

## PERCEIVED STRESS AND COPING STRATEGIES AMONG ICU NURSES IN A TEACHING HOSPITAL AT AL-NAJAF CITY

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**Abstract:** Stress is a serious concern in the nursing profession. Stress among nurses is the result of exposure to a mix of working environment and personal factors, arises when nurses try to manage patient's nursing care within the scope of nursing. The aim of the study was to assess the perceived stress and coping strategies of nurses working in the intensive care unit. The study design is quantitative study (descriptive design). To provide precise and representative data, a non-probability (purposive) sample was chosen. The total number of nurses participating in the study was (190) nurses from different teaching hospitals in Al-Najaf city. The results of the study showed that the average level of perceived stress was (20.5), and the majority of the study sample (69.5%) had a moderate level of perceived stress, while coping strategies (93.7%) were an adoptive response. According to the results of the current study and its discussion, the study concluded that the Perceived stress among the nurses working in the ICU was moderate and concluded that the coping strategies were an adaptive response. The current study recommends conducting a larger study of the remaining surgical and medical wards, and recommends providing a resting place for the staff in the intensive care unit, in addition to providing psychological courses to control the emotions of the workers in the intensive care unit and provide them with psychological support.

**Keywords:** Perceived Stress, Coping Strategies, Hospital

### Introduction

A student's life is filled with various stressors, including the demands of secondary school, the need to succeed, the uncertainty of the future, and the challenges of integrating into the system. These students deal with social, emotional, physical, and family issues that can impair their capacity to learn. Some of them struggle to manage the stress and fall behind, while others view the pressure as an opportunity to work harder. Stress can cause physical and mental health problems, so students have been very concerned about reducing their stress and adopting healthier lifestyles. It is crucial to be aware of one's stress level because it has a significant impact on one's mental and physical capabilities (1).

Stress can be broadly classified into two categories: eustress and distress. One type of constructive stress that encourages people to keep working is called eustress. While a healthy amount of stress can improve learning capacity, positive stress encourages and facilitates learning. Distress, on the other hand, is a form of negative stress that arises when the pleasant stress becomes intolerably intense. Negative stress of this kind should be reduced because it stifles and hinders learning (2).

Coping with stress is essential to survival and wellbeing and it has been identified as a stabilization component which may aid an individual in psychological adaption throughout high stress situations; in addition to dealing to stressful situations, students must manage with educational pressures. Various stress-reduction strategies for students have been investigated, which include time management skills, support systems, positive emotion, free time participation, and insight meditation anxiety - reducing courses, wellness electives, informal support groups, and mentoring programs (3).

### Importance of the study

Today, stress has become a huge problem; the majority of individuals, even young children are not an exception, can be viewed in a condition of stress, if we want to cope with stress, we must first grasp the physiology of stress, despite the fact that stress research had contributed important insights and

improved our knowledge of stress's metabolic and physiological difficulties, stress affects most of the bodily systems, despite this, stress management continues to be a significant concern(4).

Stress is considered a natural and even necessary aspect of life, especially when striving to achieve goals or face challenges. In many cases, stressful situations can actually enhance performance and lead to greater achievement. Whether we like it or not, stress is an unavoidable part of life—complete freedom from it is only possible in death. According to a World Bank report, educational systems around the globe have largely failed to effectively address stress and burnout among secondary school principals. This shortcoming has hindered efforts to build a strong human resource foundation, which is crucial for development across all areas of the school system. Various studies have explored the factors influencing stress management. For instance, Howard identified age as a factor, Berkel emphasized gender, and Birdie highlighted teaching experience (5).

59% of students said they frequently fear that an exam will be challenging, while 66% of students said they are anxious about receiving low grades. Even when they are well-prepared, 55% of students experience severe anxiety when taking tests, according to additional OECD research. Girls regularly express higher levels of anxiety related to schoolwork than boys do, with 37% of students reporting feeling extremely nervous when studying (6).

