# 福島県立医科大学学術成果リポジトリ



FUKUSHIMA MEDICAL UNIVERSITY

Emotional intelligence dimensions as predictors of coping reactions to stress in nursing practitioners

メタデータ	言語: English
	出版者: The Fukushima Society of Medical Science
	公開日: 2020-01-17
	キーワード (Ja):
	キーワード (En): emotional intelligence, stress, coping,
	nursing
	作成者: Yousif Ali, Yaseen, Deldar Morad, Abdulah,
	Rasoul Sabri, Piro
	メールアドレス:
	所属:
URL	https://fmu.repo.nii.ac.jp/records/2001984

## [Original Article]

## Emotional intelligence dimensions as predictors of coping reactions to stress in nursing practitioners

Yousif Ali Yaseen<sup>1</sup>, Deldar Morad Abdulah<sup>2</sup> and Rasoul Sabri Piro<sup>2</sup>

<sup>1)</sup>Depaerment of Medicine, College of Medicine University of Duhok, Iraqi Kurdistan, <sup>2)</sup>Adult Nursing Department, College of Nursing, University of Duhok, Iraqi Kurdistan

(Received April 24, 2019, accepted October 1, 2019)

#### Abstract

Stress is an inevitable part of nursing life. Nurses need to respond to their stressful environment contents to reduce negative consequences. We examined the role of dimensions of emotional intelligence in predicting coping reactions to stress in 201 college nursing practitioners in this cross-sectional study between November 2017 and January 2018. The nurses appraised their own emotions, but they were not sure that appraised others' emotions, regulated their and others' emotions. They could cope with new ideas and faced obstacles. Most of the nurses were moderately stressed. Those nurses were not able to regulate their own emotions were determined to have a higher level of perceived stress. Active coping, positive reframing and acceptance were the most prevalent coping mechanisms. The investigation showed that others' emotion appraisal was a predictor for self-blame reaction, and emotion utilization was the predictor for positive reframing and self-blame.

**Keywords** : emotional intelligence ; stress ; coping ; nursing **Registration Number** : 12072017-5 on 12th, July 2017

## Introduction

The nursing function is a central part of health teams given to responsibilities for coordination establishments for direct health care and communication between medical staff, patients, and families. Nursing has been reported to be a profession with a high risk of workplace stress owing to the high job demands, including workloads, health risks exerted by direct contact with patients, and the bulk of administrative duties<sup>1</sup>. Nurses have to cope with job-related stress and a high clinical burden. These kinds of work stresses result in harm and have effects not only on nurses' health but also on their abilities to respond to job necessities. There is evidence that more than 40% of nurses suffer from moderate to severe levels of workplace stress<sup>2</sup>.

With taking into account this high level of stress, the nurses need to implement the proper and prompt coping strategies for stress-relieving purposes. It seems that the responses of nurses to stressful events and their choices of coping mechanisms are reflections of individual differences and organizational factors. Nurses need to be emotionally intelligent to harness the stresses because their abilities to respond have an impact on improving clinical performance and increasing an overall health<sup>3</sup>. Coping defined by Lazarus and Folkman<sup>4</sup> as the cognitive and behavioral attempts to manage, decrease, or tolerate the external or internal demands created in an environment.

Stress has been considered a living fact and is unavoidable in this competitive world. "Stress, a phenomenon experienced within the individual, is a physiological and emotional experience which results from a requirement to change"<sup>5)</sup>. It was shown that a person with a high emotional intelligence had a low perceived stress level, is healthier due to good control of their emotions and had high adaptability to the work environment<sup>6)</sup>. It has been

Corresponding author : Deldar Morad Abdulah E-mail : deldarmorad@gmail.com https://www.jstage.jst.go.jp/browse/fms http://www.fmu.ac.jp/home/lib/F-igaku/

emerged as a critical predictor to protect the nurses against the clinical environment, stress, and associated with decision making and the intra-professional relationship<sup>7</sup>.

In this study, emotional intelligence (EI) was defined as the nurse's ability to understand, appraise, and regulate its own emotions accurately to deal with the stress within the nursing environment<sup>8</sup>.

Different dimensions have argued for emotional intelligence. Some authors expressed five dimensions, but others devoted four emotional intelligence. Given this point, we considered five dimensions to the emotional intelligence, and these are an appraisal of own emotions; appraisal of other's emotions; regulation of own emotions; regulation of other's emotions; and utilization of emotions. Self and other's emotions appraisal refer to the nurse's ability to find out and indicates one's own and others' emotions. Regulation of emotions refers to the nurse's ability to manage emotions, and utilization is defined as its applicability in stress management<sup>9)</sup>.

