

The Relationship Between Moral Intelligence and Stress Coping Styles In Intensive Care Unit Nurses

Abstract

Moral intelligence is one of the important and decisive factors in the nursing profession, in which stress coping styles also have a special place. This study aims to determine the relationship between moral intelligence and stress coping styles in intensive care unit nurses in Ardabil city hospitals. The present descriptive-correlational study recruited 213 nurses selected by the census from those working in intensive care units in teaching hospitals in the city of Ardabil. The participants responded to Lennick and Kiel's Moral Competency Index, and the Ways of Coping Questionnaire by Lazarus. The data were analyzed in SPSS-24 using descriptive (mean, standard deviation, and frequency) and analytical (Pearson's Correlation Coefficient and Multivariate Regression) statistical tests. A good level of moral intelligence was observed in 89.7% of nurses, and a positive and significant relationship was found between moral intelligence and stress coping styles ($P < 0.001$). Moreover, nurses mostly used an emotion-oriented approach as compared with a problem-oriented coping style. Despite their very good level of moral intelligence, most nurses use emotion-oriented stress coping style. It is therefore necessary to teach intensive care unit nurses appropriate ways of coping with occupational stresses.

Keywords: *Moral Intelligence, Stress coping styles, Nurse, Intensive Care Unit*

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Introduction

Stress is an inseparable part of current life and a cognitive process that makes individuals perceive their life events as threatening in terms of physical and psychological health, and job-related factors are among the most important sources of stress.¹ Occupational stress is the failure to create a balance between work requirements and a person's ability to adapt,² which can affect their personal and family's physical and mental health and their professional performance.³ Nurses and other hospital personnel are exposed to a huge amount of occupational stress due to their job sensitivity and contact with patients.^{1,3} such that the U.S. National Occupational Safety Association has ranked nursing as the most stressful among the top 40 most stressful jobs.⁴ Evidence shows that 93% of nurses are frequently exposed to workplace stressful factors that affect their physical and mental health,² particularly intensive care unit nurses who are exposed to more job stresses due to the nature, complexity, and dynamism of the workplace, use of complex technical equipment, and patients' conditions.⁴ Studies conducted in Iran also suggest that nurses do not use effective coping strategies to deal with occupational burnout and that they suffer higher levels of job stress than the global

standard.⁵ Therefore, empowerment of nurses to cope with, moderate or eliminate stressful factors creates a peaceful workplace and increases nurses' capacity and efficiency.⁶ People use different ways to cope with stress,⁵ and their reaction hugely affects their coping. This subject is usually examined under coping.⁴ Lazarus regards problem-oriented and emotion-oriented coping as the main stress coping strategies. The focus of the problem-oriented coping strategy is on the stressful factor, which should be eliminated or changed through collecting and evaluating data from available sources, but the focus of the emotion-oriented coping style is on the emotional consequences of the stressful factor such as crying, yelling, anger, and regaining one's emotional balance.⁷ Several studies have shown that moral intelligence boosts people's ability and capacity to deal with many daily life problems and is influential in improving the use of effective coping strategies.⁸⁻¹⁰ Moral principles in the nursing profession are associated with many variables including moral intelligence. Undoubtedly, intelligence and ethics each affect different aspects of human life and stabilize and determine their social status.¹¹

According to Lennick and Kiel, moral intelligence encompasses the principles of integrity, accountability, compassion, and forgiveness. Integrity is doing the right thing and telling the truth at all times. Accountability is accepting one's actions and their consequences, mistakes, and failure. Compassion is to be mindful of others, and forgiveness means being aware of one's own and other people's flaws and mistakes and forgiving oneself and others.¹² Review of the literature revealed little information about comparing moral intelligence and stress coping styles in intensive care unit nurses, and studies conducted on other medical groups provide contradictory information about stress coping styles. Thus, the present study was conducted to determine the relationship between moral intelligence and stress coping styles in intensive care unit nurses.

Material and methods

Design

The present study is descriptive correlational research conducted in 2019.

Participants

The present descriptive-correlational study recruited 213 nurses selected by the census from those working in intensive care units in teaching hospitals in the city of Ardabil. Full-time nurses working in intensive care units, with any employment status, bachelor's degree or higher, and more than one year's work experience interested in taking part were included in the study.

Instrument and data collection

Data were collected using a three-part questionnaire as follows: Part A: demographic details (age, gender, academic qualifications, work experience, etc.). Part B: Lennick and Kiel's Moral Competency Index (2005) contains 40 items based on a five-point Likert scale (from 1 for never to 5 for in all situations), with a score ranging from 40 to 200 points, where scores higher than 120 meant good moral intelligence, 80-120 moderate, and 40-80 poor. This questionnaire consists of four main dimensions (including integrity, accountability, forgiveness, and compassion) and 10 competencies, where integrity includes acting according to principles, values, and beliefs, and honesty means standing for what is right and keeping promises, each with four items. Accountability includes assuming responsibility for personal decisions and accepting the responsibility of serving others, each with four items. Forgiveness includes the ability to forgive one's own mistakes, and the ability to forgive other people's mistakes, each with four items. Using Cronbach's alpha technique, Lennick and Kiel reported 0.89 for the overall reliability of the scale, 0.72 for integrity, 0.91 for accountability, 0.78 for forgiveness, and 0.83 for compassion.^{13,14} Reliability of this scale in Iranian studies was reported with Cronbach's alpha of

0.89-0.91.¹³⁻¹⁵ In the present study internal consistency with Cronbach's alpha was found to be 0.9.

