



Science

## **STRESS AND SELF EFFICACY AMONG NURSES IN NEONATAL INTENSIVE CARE UNITS**

**Rehab Hani Elkazaz<sup>\*1</sup>, Abeer Elsayed Berma<sup>2</sup>**

<sup>\*1</sup>Lecturer of Pediatric Nursing, Faculty of Nursing, Port Said University, Egypt

<sup>2</sup>Lecturer of Psychiatric Nursing and Mental Health, Faculty of Nursing, Port Said University, Egypt

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### **Abstract**

Stress is one of the main factors affecting one's efficiency as well as staff health and quality of nursing services. Neonatal units can be stressful environments for nurses, infants and families as well. Since there is no evidence in this regard in Egypt. Aim of the study: to determine the relationship between stress and self-efficacy among staff nurses in neonatal intensive care units (NICU) in Port Said. Method: This was a descriptive correlation study including thirty three nurses working in NICUs of hospitals in Port Said. The data collection tools were a self-efficacy and stress scales. Results: It reveals that, there were statistically significant correlations between staff nurses self-efficacy and their stress toward financial environment. Also there were negative correlation between stress psychological domain, physical environment and services, work relationship with nurses as well as physicians and self-efficacy assessment. Also reveals that, there were no statistical significant relations between workplace stressors, staff nurses self-efficacy and their socio-demographic characteristics. But there are statistically significant relation was found between staff nurses self-efficacy and their duration of nursing experience. The findings of the present study show that increasing stress in the aspects of psychological, physical environment and services domain, in addition to, social environment with nurses and physicians among nurses would lead to decrease self-efficacy. Also the present study reveals that there were statistically significant correlations between staff nurses self-efficacy and their stress toward financial environment. So, staff nurses should attend continuing educational programs on staff nurses' quality outcomes such as enhancing staff nurses' self-efficacy and strategies coping to reduce stress.

**Keywords:** Self Efficacy, Neonatal Intensive Care Unit, Stress, Nurses.

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## 1. Introduction

Neonatal intensive care unit (NICU) is a unit designed to provide for sick and premature infants with care during the transitional period after birth in which the infant has the most physiological changes. The environment of NICU can be stressful for nurses as well as infants and their families. In these units, many personnel are involved in the treatment and care of infants. Neonatal specialists, nurses (usually a head nurse and primary nurses who are in charge of only one infant and perhaps a clinical nurse specialist trained in neonatal care), residents, and medical, nursing, and even midwifery students are present at any NICU. Among all staff members, nurses are responsible for the majority of everyday care procedures of the infants (**Sheikh Bahaedinzadeh and Raei., 2011**). During the past 4 decades, stress has been considered as a problem in intensive care units which can be caused by various factors and conditions. Stress in intensive care units predisposes the personnel to work problems and eventually depression. Besides, NICUs are different from adult intensive care units in nature. Highly vulnerable patients, the presence of parents as members of the care group, and specific developmental needs of infants are unique features of care in NICUs (Valizadeh et al., 2012).

Factors contributing to stress and burnout among NICU nurses fall into three general categories. First, several aspects of the NICU physical and interpersonal work environment can be challenging. Working in physical surroundings often with inadequate lighting and excessive ambient noise, being over stimulated in the pervasive crisis atmosphere, experiencing interdisciplinary conflicts and facing verbal abuse from distressed families can add to levels of stress (**Bellieni et al., 2010**; Czaja, 2012). Moreover, staff must manage this work environment for long hours while maintaining vigilance over their patients and promoting a calm environment for families, as well as a professional and caring personal (Cricco-Lizza, 2014). Workload issues constitute a second general category of stress, including dealing with excessive and unrealistic patient assignments because of inadequate staffing, working mandatory overtime during periods of high census, or, alternatively, being forced to take days off during periods of low census (Braithwaite, 2008 & Garrett, 2008). Providing patients and families with optimal care creates a third general category of factors. Poor communication skills may contribute to nurses' feelings of inadequacy about their ability to provide necessary emotional support to families (**Boyle, 2011**; Zeinhom et al., 2016). Ethical dilemmas may create moral distress, such as when nurses are asked to carry out end-of-life orders to which they have a 'conscientious objection'. Staying current with changing practices and technological advances is also challenging (Catlin et al., 2008 ; Tizdast et al.,2014).

Self-efficacy is a degree of an individual's sense of mastery about his/her ability for doing a special activity. The efficacy theory of Bandura emphasizes on individual's self-esteem and confidence in doing demanded behavior. Bandura states that self-efficacy is the main and important precondition in changing behavior such as health behaviors. Bandura states that self-efficacy is one of the personal beliefs that people need them to succeed, and it can show an individual's thinking and practice method. Therefore, professional qualification is in relation with self-efficacy Pazkian et al ., (2012).