An association between emotional intelligence and work wellness within a nursing environment<sup>10)</sup> and a moderate role of emotional intelligence in job stress experience have been reported<sup>11)</sup>. Besides, increased work satisfaction, better health status, and a lower risk of workplace burnout have been correlated with emotional intelligence<sup>12)</sup>. Given the perspectives as mentioned above, the role of emotional intelligence in a reduction of work stress cannot be ignored in the nursing community.

EI is increasingly discussed as a factor with a significant role in nursing, medicine, and other healthcare professionals for its role in individual mental health and clinical performance. Although the correlation of EI with job stress has been documented in a nursing environment, there is a little information on the coping reactions of the nurses to the workplace stresses and less attention has been paid to this phenomenon in the literature<sup>13</sup>). It is important to understand that how the nurses respond to the available perceived or received stresses in their clinical settings, as these kinds of efforts are highly valuable to understand the realistic context of their working.

Dealing with the stress within the nursing environment is essential, as it has been documented that work stress is highly related to health-associated indicators like depression, anxiety, and fatigue, and work outcomes such as turnover<sup>14</sup>). The nurses enable to overcome stressful conditions, solve the conflicts, and make them successful team working through the EI. However the caution must be paid as if it poorly managed it can lead to stress, exhaustion, and frustration<sup>15)</sup> Importantly, under the best circumstance, intelligence quotient accounts for only 20% of a person's success, and the remaining 80% depends on emotional intelligence<sup>16)</sup>.

The role of dimensions of emotional intelligence in predicting coping reactions to stress in nursing practitioners was examined in the present study. The authors expected that nurses take advantage of their colleagues' assistance as a coping strategy in relation to EI to deal with stressful situations.

## Subjects and methods

## Study design and sampling method

In the present cross-sectional study, a total of 201 college nursing practitioners working in main public hospitals were purposively and personally invited across the geographic locations of Duhok city in Iraqi Kurdistan in 2017. The nursing practitioners were recruited from seven public hospitals/ medical centers following taking ethical clearance from the corresponded local department and official permission between November 2017 and January 2018. The hospitals were multi-specialty and comprehensive with a combination of clinical practices and teaching activities, including one teaching hospital for adult patients; one pediatric hospital; an emergency hospital; one maternity, and one burn and plastic surgery hospital. The medical centers were one cardiac and one rehabilitation center.

The study objectives were clarified to the participants personally or in a small group included two to three subjects before filling the questionnaire at a calm and suitable environment to avoid the possible staff interruption. The measurement tools were self-administered, and the overall time required to fill all items of the questionnaires was 15 minutes only.

The data were collected from the nurses working in the heterogeneity of clinical settings, including medical and surgical ward, emergency room, cardiac center, operation room, and anesthesia. The nurse practitioners met eligibility criteria if they were male or female; married or not; with at least a Bachelor's Degree; with at least two years' experience; and irrespective of their socio-demographic aspects and job rank whether nursing officers, chief nurses, or assistant nurses. The subjects who were not available during the data collection or did not show their willingness to participate were not included in the study.

#### Measurement Criteria

The general information of the subjects was collected through the self-reported technique and recorded in an anonymous pre-designed self-administered questionnaire. Smoking was categorized as smoker and non-smoker. Besides, sleeping patterns were measured as short sleeping (<6 sleeping hours /24 hours), normal sleeping (<6 sleeping hours/24 hours), and long sleeping (>8 sleeping hours/24 hours); physical activity as yes or no and its patterns as regular or irregular.

**Brief Emotional Intelligence Scale (BEIS-10)** developed based on the 33-item Emotional Intelligence Scale (EIS) and according to the theory, was used to measure the level of emotional intelligence. The scale has ten questions to distinguish five categories of EI, including an appraisal from own emotions; appraisal from other's emotions; regulation of own emotions; regulation of other's emotions; and utilization of emotions. The scale rates on a 5-point Likert scale anchored by 1=strongly agree, 2=agree, 3=neutral, 4=disagree, and 5=strongly disagree. The proportion of agreement scores for items ranged from 89.2% to 96.4% within a  $\pm 1$  range<sup>9</sup>.