### **Theoretical Foundation**

First and foremost, the attachment theory, originating from psychoanalytic frameworks, elucidates the psychological role of emotional bonding in families. John Bowlby, through independent studies, identified that disruptions in familial bonding often lie at the root of psychological disorders. According to his theory, a secure emotional bond between children and their parents serves as a cornerstone for peace of mind, social competence, and emotional stability. Modern research confirms the broad application of attachment theory, with studies showing that children with secure attachments display better social, emotional, and psychological outcomes. Meta-analyses demonstrate that children who are securely bonded with their parents are less prone to depression and anxiety, and possess higher levels of self-awareness and empathy.

The family systems theory also aids in understanding the significance of emotional bonding. Olson and colleagues define the concept of "cohesion" as the degree of emotional connectedness between family members. In other words, the level of emotional bonding within a family determines the balance between individual independence and familial closeness. According to Olson's Circumplex Model, a healthy family maintains this balance, allowing members to spend time together while also retaining independence when needed. Extremely strong or weak emotional bonds can disrupt family functioning, leading to emotional enmeshment or disengagement when the balance is lost.

Studies also support the theory of emotional support within the family, emphasizing that strong emotional ties serve as a buffer against stress. According to social support theories, warmth, advice, and shared emotional experiences within the family enhance self-esteem and mitigate the impact of stress. A supportive family environment provides emotional comfort to both children and adults and facilitates the resolution of social challenges. Conversely, a lack of affection and excessive control in parent-child relationships may result in psychological trauma and negative emotional outcomes.

### **Methodology**

**Study Design:** The study design is quantitative study (descriptive correlational). (October, 2023) to (April, 2024).

**Administrative Agreements:** The study was approved by the Council of the College of Nursing / University of Kufa and the Ethical Research Committee.

Ethical consideration is an important issue in nursing research, and its primary goal is to secure the rights of the researcher and study participants. Participants were assured that the data to be collected from the questionnaire would be kept confidential and that no one would be allowed to know it. Subsequently, written permission was obtained from the students to participate in the study.

**Setting of the Study:** The study had been conducted in ICU of Al-sadder medical city, AL Hakeem

teaching hospital, Al-Zahraa teaching hospital and Al-Najaf teaching hospital at Al-Najaf city.

**Study Sample:** A non- probability (purposive) sample was selected to obtain representative and accurate data. The total number of nurses participating in the study was (190) nurses.

### **The Study Instrument:**

#### **Part I: Demographic characteristics:**

This part consists of (12) items: age, gender, marital status, residency, monthly income, type of house, hospital names, educational level, desired in work, chronic diseases and psychological diseases and medications of mental diseases.

**Part II : Perceived Stress Scale (P.S.S.):** Cohen (1994) developed this scale. By asking participants how unpredictable, unmanageable, and overburdened they feel their lives are, this psychological test aims to evaluate their feeling of stress (Cohen & Williamson, 1988). These questions are answered on a 5-point Likert scale, with 0 representing never and 4 representing very often, based on the respondent's sentiments and emotions throughout the past month. Question six, for instance, asks, "How often in the last month have you found that you could not cope with all that you had to do?" For scoring purposes, the responses to the four positively worded questions were inverted. Higher scores indicate higher perceived stress, and vice versa. The resulting scores range from 0 to 4.

**Part III:** The Brief COPE (Carver, 1997) is a 28-item measure of coping style that includes 14 two-item scales: self-distraction, denial, venting, substance abuse, behavioral disengagement, active coping, planning, positive reframing, acceptance, humor, religion, using emotional support, and self-blame. Each of the items is a coping mechanism that humans can employ in stressful or difficult situations. Each item has a four-point multiple-choice scale, with 1 denoting "I don't usually do this at all" and 4 denoting "I have performed the coping response." (I do this a lot typically). The Brief COPE's components are added up to provide scale scores, which, like the full COPE, indicate how much a specific coping technique is used.

#### **Validity of the Questionnaire:**

The validity of the of study tools (questionnaire) was determined by a panel of 10 experts, who have more than ten years of experience in their field to investigate the questionnaire towards Perceived stress and coping strategies among ICU nurses.