Part C: Lazarus' Ways of Coping Questionnaire (WCQ): This tool was developed by Folkman & Lazarus (1988) and assesses a wide range of thoughts and actions used by individuals when faced with internal or external stressful conditions. This tool examines eight usual problem-focused or emotion-focused coping methods. The main problem-focused coping method includes "planful problem-solving" with six items, "Positive reappraisal" with seven items, "seeking social support" with six items, and "accepting responsibility with four items, and the emotion-focused coping method includes "escape-avoidance" with eight items, "confrontative coping" with six items, "distancing" with six items, and finally, "self-controlling" with seven items. Each item is given a score based on a four-point Likert scale from "never" to "always", which score from zero to three points, respectively. The total score in each group is worked out and a person's coping strategy is thus determined. The scores of these four dimensions range from 0 to 198, where 0-32 indicates poor coping strategy, 33-66 moderate, and over 66 high.

In Lazarus' study, internal consistency was reported to range from 0.66 to 0.79 for each coping strategy.¹⁶

Reliability of this tool was reported at 0.84 in the Royani⁶ study and 0.74 for confrontative coping, 0.64 for distancing, 0.69 for self-controlling, 0.81 for seeking social support, 0.71 for accepting responsibility, 0.75 for escape-avoidance, 0.69 for planful problem-solving, and 0.84 for positive reappraisal in Gorzin study.¹⁷ In the present study, the internal consistency of the tool was found 0.87 with Cronbach's alpha.

Statistical analyses

Data were analyzed in SPSS-24 at a significance level of $P < 0.05$ using descriptive and analytical statistical tests (Pearson's Correlation Coefficient, Multivariate Regression).

Ethical considerations

The present study was derived from a master's degree thesis (code of ethics: IR.ARIMS.REC.1397/020) from Ardabil University of Medical Sciences. The participants were then briefed on the study objectives and ensured the confidentiality of their information, and signed written informed consent forms.

Results

Sample description

Of all participants, 73% were married, 62% were in the age range of 30-40 years, 51% had under five year's work experience, 90% were rotating nurses, 96% had bachelor's degrees, 52% were formally employed, and 62% worked between 175 and 200 hours per month.

Comparing the frequency

Most of the participating nurses (89.7%) had a good level of moral intelligence (Table 1).

Table 1. Frequency distribution of moral intelligence level in intensive care unit nurses

moral intelligence level	N	%
Poor	2	.9
Moderate	20	9.4
Good	191	89.7
Total	213	100

Comparing the mean score

Concerning the moral intelligence dimensions, integrity had the highest mean score (60.89±8.96) and compassion the lowest (15.34±2.51) (Table 2).

Table 2. Mean and standard deviation of dimensions of moral intelligence

Dimensions of moral intelligence	Mean (SD)
Integrity	60.89(8.96)
Accountability	45.78(6.54)
Compassion	15.34(2.51)
Forgiveness	29.13(2.56)

The overall mean score of stress coping styles is 76.57±18.56, with “escape-avoidance” having the highest mean score (12.3±3.41) and “accepting responsibility” the lowest

(5.9±2.27). The mean use of the emotion-focused method was 39.6±9.52 while the mean use of the problem-focused method was 36.6±9.1 (Table 3).

Table 3. Mean and standard deviation of dimensions of stress coping styles in intensive care unit nurses

stress coping styles	dimensions	Mean (SD)
problem-oriented 36.6 ±9.1	seeking social support	9.2(2.87)
	accepting responsibility	5.9(2.27)
	Planful problem-solving	10.3(2.67)
	Positive reappraisal	10.9(3.12)
emotion-oriented 39.6±9.52	confrontative	10.4(2.83)
	distancing	8.3(2.76)
	self-controlling	8.9(2.65)
	escape-avoidance	12.3(3.41)
Total score		76.57(18.56)

Regression analysis

According to Table 4, regression analysis shows stress coping styles used by intensive care unit nurses are significantly predicted by moral intelligence (P<0.001). Thus, with a beta

coefficient of 0.45, moral intelligence was able to predict stress coping styles used by nurses.

Table 4. The results of regression analysis on the relationship between moral intelligence and stress coping styles

Resources	Non-standard coefficient β	Standard coefficient	error	Standard coefficient β	T	sig
Fixed effect	22.8	8.6	-		2.67	.008
moral intelligence	.38	.70	.45		5.23	.001

Discussion

The present study results showed that intensive care unit nurses had a good level of moral intelligence.