The "Perceived Stress Scale (PSS)" measures the perceived degree of a nurse for its experienced stress. The tool has ten items designed to find out how unpredictable, uncontrollable, and overloaded respondents find their lives. These items ask the person about feelings and thoughts for the last month. PSS measures a particular way of a person of its feeling. It is rated on a 5-point Likert scale anchored 0=never, 1=almost never, 2=sometimes, 3=frailty often, and 4=very often. To score the scale, the scores for questions 4, 5, 7, and 8 must be reversed as 0=4, 1=3, 2=2, 3=1, and 4=0. Subsequently, the scores are summed together to obtain a total score between 0 and 40, which higher scores indicating higher perceived stress. Scores ranging from 0-13 is considered as low stress, 14-26 as moderate stress, and 27-40 as high perceived stress<sup>17)</sup>.

The different coping reactions were measured through the 14 scales **brief COPE** includes 28 items. The scales are self-distraction; active coping; denial; substance use; use of emotional support; use of instrumental support; behavioral disengagement; venting; positive reframing; plan ning; humor; acceptance; religion; self-blame. The responses in the brief COPE range from 0 (I have not been doing this at all); 1 (I have been doing this a little); 2 (I have been doing this a medium amount); and 3 (I have been doing this a lot)<sup>18)</sup>.

### Statistical analysis

The descriptive purposes of the investigation were determined through the frequency distribution, including mean and standard deviation for continuous and frequency and percentage for nominal variables. The predictors of perceived stress and coping mechanisms in nurses were examined in the univariate analysis of variance and multivariate analysis of variance (MANOVA), respectively. The normality of the distribution in the MANOVA test was examined in Box's Test of equality of Covariance metrics (P=0.408). In univariate analysis, the perceived stress level was considered a dependent variable and dimensions of emotional intelligence with adjustment for baseline information as independent variables. In the MANOVA analysis model, the coping mechanism was considered dependent variables and dimensions of EI with adjustment for baseline information as independent variables. The pairwise comparisons of significant difference were performed by Bonferroni Correction. The twotailed P-value of less than 0.05 was considered to be substantial differences. SPSS version 25 was used for data analysis.

#### Ethical considerations

The ethical approval of the current investigation was taken from the corresponded local health ethics committee in Duhok registered as reference number : 12072017-5 on 12<sup>th</sup>, July 2017. The written consent form was obtained from all participants prior to the face-to-face interview. The nurses' right to reject the participation was protected throughout the study steps. The guarantee was given for confidentiality of the obtained information of nurses at the time of publication.

#### **Results**

The mean age of the total of 201 nurses participated in the study was 29.31 years. More than half of them were males (57.2%); the majority were married (64.7%) and live in urban areas (78.6%). The average number of family member was 5.51 persons. A small percentage of nurses was a smoker (11.40%). A considerable percentage of them was physically active (80.1%) with irregular patterns (84.5%). More than half of them were normal

N. Classification	Frequency Distribution			
Nurse Characteristics (n=201)	Mean	Standard Deviation		
Age, year	29.31	4.15		
Gender				
Male/Female	115/86	<b>57.2</b> /42.8		
Family member	5.51	2.74		
	Frequency	Percentage		
Marital status				
Single/Married	71/130	35.3/64.7		
Residency				
Urban/Rural	158/43	78.6/21.4		
Smokers	23	11.4		
Physically Active	161	80.1		
Physical activity patterns				
Regular/ Irregular	25/136	15.5/84.5		
Sleeping patterns				
Short sleepers	58	28.9		
Normal sleepers	114	56.7		
Long sleeper	29	14.4		

 Table 1.
 Baseline characteristics of the nursing practitioners

The bold numbers show the highest percentage.

## sleepers (56.7%), Table 1.

The nurses slightly appraised their own emotion changes and recognized the practice in a convenient place and time (Mean [M]: 1.99). However, they were not sure that understood how other people feel and experience their emotions (M : 2.19) and were not sure that have a control on their own emotions (M : 2.33) and how to regulate the others' emotions, including events' arrangement (M : 2.24). However, the nurses slightly and successfully utilized their positive moods to face barriers in their life (M : 1.91), see Table 2.

In terms of perceived stress, the study revealed that most of the nurses had a moderate level of perceived stress (83.6%) followed by a low level of stress (11.9%). The study showed that the active coping (M : 3.66), positive reframing (M : 3.91), and acceptance (M : 4.00) were the most used coping reactions by nurses, see Table 2.