Furthermore, the recommendations of the opinions of specialists have been taken into consideration. Modifications have been completed so far, and the equipment is now ready for use as a data collection tool. (Appendix A)

#### **Data Collection:**

The data was collected with the subjects' who were included in the current study using a developed questionnaire and a self-administered questionnaire. Prior to data collection, the investigator met with the nurses in the intensive care units to clarify the study subjects' and obtain their verbal agreement to participate in the study with the right to refuse or withdraw participation and confidentiality of the information, and then a copy of the questionnaire was distributed before it's receiving by the investigator, a total of 190 questionnaires for statistical analysis were collected from intensive care units in the hospitals. This method was done at the teaching hospitals that participated in this research. From October, 2022, to April 24th, 2023, the data collection procedure was conducted out.

**Statistical analysis:** Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 25 of the Statistical Analysis System. The following statistical data analysis approaches were used to analyze and evaluate the results of the study.

#### **Descriptive Data Analysis**

1. (Frequency(F): The frequency of an events in statistics is the number of times the event occurred in an experiment or research. It was used for describing the distribution of sample demographic variables.
2. Percentages (%): is computed by dividing the frequency of participants in the category by the total

number of participants and multiplying by 100 percent.

3. (Mean)of score (MS): The mean in statistics is the arithmetic average of a set of numbers. The average is computed by adding two or more scores and then dividing the total by the number of scores. It used to measure the centrality of the data.
4. Standard deviation: The standard deviation measures the amount of variance in a population. If the standard deviation is low, it means that everyone is relatively close to average. Whereas if the standard deviation is large meaning everyone is fairly unique and not too close to the average. It indicates the average amount of deviation of values the mean.

### Inferential Data Analysis

1. The Pearson correlation coefficient and ANOVA test.

### Results

**Table 1.** Distribution of the observed frequencies and percent of Demographical Characteristics for Study Sample.

Variables	Categories	Frequency	Percent
Age	20 =<	1	0.5
	26 - 21	85	44.7
	32 - 27	61	32.1
	38 - 33	23	12.1
	44 - 39	14	7.4
	+45	6	3.2
Gender	male	81	42.6
	female	109	57.4
	Total	190	100.0
Marital Status	single	83	43.7
	married	102	53.7
	divorce	4	2.1
	widow	1	0.5
	Total	190	100.0
Residency	Urban	168	88.4
	Rural	22	11.6
	Total	190	100.0
Monthly Income	sufficient	66	34.7
	some extent	87	45.8
	un sufficient	37	19.5
	Total	190	100.0
Type of House	with family	152	80.0
	alone	32	16.8
	other	6	3.2
	Total	190	100.0
	al-sadder	54	28.4
	medical city		
	al-Hakeem		
Hospital Name	teaching hospital	51	26.8
	al-Zahra		
	teaching hospital	39	20.5
	al-Najaf		
	teaching hospital	46	24.2
	Total	190	100.0

Level of Education	nursing school	31	16.3
	institute	77	40.5
	college	78	41.1
	post graduate	4	2.1
	Total	190	100.0
Desired in Work	yes	137	72.1
	no	53	27.9
	Total	190	100.0
Chronic Diseases	yes	28	14.7
	no	162	85.3
	Total	190	100.0
Psychological Diseases	yes	22	11.6
	no	168	88.4
	Total	190	100.0

Table 1 shows the majority of age between (21-26) years old (44.7%), females 57.4%, married 53.7%, urban (88.4%), Monthly Income enough to some extent (45.8%), living with family (80%), working in al-sadder medical city (28.4%), college (41.1%), Desired in Work (72.1%), don't have (88.4% chronic diseases (85.3%) and don't have psychological diseases.

