaei F, Alavimajd H. Association of ICU nurses’ demographic characteristics and moral distress. Iran J Med Ethics History. 2013; 5(7): 66-78. [In Persian]
4. Joolae S, Jalali H, Rafii F, Hajibabae F, Haghani H. The relationship between ethical climate at work and job satisfaction among nurses in Teheran. Indian J Med Ethics. 2013; 10(4): 238-42.
5. Ameri M, Safavibayat Z, Kavousi A. Moral distress of oncology nurses and morally distressing situations in oncology units. Aust J Adv Nurs. 2016; 33(3): 6.
6. Brenda A. Wands. A survey of moral distress in certified registered nurse anesthetists: A theoretical perspective for change in ethics education for advance practice nurses. Int J Nurs Sci. 2018; 5(2): 121-25.
7. Dodek PM, Norena M, Ayas N , Wong H. Moral distress is associated with general workplace distress in intensive care unit personnel. J Crit Care. 2019; 50: 122–25.
8- Browning AM. CNE article: Moral distress and psychological empowerment in critical care nurses caring for adults at end of life. Am J Crit Care. 2013; 22(2): 143-51.
9. Spritzer G. Taking stock: A review of more than twenty years of research on empowerment at work. Handbook of organizational behavior. 2008; 1: 54-72.
10. Eskandari F, Pazargadi M, ZagheriTafreshi M, RabieSiahkali S, Shoghi AR. Relationship between psychological empowerment with affective commitment among nurses in Zanjani. 2010. Preventive Care Nurs Midwif J (PCNM). 2014; 3(2): 47-60. [In Persian]
11. Zahednezhad H, Manoochehri H, ZaghariTafreshi M, FarokhnezhadAfshar P, GhaneiGheshlagh R. Relationship between organizational justice and nurses’ psychological empowerment. Iran J Nurs. 2015; 28: (93): 78-86. [In Persian]
12. Barati F, Tabiee SH, SHarifzadeh GH. Psychological empowerment in nurses of educational hospitals in Birjand and their correlation with demographic characteristics 2013. Mod Care J. 2014; 11 (4): 247-54. [In Persian]
13. Ghamari Zare Z, Ghanbari Afra L, Zand Gh, Aliakbarzadeh Arani Z. Investigation of the correlation between psychological empowerment
and its components with psychological strain in nurses. Qom Uni Med Sci J. 2018; 12(4): 89-99.
14. Lusignani M, Gianni ML, Re LG, Buffon ML. Moral distress among nurses in medical, surgical and intensive-care units. J Nursing Management. 2017; 25(6): 477-85.
15. Silén M, Svantesson M, Kjellström S, Sidenvall B, Christensson L. Moral distress and ethical climate in a Swedish nursing context: perceptions and instrument usability. J Clin Nurs. 2011; 20(23-24):3483-93.
16. Stewart JG, McNulty R, Griffin MT, Fitzpatrick JJ. Psychological empowerment and structural empowerment among nurse practitioners. J Am Acad Nurse Prac. 2010; 22(1): 27-34.
17. DiNapoli JM, O Flaherty D, Musil C, Clavelle J T, Fitzpatrick J J. The relationship of clinical nurses perceptions of structural and psychological empowerment and engagement on their unit. J Nurs Adm .2016; 46(2): 95-100.
18. Bonyad Karizme T, RahimiPordanjani T, Mohamadzadeh Ebrahimi A. The relationships between structural and psychological empowerment and job satisfaction among nurses. Hayat. 2016; 22 (3): 201-15. [In Persian]
19. Ebrahimi H, Hosseinizadeh R, ZaghariTefreshi M, Hosseinizadeh S, AsghariJafarabadi M. Clinical competency and psychological empowerment of nurses and their correlation with demographic characteristics. JHPM. 2013; 2(4): 30-38.
20. Altaker KW, Howie-Esquivel J, Cataldo JK. Relationships among palliative care, ethical climate, empowerment and moral distress in intensive care unit nurses. Am J Crit Care. 2018; 27(4):295-302.