The perceived stress level (as a continuous variable) was considered a dependent variable and dimensions of emotional intelligence with adjustment for baseline information as independent variables in the univariate analysis of variance. The analysis showed that the nurses who were not able

Table 2.	Emotional intelligence, perceived stress levels,
	coping strategies in nursing practitioners

Scalos $(n-201)$	Frequency Distribution			
Scales (II-201)	Mean	Standard Deviation		
Emotional Intelligence				
Appraisal of own emotions	1.99	.78		
Appraisal of others' emotions	2.19	.81		
Regulation of own emotions	2.33	.75		
Regulation of others' emotions	2.24	.71		
Utilization of emotions	1.91	.73		
Perceived stress*	19.34	4.43		
Low stress	24	11.9		
Moderate stress	168	83.6		
High stress	9	4.5		
Coping Mechanism				
Active Coping	3.66	1.08		
Denial	3.02	1.57		
Emotional Support	2.99	1.24		
Instrumental Support	3.18	1.40		
Positive Reframing	3.91	1.05		
Planning	3.42	1.24		
Acceptance	4.00	1.35		
Self-Blame	2.68	1.28		
Religion	3.53	1.71		
Self-Distraction	3.43	1.36		
Substance Use	1.12	1.37		
Behavioral Disengagement	1.82	1.39		
Venting	2.52	1.17		
Humor	2.52	1.69		

\*The perceived stress categories were presented in frequency and percentage.

to regulate their own emotions were more likely to have a higher level of perceived stress (P=.008, stress difference : 10.6%), Table 3.

In the MANOVA analysis model, the coping mechanisms (in continuous type) were considered dependent variables and dimensions of EI with adjustment for baseline information as independent variables. The baseline information that predicted the coping mechanisms were gender (males predicted to express and escape from unpleasant feelings; P=0.018); residency (the nurses who live in urban areas tried to see the stress differently and find the positive aspects; P=.002). In addition, non-smoker nurses attempted to come up with a strategy and make the appropriate steps (P=.034) and physically active nurses tried to express and escape from unpleasant feelings more than physically inactive subjects (P=.048). Similarly, the normal sleepers

Dependent variable : Perceived stress level					
Predictors	Mean Square	F	Sig.	Partial Eta Squared	
Gender	.751	.041	.840	.000	
Marital Status	5.748	.314	.576	.002	
Residency	2.111	.115	.735	.001	
Smoking	32.735	1.787	.183	.012	
Physical Activity	58.633	3.200	.076	.020	
Sleeping Hours	50.308	2.746	.067	.035	
Chronic Disease	20.934	1.142	.287	.007	
Own Emotion Appraisal	13.832	.755	.626	.033	
Others Emotion Appraisal	26.045	1.421	.200	.061	
Own Emotion Regulation	55.613	3.035	.008	.106	
Others Emotion Regulation	20.217	1.103	.364	.048	
Emotion Utilization	9.065	.495	.837	.022	
Age	11.622	.634	.427	.004	
Family Member	.006	.000	.986	.000	

Table 3. Correlation of emotional intelligence with perceived stress in nursing practitioners

The bold number shows the predictor.

were more likely to attempt to come up with a strategy and make the appropriate steps (P=.025), Table 4a.

In addition, the analysis showed that nurses with chronic disease were less likely to seek emotional support from others (P=.022). The nurses with a higher level of stress were more likely to deny the stress (P=.002); seek the emotional support (P=<0.001); seek help and advice from others (P=.030); to not criticize themselves for the circumstances that happened (P=.002); to not make jokes about the situation (P=.002), and turn to other activities to take their mind off or think less about it (P=0.002); and those with a larger family members were more likely give up trying to deal with it (P=.008), Table 4a.

Concerning dimensions of EI as the predictors of the coping mechanisms, the study showed that those nurses who were not able to appraise others' emotion and utilize their own emotions were more likely to criticize themselves (P=.007 and P=.008, respectively), see Table 4a.

The study revealed that the subjects living in urban areas were more likely to reframe their plan positively (P=0.002) compared to those living in rural locations. In addition, the normal sleepers were more likely to have active coping compared to long sleepers (P=0.032) and emotional support was more prevalent in subjects without chronic diseases (P=0.022), see Table 4b.

## Discussion

In this study, types of coping responses to the stressful situations in a sample of nursing practitioners in Iraqi Kurdistan were examined. The study found that the nurses appraised their own emotions, but they were not sure that appraised others' emotions, regulating their and others' emotions. They were able to cope with new ideas and faced obstacles. Most of the nurses were moderately stressed. Those nurses who were not able to regulate their own emotions were determined to have a higher level of perceived stress. Active coping, positive reframing and acceptance were the most prevalent coping mechanisms. The study showed that others' emotion appraisal was a predictor for self-blame reaction, and emotion utilization was the predictor for positive reframing and self-blame.