Despite discrepancies in the mean score of moral intelligence in nurses reported in different studies, they are mostly higher than average. In a study titled “The relationship between moral intelligence and anger in emergency department nurses in Kashan”, Asgari et al.¹⁸ reported the moral intelligence of nurses as favorable. Bahrami¹⁴ and Dehghani et al.¹⁹ reported the moral intelligence of nurses as excellent, which agrees with the present study results. However, several similar studies, including studies by Saeed²⁰ Nahrir²¹, reported the moral intelligence of nurses as average. which disagrees with the present study results. According to Mashreghi et al., moral intelligence is a highly important psychological component for occupational commitment and self-discipline in intensive care unit nurses.³ This high moral intelligence score can be attributed to the nature of work in intensive care units, where there are critically ill patients, some of whom have no accompaniments and require serious attention. Therefore, intensive care unit nurses pay particular attention to moral intelligence. However, their specialized training in ethics appears to affect their high moral intelligence.

Among different dimensions of moral intelligence, “integrity” had the highest mean score and “compassion” the lowest. Dehghani¹⁹ and Gorzin et al.¹⁷ also reported the highest score for “integrity”. which agrees with the present study results. Meanwhile, in a study by Ansari (2018) titled “Dimensions of moral intelligence in the nursing profession”, compassion had the highest mean score among all components of moral intelligence,²² which disagrees with the present study results. This difference can be attributed to the differences in culture, type of ward, and type of management and leadership of nurses.

Regarding stress coping styles used by nurses in the intensive care unit, nurses used the “escape-avoidance” strategy the most and the “acceptance of responsibility” the least.

In a study by Masoudnia²³, individuals with the highest stress level used the “escape-avoidance” strategy. According to a study, nurses with psychotic personalities mostly used the “escape-avoidance” style.²⁴ In agreement with the present study, Isa et al.²⁵ reported that intensive care unit nurses mostly used the “escape-avoidance” style as compared to emergency ward nurses.

Liam et al. (2010) reported that nurses in Singapore preferred using a problem-focused rather than an emotion-focused

strategy.²⁶ Nurses in southern and western Ethiopia mostly used problem-solving and social support, and escape-avoidance style less often.²⁷ In studies by Royani et al.⁶ (2016), nurses used a self-controlling strategy, which disagrees with the present study.

In agreement with the present study, Rodriguez²⁸ and Gholamzadeh²⁹ reported “accepting responsibility” as the strategy least used by nurses.

Concerning the use of coping styles, our results showed that most participating nurses used emotion-focused as opposed to problem-focused styles when exposed to stress, which concurs with studies by Ziga et al.³⁰, Khanjani et al.³¹, Wang et al.³², Moahmoudirad³³ and Royani et al.⁶

Meanwhile, in studies conducted by Rostami et al.³⁴ and Hajiseyedrezaei et al.³⁵, a problem-focused strategy was mostly used, which disagrees with the present study results.

Lim et al.²⁶ believe that nurses in western countries mostly use problem-focused coping strategies. In contrast, Wang et al.³² claimed that most Asian nurses use emotion-focused coping strategies.

One’s perception of control over the stressful situation can affect their decision to use a particular coping strategy; if the situation is perceived as out of control, one prefers to use emotion-focused strategies while those who feel to control the stressful situation are more inclined to use problem-focused strategies.

A positive and significant relationship was found between moral intelligence and stress coping style in intensive care unit nurses. The authors found no study that had directly addressed the relationship between moral intelligence and stress coping styles in nurses. Our results confirm the results of other studies that show moral intelligence enhances people’s ability and capacity to deal with many daily life problems, and that it improves the use of effective coping strategies.⁸⁻¹⁰ A study by Moghadas³⁶ conducted on University personnel in Isfahan showed a positive and significant relationship between moral intelligence and coping strategies, such that personnel with higher moral intelligence is better-tolerated stress. Furthermore, Mashreghi’s³ study titled “The relationship of moral intelligence and social adaptation with stress coping styles in medical residents in Tehran universities” showed positive and significant relationships between moral intelligence and problem-solving strategies, social support, and cognitive evaluation. Moreover, a study by Ansari-Shahidi²² on the role of moral intelligence and professional value in predicting the resilience of nurses showed a significant

relationship between moral intelligence and resilience, such that resilience increased with increasing moral intelligence.

Limitations

Since the present study was conducted in intensive care units, the results cannot be generalized to other wards. In addition, the self-report nature of the questionnaires and the complexity of the concepts of moral intelligence and stress coping styles in nurses should be taken into account.

Conclusion

Generally, the present study results showed that intensive care unit nurses have a very good level of moral intelligence and mostly use emotion-focused, not problem-focused, strategies to cope with stress. A positive relationship was also observed between moral intelligence and stress coping strategies. Given the important effect of occupational stress and coping strategies on mental health and the quality of care services, further qualitative and quantitative studies will be effective in further clarifying the nature of occupational stress and how to apply coping strategies.

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Conflict of interest

None.

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Ethics statement

None.

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