**Table 2.** Summary statistics and initial assessment for perceived stress among ICU nurses.

Items	Responses	Frequency	Percent
Q1	Never	12	6.3
	Almost never	49	25.8
	Sometimes	71	37.4
	Fairly often	39	20.5
	Very often	19	10.0
Q2	Never	15	7.9
	Almost never	25	13.2
	Sometimes	64	33.7
	Fairly often	59	31.1
	Very often	27	14.2
Q3	Never	36	18.9
	Almost never	57	30.0
	Sometimes	51	26.8
	Fairly often	35	18.4
	Very often	11	5.8
Q4	Never	4	2.1
	Almost never	26	13.7
	Sometimes	56	29.5
	Fairly often	73	38.4
	Very often	31	16.3
Q5	Never	19	10.0
	Almost never	40	21.1

Q6	Sometimes	78	41.1
	Fairly often	43	22.6
	Very often	10	5.3
	Never	9	4.7
	Almost never	36	18.9
Q7	Sometimes	73	38.4
	Fairly often	48	25.3
	Very often	24	12.6
	Never	12	6.3
	Almost never	31	16.3
Q8	Sometimes	83	43.7
	Fairly often	54	28.4
	Very often	10	5.3
	Never	11	5.8
	Almost never	38	20.0
Q9	Sometimes	59	31.1
	Fairly often	67	35.3
	Very often	15	7.9
	Never	41	21.6
	Almost never	43	22.6
Q10	Sometimes	57	30.0
	Fairly often	31	16.3
	Very often	18	9.5
	Never	27	14.2
	Almost never	47	24.7
Q10	Sometimes	50	26.3
	Fairly often	52	27.4
	Very often	14	7.4

The table 2 shows the participants answer to the stress among ICU nurse's domain items using 5-point Likert scale that were Almost never for Q3, sometimes for Q1, Q2, Q5, Q6, Q7, Q9 Fairly often for Q4, Q8, Q10.

**Table 3.** Summary statistics for Perceived stress among ICU nurses finalassessment.

	Response	Frequency	Percent	Mean	SD	Assess
Total Stress	Low Stress	26	13.7	20.5	6.3	Moderate Stress
	Moderate Stress	132	69.5			
	High Stress	32	16.8			

Total	190	100.0
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Concerning Table 3 is about the Majority of ICU nurses have moderate stress.

**Table 4.** Summary statistics and Initial Assessment for coping strategies among ICU nurses.

Items	Responses	Frequency	Percent
Q1	I have not been doing this at all	28	14.7
	A little bit	38	20.0
	A medium amount	73	38.4
	I haven't stopped doing this.	51	26.8
Q2	I haven't been doing this at all	9	4.7
	A little bit	35	18.4
	A medium amount	96	50.5
	I haven't stopped doing this	50	26.3
Q3	I haven't been doing this at all	85	44.7
	A little bit	49	25.8
	A medium amount	35	18.4
	I haven't stopped doing this	21	11.1
Q4	I have not been doing this at all	50	26.3
	A little bit	51	26.8
	A medium amount	48	25.3
	I haven't stopped doing this	41	21.6
Q5	I have not been doing this at all	52	27.4
	A little bit	50	26.3
	A medium amount	50	26.3
	I haven't stopped doing this	38	20.0
Q6	I have not been doing this at all	88	46.3
	A little bit	51	26.8
	A medium amount	39	20.5
	I haven't stopped doing this	12	6.3
Q7	I have not been doing this at all	11	5.8
	A little bit	31	16.3
	A medium amount	70	36.8
	I haven't stopped doing this	78	41.1
Q8	I have not been doing this at all	83	43.7
	A little bit	52	27.4
	A medium amount	43	22.6
	I haven't stopped doing this	12	6.3
Q9	I have not been doing this at all	28	14.7
	A little bit	41	21.6
	A medium amount	59	31.1
	I haven't stopped doing this	62	32.6
Q10	I have not been doing this at all	44	23.2
	A little bit	46	24.2
	A medium amount	61	32.1
	I haven't stopped doing this	39	20.5
	I have not been doing this at all	52	27.4