Coping experts have different opinions on reporting coping mechanisms. Lazarus and Folkman<sup>4)</sup> conceptualize it as an interactive process between a subject and the environment.

#### Planning and positive reframing for a response

The study showed that the utilization of emotions is a predictor for the nurses to see the stress in a different light and find its positive aspects (positive reframing), which is a positive way of coping reactions. However, the problem here is that the participated subjects were not sure how to recognize and express their emotions, how others feel, and how to utilize their own and others' emotions. In

## Table 4. Predictors of coping reactions to stress in nursing practitioners

a) Predcitors						
Predictors	Dependent Variables	Mean Square	F	Sig.	Partial Eta Squared	
Gender	Venting	7.725	5.717	.018	.030	
Marital Status	Emotional Support	5.383	3.884	.050	.021	
Residency	Positive Reframing	10.332	9.750	.002	.051	
Smoking	Planning	7.096	4.568	.034	.024	
Physical Activity	Venting	5.377	3.980	.048	.021	
Sleeping Hours	Active Coping	4.285	3.781	.025	.040	
Chronic Disease	Emotional Support	7.369	5.317	.022	.028	
Perceived Stress	Denial	22.618	9.707	.002	.051	
	Emotional Support	19.823	14.303	<.001	.073	
	Instrumental Support	9.433	4.766	.030	.026	
	Self-Blame	14.677	10.199	.002	.053	
	Self-Distraction	22.159	13.354	<.001	.068	
	Humor	26.124	9.830	.002	.051	
<b>Own Emotion Appraisal</b>	<u>No Factor</u>					
<b>Others Emotion Appraisal</b>	Self-Blame	10.837	7.531	.007	.040	
<b>Own Emotion Regulation</b>	<u>No Factor</u>					
<b>Others Emotion Regulation</b>	<u>No Factor</u>					
<b>Emotion Utilization</b>	Positive Reframing	5.284	4.986	.027	.027	
	Self-Blame	10.318	7.170	.008	.038	
Age	No Factor					
Family Member	Self-Blame	5.608	3.897	.050	.021	
	Behavioral Disengagement	13.635	7.094	.008	.038	

The predictors were shown in this table only.

b) Pairwise comparisons (Bonferroni Correction)

Pairwise Comparisons							
Dependent Variable	(I) nurse category	(J) nurse category	Mean Difference (I-J)	SE	Sig. <sup>b</sup>	95% CI for Differ- ence <sup>b</sup>	
					~13.	Lower Bound	Upper Bound
Venting	Male	Female	.439*	.183	.018	.077	.800
<b>Emotional Support</b>	Single	Married	356	.181	.050	-713	.000
Positive Reframing	Urban	Rural	.580*	.186	.002	.213	.946
Planning	Smoker	Non-Smoker	644*	.302	.034	-1.239	050
Venting	Physically Active	Non-Physically Active	.443*	.222	.048	.005	.881
Active Coping	Less Than 6 Hours	6-8 Hrs. sleeping	.040	.179	1.000	394	.474
		Sleeping > 8 Hrs.	.630*	.250	.038	.026	1.234
	6-8 Hours	Sleeping < 6 Hrs.	040	.179	1.000	474	.394
		Sleeping > 8 Hrs.	.590*	.229	.032	.038	1.142
	More Than 8 Hours	Sleeping < 6 Hrs.	630*	.250	.038	-1.234	026
		6-8 Hrs. sleeping	590*	.229	.032	-1.142	038
<b>Emotional Support</b>	Chronic Disease	No Chronic Disease	955*	.414	.022	-1.772	138

Based on estimated marginal means

\*The mean difference is significant at the .05 level.

<sup>b</sup>Adjustment for multiple comparisons : Bonferroni.

addition, the negative point is that they were more likely to criticize themselves for the circumstances in their clinical settings when they cannot utilize the emotions to come up with new ideas and face to obstacles.

There is a piece of evidence that the persons with a higher level of EI are more possibilities to commit seeking external helping, turn to active coping and religious affairs, and cognitive reconstructing<sup>19</sup>. We did not find that the dimensions of EI are predictors for seeking emotional support from the external bodies. However, we showed that the nurses have a higher level of stress attempt to find assistance and advice for the external persons.

We showed that normal sleepers were more likely to have active coping compared to long sleepers. The exact amount of sleep required by healthy adults has not been determined yet, however, the impacts of inadequate sleep have been well documented. The review studies have shown that insufficient sleep has been shown to associate with cognitive issues, mood alterations, reduction of job performance, reduction of motivation, rising safety risks, and psychological alterations<sup>20)</sup>. Moreover, extended sleep has not been determined to improve mood or health and may be related to poor health. The sleep deprivation has negative effect on performance of hospital staff nurses<sup>21)</sup>. Even the nurses who sleep 6 or fewer hours in 24 hours are 3.4 percent change of an error<sup>22</sup>). Since active coping could include clinical decision-making in medical settings have an intimate role in the quality of care that nurses present to patients. It is estimated that up to 65% of adverse events could be prevented when the nurses made better decisions  $^{\rm 23,24)}$ 

#### Social support

The investigations emphasized on the importance of the availability of organization support in stressful situations<sup>25)</sup>. The patient care is not the only aspect of nursing. Nurses are involved in interrelation with their colleagues and administrative staff in their daily occasions. It has been documented that organizational and management characteristics have an impact on workplace stress among nursing practitioners<sup>26)</sup>. Those nurses with low organizational support experience a higher level of burnout<sup>27)</sup>. A considerable percentage of potential sources of stress among nurses are organizational, whether psychological, social, or physical<sup>26)</sup>. Social support is one of the most significant mechanisms that nurses can enhance their resilience<sup>28</sup>). It has a role in assisting professionals against burnout and

compassion fatigue<sup>29)</sup> as well as it can be a stress-diminishing tool for its feeling control. The individuals with insufficient ability to recognize their emotions are less engaged in social adaptation<sup>30)</sup>.

It is important to mention that nurses experience stress within their work environment when they accept that job load outweighs their abilities<sup>31)</sup>. Therefore, they look for assistance from the external sources to deal with the stress. The stressful events are changeable over time and in different situations. Hence the nurses apply different coping strategies, as reflected in the present study. Moreover, their cognitive abilities to cope with the stressful situations may be related to some other factors such as age, sex, coping skills, previous experience of stress, and personality of the nurses.

#### Coping mechanisms types

The coping mechanisms are divided into two basic frameworks, including problem and emotionbased coping. Problem-focused coping aims to solve the issue, and emotion-focused coping are aimed to regulate the emotions of a person under stress or increase stress skill management<sup>32)</sup>. Some other investigators added avoidance as a third basic coping dimension called as delay solving<sup>33)</sup>. In the new classification, the coping styles were categorized as logical, detached, emotional, and avoidant kinds. The problem-focused strategy is considered as a logical coping. In a detached coping, a person tends to be far from away from the issue to decrease the potential impacts of emotions. Generally, logical and detached coping strategies are considered as efficient styles and emotional and avoidance style as inefficient coping<sup>34)</sup>.

It is possible that the same person uses both of the mentioned response mechanisms against stressful situations. The problem-based strategies are more likely used by a person when it feels that it can be constructive, while emotion-based strategies are practiced when a person feels that can stress tolerable<sup>32)</sup>.

According to cognitive evaluation theory model, a person is subjected to respond to stress from the environment with the assistance of the available resources and way of approach the situation as explained it as an interaction between an individual and the environment<sup>4)</sup>.

#### Denial strategy

The study showed that a higher level of perceived stress is a predictor of denial in nursing practitioners. Possibly, denial of the stress occurring in a work setting is a confusing phenomenon $^{35)}$ . It is unclear that it is a maladaptive, passive, or negative coping, or maybe they are normal and reasonable reactions to the life-threatening situations. The nurses maybe do not see the stress as a threat to their real situation. Lazarus and Folkman<sup>4)</sup> mentioned that stress passes through three stages. In the primary appraisal, the person perceives stress as a threat to itself. In the secondary appraisal, the person brings in its mind to consider a response to the threat, and in the coping stage, the person starts to execute a response. The nurses may see that there is a response to the present threat in the work setting, forcing them to consider as less threatening because they realize the available response is not or less effective than expected. They may bring in their mind to reappraise the threat level or reappraise what coping reaction would be more appropriate.

Nursing practitioners attempt to distance from patients and avoid involvement, reflecting the inability in dealing with the emotional burden of daily contact in clinical settings, in particular in oncology units<sup>13)</sup>. In this regard, the nurses need continuous preparation to deal with feelings and patients to develop protective mechanisms as the hospital is accompanied by suffering. It seems that nurses attempt to deal with the stressful situations through avoiding stressful events as much as possible, and sometimes tie up their efforts with religious beliefs to reduce the stress, as shown in this study.