Q11	A little bit	61	32.1
	A medium amount	50	26.3
	I haven't stopped doing this	27	14.2
	I have not been doing this at all	12	6.3
Q12	A little bit	27	14.2
	A medium amount	75	39.5
	I haven't stopped doing this	76	40.0
	I have not been doing this at all	36	18.9
Q13	A little bit	75	39.5
	A medium amount	48	25.3
	I haven't stopped doing this	31	16.3
	I have not been doing this at all	8	4.2
Q14	A little bit	36	18.9
	A medium amount	87	45.8
	I haven't stopped doing this	59	31.1
	I have not been doing this at all	20	10.5
Q15	A little bit	44	23.2
	A medium amount	66	34.7
	I haven't stopped doing this	60	31.6
	I have not been doing this at all	69	36.3
Q16	A little bit	59	31.1
	A medium amount	43	22.6
	I haven't stopped doing this	19	10.0
	I have not been doing this at all	16	8.4
Q17	A little bit	35	18.4
	A medium amount	60	31.6
	I haven't stopped doing this	79	41.6
	I have not been doing this at all	46	24.2
Q18	A little bit	50	26.3
	A medium amount	64	33.7
	I haven't stopped doing this	30	15.8
	I have not been doing this at all	29	15.3
Q19	A little bit	50	26.3
	A medium amount	52	27.4
	I haven't stopped doing this	59	31.1
	I have not been doing this at all	18	9.5
Q20	A little bit	38	20.0
	A medium amount	88	46.3
	I haven't stopped doing this	46	24.2
	I have not been doing this at all	51	26.8
Q21	A little bit	53	27.9



	A medium amount	47	24.7
	I haven't stopped doing this	39	20.5
	I have not been doing this at all	33	17.4
Q22	A little bit	37	19.5
	A medium amount	60	31.6
	I haven't stopped doing this	60	31.6
	I have not been doing this at all	27	14.2
Q23	A little bit	43	22.6
	A medium amount	74	38.9
	I haven't stopped doing this	46	24.2
	I have not been doing this at all	14	7.4
Q24	A little bit	42	22.1
	A medium amount	87	45.8
	I haven't stopped doing this	47	24.7
	I have not been doing this at all	15	7.9
Q25	A little bit	36	18.9
	A medium amount	77	40.5
	I haven't stopped doing this	62	32.6
	I have not been doing this at all	48	25.3
Q26	A little bit	66	34.7
	A medium amount	33	17.4
	I haven't stopped doing this	43	22.6
	I have not been doing this at all	13	6.8
Q27	A little bit	24	12.6
	A medium amount	45	23.7
	I haven't stopped doing this	108	56.8
	I have not been doing this at all	51	26.8
Q28	A little bit	45	23.7
	A medium amount	51	26.8
	I haven't stopped doing this	43	22.6

The table 4 shows the participants answer to the coping strategies among ICU nurses domain items using 4-point Likert scale that were I have not been doing this at all (6 ITEMS) Q3, Q5, Q6, Q8, Q16, 28, A little bit (5 ITEMS) Q4, Q11, Q13, Q21, Q26, A medium amount (11 ITEMS) Q1, Q2, Q10, Q14, Q15, Q18, Q20, Q23, Q24, Q25, Q28, I have been doing this a lot (7 ITEMS) Q7, Q9, Q12, Q17, Q19, Q22, Q27.

**Table 5.** Summary statistics and Initial Assessment for coping strategies domains among ICU nurses.

Coping strategies Domains	Responses	Frequency	Percent	Mean	SD
Problem Focused	Mal adoptive	8	4.2	5.89	0.99
	Adoptive	182	95.8		
Emotion Focused	Mal adoptive	16	8.4	5.32	0.86
	Adoptive	174	91.6		
Avoidant	Mal adoptive	67	35.3	4.50	0.96
	Adoptive	123	64.7		

Mal adoptive = < 4, Adoptive = 4.1 and more

The table 5 shows Coping strategies domains. The table shows the problem focused domain has adoptive response was on 182 (95.8%) on the study sample, adoptive response in the emotion focused domain of 174 participant nurses, and adoptive response in the avoidant domain of (%91.6) sample (%64.7) 123.

**Table 6.** Summary statistics and Final Assessment for coping strategies domains among ICU nurses.

	Responses	Frequency	Percent	Mean	SD
<b>Coping Strategies</b>	<b>Mal adoptive</b>	12	6.3		
	<b>Adoptive</b>	178	93.7	5.24	0.75
	<b>Total</b>	190	100.0		

Mal adoptive = < 4, Adoptive = 4.1 and more.