#### Experience and nursing responses to stress

The nurses participated in the present study were young (mean : 29.31 years), indicating nonexperienced practitioners in clinical practices. The nurses with more experiences with stressful situations are more prone to engage in active coping responses. In contrast, those persons with fewer experiences who are inclined to passive-based coping strategies as it is claimed the young persons have greater sensitivity to stressful agents owing to lack of workplace adaptability<sup>36</sup>. Most importantly, the EI aspects are developed through the life experience and training<sup>37</sup>. We did not find that age is a predictor for coping mechanism in this study.

#### Limitations of the study

The nurses who participated in the current study were only from one geographic location precluding us to generalize the findings across the country. The nurses who participated in this study were from different clinical departments. It has been documented that the intensive care unit and emergency departments have a higher substantial level of stress<sup>36)</sup>.

### Recommendations

It is recommended that nurses who work in clinical settings receive the educational sessions on emotional intelligence components to recognize their own and other's emotions and how to deal with their colleagues and patients' emotions to obtain the viable adaptation in the stress-based environments due to its seminal role in forming a successful human relationship and establishing a therapeutic nurse-patient relationship<sup>38)</sup>. Particularly that nurses who do not have sufficient interpersonal skills make two-fold the importance of EI development through the training programs in the nursing workplace.

## Conclusions

The study suggests that others' emotion appraisal and emotion utilization predict the way nurses blame themselves and how they positively see stress and criticize themselves. The study documented that nurses have difficulties in recognizing and regulating their own and others' emotions in a positive way. However, they try to respond to the stresses through active coping, positive reframing, and acceptance. Inability in regulating their own emotions was responsible for a high level of stress in nursing practitioners.

#### Acknowledgments

The authors of the study would like to express their deep gratitude towards The administration of the corresponded hospitals and those nurses assisted us in accomplishing this task. The authors were only financial supporters of the present study.

## Sources of support

The authors were the only financial supporters of the study.

## **Conflicts of interest**

The authors declare that there is no conflict of interest.

## Authorship

The corresponding author declares that all authors have sufficiently participated in study design, assessment, review, data collection, analysis, and interpretation.

## References

- Kamau C, Medisauskaite A and Lopes B. Inductions Buffer Nurses' Job Stress, Health, and Organizational Commitment. Archives of environmental & occupational health, **70**(6): 305-308, 2015.
- 2. Sharma P, Davey A, Davey S, Shukla A, Shrivastava K and Bansal R. Occupational stress among staff nurses : Controlling the risk to health. Indian Journal of Occupational & Environmental Medicine, **18**(2) : 52, 2014.
- Salovey P and Grewal D. The science of emotional intelligence. Current directions in psychological science, 14(6): 281-285, 2005.
- Lazarus RS and Folkman S, Stress, Appraisal, and Coping. Springer Publishing Company, New York, 1984.
- 5. Robinson KM, Bridgewater SC, Molla PM and Wathen CA. Concepts of stress for nursing. Issues in mental health nursing, 4(3): 167–176, 1982.
- Gohm CL, Corser GC and Dalsky DJ. Emotional intelligence under stress : Useful, unnecessary, or irrelevant ? Personality and Individual Differences, 39(6) : 1017-1028, 2005.
- Chabeli MM. Higher order thinking skills competencies required by outcomes-based education from learners. Curationis, 29(3): 78-86, 2006.
- Colman AM. A dictionary of psychology. Oxford University Press, USA, 2015.
- Davies KA, Lane AM, Devonport TJ and Scott JA. Validity and reliability of a brief emotional intelligence scale (BEIS-10). Journal of Individual Differences, 2010.
- Nel JA, Jonker CS and Rabie T. Emotional intelligence and wellness among employees working in the nursing environment. Journal of Psychology in Africa, 23(2): 195-203, 2013.
- Karimi L, Leggat SG, Donohue L, Farrell G and Couper GE Emotional rescue : The role of emotional intelligence and emotional labour on wellbeing and job-stress among community nurses. Journal of advanced nursing, **70**(1) : 176-186, 2014.
- Powell KR, Mabry JL and Mixer SJ. Emotional intelligence : A critical evaluation of the literature with implications for mental health nursing leadership. Issues in mental health nursing, 36(5) : 346-356, 2015.

- Luz KRd, Vargas MAdO, Barlem ELD, Schmitt PH, Ramos FRS and Meirelles BHS. Coping strategies for oncology nurses in high complexity. Revista brasileira de enfermagem, 69(1): 67-71, 2016.
- 14. Thorsteinsson EB, Brown RF and Richards C. The relationship between work-stress, psychological stress and staff health and work outcomes in office workers. Psychology, **5**(10) : 1301, 2014.
- Lloyd JL. Relationship between self-compassion, sense of coherence, coping strategies and perceived stress in clinical psychology trainees. Doctoral dissertation, Staffordshire & Keele Universities, 2017.
- Homaei R, Heidari A, Bakhtiyarpor S and Borna M. Relationship between achievement motivation, cognitive intelligence, emotional intelligence, academic and demographic variables with academic performance of students. New Findings in Psychol, 12(4): 49-63, 2009.
- 17. Cohen S. Perceived stress scale Web : mind garden ; 1994 [Available from : http://www.mindgarden.com/documents/PerceivedStressScale.pdf.
- Carver CS. You want to measure coping but your protocol'too long : Consider the brief cope. International journal of behavioral medicine, 4(1) : 92, 1997.
- Matthews G and Zeidner M. Emotional intelligence, adaptation to stressful encounters, and health outcomes. Jossey-Bass, San Francisco, CA, US, 2000.
- 20. Rogers AE. The effects of fatigue and sleepiness on nurse performance and patient safety. Patient safety and quality : An evidence-based handbook for nurses : Agency for Healthcare Research and Quality (US) ; 2008.
- Scott LD, Hwang WT, Rogers AE, Nysse T, Dean GE and Dinges DF. The relationship between nurse work schedules, sleep duration, and drowsy driving. Sleep, 30(12): 1801-1807, 2007.
- Dawson D and McCulloch K Managing fatigue : it's about sleep. Sleep medicine reviews, 9(5) : 365-380, 2005.
- Brennan TA, Leape LL, Laird NM, *et al.* Incidence of adverse events and negligence in hospitalized patients : results of the Harvard Medical Practice Study I. New England journal of medicine, **324**(6) : 370-376, 1991.
- 24. Hodgetts TJ, Kenward G, Vlackonikolis I, *et al.* Incidence, location and reasons for avoidable inhospital cardiac arrest in a district general hospital. Resuscitation, **54**(2) : 115-123, 2002.
- 25. Ahmed M, Rayan A and Khalil M. Relationship between job stressors and organizational support among Jordanian nurses. American Journal of Nursing Research, 4(3): 51-55, 2016.

- 26. Santos SR, Carroll CA, Cox KS, *et al.* Baby boomer nurses bearing the burden of care : A four-site study of stress, strain, and coping for inpatient registered nurses. The Journal of nursing administration, **33**(4) : 243-250, 2003.
- 27. Eze, IC. Influence of perceived organizational support and self-efficacy on burnout. Research on Humanities and Social Sciences, 4(24): 45-50, 2014.
- Collins S. Statutory social workers : Stress, job satisfaction, coping, social support and individual differences. British Journal of Social Work, 38(6): 1173-1193, 2007.
- Jenkins R and Elliott P. Stressors, burnout and social support : nurses in acute mental health settings. Journal of advanced nursing, 48(6) : 622-631, 2004.
- Engelberg E and Sjöberg L. Emotional intelligence, affect intensity, and social adjustment. Personality and Individual Differences, 37(3): 533-542, 2004.
- 31. Lawal AM and Idemudia ES. The role of emotional intelligence and organisational support on work stress of nurses in Ibadan, Nigeria. curationis, **40**(1): 1-8, 2017.
- 32. Folkman S and Lazarus RS. An analysis of coping in a middle-aged community sample. Journal of

Health & Social Behavior: 219-239, 1980.

- Endler NS and Parker JD. Multidimensional assessment of coping : A critical evaluation. Journal of Personality & Social Psychology, 58(5) : 844, 1990.
- 34. Roger D, Jarvis G and Najarian B. Detachment and coping : The construction and validation of a new scale for measuring coping strategies. Personality and Individual Differences, **15**(6) : 619-626, 1993.
- Vos MS and De Haes J. Denial in cancer patients, an explorative review. Psycho-Oncology : Journal of the Psychological, Social and Behavioral Dimensions of Cancer, 16(1): 12-25, 2007.
- Nespereira-Campuzano T and Vázquez-Campo M. Emotional intelligence and stress management in Nursing professionals in a hospital emergency department. Enfermería Clínica (English Edition), 27(3): 172-178, 2017.
- Fariselli L Ghini M and Freedman J. Age and emotional intelligence. Six seconds THE EMO-TIONAL INTELLIGENCE NETWORK Retrieved March, 5(2016, 2008.
- McQueen AC. Emotional intelligence in nursing work. Journal of advanced nursing, 47(1): 101-108, 2004.