Table 6 shows adoptive response in the coping strategies of 178 (93.7%) sample

**Table 7.** Correlation between the coping strategies domains and stress among ICU nurses.

Statistics	Stress	Problem Focused	Emotion Focused	Avoidant	Coping
<b>Correlation Coefficient</b>	1.000	<b>**207.</b>	<b>0.055-</b>	<b>*186.-</b>	<b>0.017-</b>
<b>Sig. (2-tailed(</b>		0.004	0.444	0.010	0.819
<b>Correlation Coefficient</b>	<b>**207.</b>	1.000	<b>**562.</b>	<b>**253.</b>	<b>**771.</b>
<b>Sig. (2-tailed(</b>	0.004		0.000	0.000	0.000
<b>Correlation Coefficient</b>	<b>0.055-</b>	<b>**562.</b>	1.000	<b>**454.</b>	<b>**844.</b>
<b>Sig. (2-tailed(</b>	0.444	0.000		0.000	0.000
<b>Correlation Coefficient</b>	<b>*186.-</b>	<b>**253.</b>	<b>**454.</b>	1.000	<b>**716.</b>
<b>Sig. (2-tailed(</b>	0.010	0.000	0.000		0.000
<b>Correlation Coefficient</b>	<b>0.017-</b>	<b>**771.</b>	<b>**844.</b>	<b>**716.</b>	1.000
<b>Sig. (2-tailed(</b>	0.819	0.000	0.000	0.000	

Correlation is significant at the 0.01 level (2-tailed), Correlation is significant at the 0.05 level. **\*\***(2tailed).

Table 7 shows that there was weak negative correlation between the nurses perceived stress and there coping strategies in the other hand, the problem focused coping was the most f strategies that used by the nurse during working in the ICU units.

**Table 8.** Relationship between Overall Nurses' Stress and Their Demographical Characteristics.

Variables	df	F	Sig.
Age	5	2.122	NS 0.06
Gender	1	5.058	<b>S 0.02</b>
Level of education	3	4.390	<b>S 0.005</b>
Marital Status	3	0.729	NS 0.53
Monthly Income	2	3.981	<b>S 0.02</b>
Residency	1	1.881	NS 0.171
Desired in work	1	2.517	NS 0.114
Hospital Name	3	0.513	NS 0.674
Types of House	2	0.440	NS 0.644
Chronic Diseases	1	4.406	<b>S 0.03</b>
Psychological Diseases	1	10.806	<b>S 0.001</b>

Table 8 this table shows that there is a significance relationship between nurse's stress and their gender, level of

education, monthly income, having a chronic disease and having psychological disease.

## Discussion

Throughout the course of the data analysis of the current research, the results in table (4.1) appear the highest percentage of the nurse's subgroup are: nurse with ages between (21-26) years old with (72.8 %). These results can be interpreted by this age group working in units may because it needs more efforts. This result is accordance with the study wang et al., (2020) who reported that the most age group of nurses were at (20-30) years old.

Regarding gender, the study samples were female (57.4%) and male (42.6%) These findings may explained by the fact that stress levels were higher in girls than in boys because girls were suffering from an accumulation of responsibilities at work and at home, due to their hurried lifestyles, girls are frequently busy all day. these percentages are approximately convergent, with study Fasoi et al., (2021) which found female nurses were possibly more vulnerable to perceived stress exposures when compared to male nurses

In terms of marital status, the study findings suggest that the majority of the study participants is married (53.7%). These results can be interpreted by those married nurses busy with work and more responsibilities that may effect on them. This result is supported by Devi et al.,( 2023 who showed that the majority of the study sample was composed of married.

In terms of residency, more than three-quarters of the participants are from major cities (88.4%) May be as a result of most population density in urban areas and the migration of them from the countryside to the city as well as this represents a realistic picture of Iraq society. This finding is consistent with the findings of Osuagwu.,2022, who discovered that three-quarters of the participants are urban dwellers.

According to the survey results, less than half of the study individuals have an adequate level of income (45.8%). Our results interpreted by reflection of the nature of the study sample that feeling of satisfaction with the financial situation. This result agrees with (Hao et al., 2020) ,who states that the majority of study sample (50%) is within the sufficient family income.

The results of the study indicated that 41.1% of the workers are college graduates, which is the highest percentage. This finding is similar to a 2021 study, in which more than half of the sample showed the college graduates (Wang et al., 2020).

The results of the study showed that 72.1% of workers have a desire to work. In a study conducted on the desire to work, this study showed that the highest percentage of nurses' desire to work was in the intensive care unit, and according to the study, it is a vital place that increases the knowledge and experience of workers in this unit (Berl., 2020). Discussing the findings of the levels of Perceived Stress among Nurses:

The study results show in table (3-2) and (3-3) the final general assessment of the stress level of nurses at the ICU units that the majority of nurses have (moderate) level of stress (69.5%) ; while (16.8 %) of them have (high) level of stress.

The appearance of majority of the nurses (69.5%) as moderate tension. The results are generally logical indicating that not all people are equal in the level of stress, and this reason is due to the difference in their characteristics and the factors affecting them.

The study results are consistent with the results of the study of Ahmed & Mohammed, (2019) where the stress level of the study sample had moderate stress levels.

According to the results of the study of Shdaifat et al., (2018), university of Malaysia . showed that the majority of the student sample participating in the study had moderate stress. Therefore, there is a match with the results of the study.

However, there is no agreement with the study of Alsaqri, (2017), The results of the study showed that the majority of the study sample had a high level of stress.

It is expected that the stress level among the students was moderate because the large number of nurses, working long hours without rest periods, and the large number of deaths in the intensive care unit

cause stress among nurses. In addition to factors and conditions related to the family and society, it contributes to the nurse's increased stress.

Discussing the findings of the coping strategies among samples:

The results of the study showed in table (3.4), (3.5) and (3.6) a mean of the coping strategies level was (5.24), the majority of the study sample (93.7%) adoptive response in the coping strategies

The study results are consistent with the results of the studies of Burgess, Irvine and Wally Ahmed (2007), Alharbi and Alshehry (2019) where the coping strategies of the study sample has adaptive response in the coping strategies levels. These tactics fall into three categories: behavioral, affective, and cognitive. While behavior tactics involve avoidance, cognitive strategies include verbalizing to others, learning from experience, and holding group sessions. Mutual support and faith are effective coping mechanisms (Alharbi and Alshehry, 2019).

The research concludes that the nurse's choice of coping mechanisms is determined by his understanding of the problem or stress to which he is exposed. As a result, he or she selects a method that correlates to his or her knowledge of the situation.

In the study undertaken by NIN, Hyderabad among tribal under-five children in nine Indian states in 2007-08, a total of 14,587 children were found to be underweight, with an overall incidence of around 49%, 19% of whom were seriously underweight. Overall stunting was at 51%, with approximately 24% severely stunted. Approximately 22% of children suffered wasting, and 7% had severe wasting. This is not consistent with our study those with a weight between 7-14 Kg (47.6%); those with a height between 40-70 cm (64.5%); Grandmothers are more trustworthy than nurseries or maids in raising children because they are able to provide them with the basic ingredients of social identity. Psychologists also prefer this on the grounds that the care that the grandmother surrounds her grandchildren with is ammunition for them to face the difficulties of life in the future, even though the father and mother are still alive (Stephen A Wootton) This is identical to our study where it was found father are alive (95.2%), those whose mothers are still alive (100%); Those whose grandmother takes care of the child in the absence of a mother (38.6%) (10).

## **Conclusion**

Based on the study results and discussion, the study concludes the following:

1. There is a moderate level of stress among nurses working in ICU units.
2. There is an adaptive coping mechanism uses by students to decrease stress at work.
3. There is weak negative correlation between the nurses perceived stress and there coping strategies in the other hand, the problem focused coping was the most f strategies that used by the nurse during the work.

There is high level of stress was recorded in nurses with (gender, level of education, monthly income, chronic disease and psychological disease).

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