Self-efficacy is one of the factors that affect the way an individual deals with pressures (Ebrahimi and Poorahmad, 2013). Self-efficacy is an assurance one feels about certain activities

which affects his level of personal efforts and performance (Mitchell et al. , 2012 ). In other words, self-efficacy influences motivation and the stronger the belief, the more motivated and active the person will be (Safavi et al., 2011; Zerat et al., 2014). People with higher self-efficacy are more successful when faced with challenges. This is especially true in the profession of nursing where they always have to deal with unforeseen situations, which could be factors leading to stress. Given that the main motivation for the progress and development of human society is the promotion and protection of human health and since health care professions have the highest rates of satisfaction (Khodabakhsh and Mansuri, 2011; Cheraghi et al., 2013 ).

## 2. Aim of the Study

To determine the relationship between stress and self-efficacy among staff nurses in neonatal intensive care units (NICU) in Port Said.

### Research Question:

Is there a relationship between staff nurses' stress and their level of self-efficacy in neonatal intensive care units?

## 3. Materials and Methods

### Study Design

A descriptive correctional design was utilized for the current study to determine the relationship between stress and self-efficacy among staff nurses in neonatal Intensive care units in Port Said.

### Study Setting

The present study was carried out at the nurses of El-Nasr, El-Tadamon and, Port-Fouad General hospitals in Port Said.

### Subjects

The subjects of the study included (N=33) staff nurses who were available in the above previously mentioned units at Port Said during the time of data collection. Out of this number 7 nurses were excluded for different reasons, three nurses not completing the tools of the study and the rest being included in the pilot study. Thus only 33 nurses formed subjects for this study.

### Tools of the Study

The following three tools were used to collect data:

#### Tool I: Socio demographic data sheet.

The sheet includes demographic data such as age, marital status, level of education, nursing experience in nursing, nursing experience in neonatal intensive care unit and name of hospital.

**Tool II:** stress scale: Stress Scale (SS): was developed and modified by Mohammed. (2010). Nurses responded by indicating their level of agree to each of the 74 statements grouped under nine subscales; psychological (11 items); physical (10items); physical environment and services (16 items); work relation with nurses (5items); work relation with physician (7items); work relation with infants(5items); work relation with visitors (7 items); work relation with managers

(8items); and financial (5items). Participants responded by indicating their agreement with each of the 74 statements using a three-point scale ranging from 1 to 3. Stress scale was considered to be high if the percent score was 60% or more and low if less than 60%. The instrument previous reliability was reported by Mohammed., (2010), the stress scale has demonstrated a high internal consistency (Cronbach  $\alpha$  ranged from 0.79 to 0.87). The reliability estimate of the scale for the present study was  $\alpha = 0.83$ . The validity of the scale was reported by the ten experts.

### **Tool III: Self Efficacy scale**

Self-Efficacy Scale (SES): was developed by Talb., (2006) to assess self-efficacy of nurses. It consisted of 22 statements. Responses were evaluated using a four-point Likert scale ranging from 1 (Not at all true) to 4 (Exactly true). The scores ranged from 22 to 88. Self-efficacy was considered to be high if the percent score was 60% or more and low if less than 60%. The instrument previous reliability was reported by Mohammed., (2010) the Cronbach's alpha of SES ranged from .75 to .90 & the  $\alpha = 0.78$ .

### **Method**

- 1) Official permission from the hospital administrative authority (hospital manager and nursing service director) was obtained
- 2) A pilot study was done on 10% of the total sample in order to test the clarity of the questionnaires and estimate the time needed to fill the questionnaires. Nurses who were included in the pilot study were excluded from the study sample.
- 3) Data were collected in the period from March 2016 to end of May 2016.

### **Ethical Consideration**

- The purpose of the study was explained to all staff nurses working in neonatal intensive care units.
- Data confidentiality of nurses' privacy and their anonymity was assured.

### **Statistical Analysis**

The raw data were coded and entered into SPSS system files (SPSS package version 20). Analysis and interpretation of data were conducted.

The following statistical measures were used:

- Descriptive statistics including frequency, distribution, mean and standard deviation were used to describe different characteristics.
- Kolmogorov – Smirnov test was used to examine the normality of data distribution.
- Univariate analyses including: t-test and ANOVA test were used to test the significance of results of quantitative variables. Chi-Square test, Fisher's Exact test and Monte Carlo correction of Chi-Square test and were used to test the significance of results of qualitative variables.
- Linear correlation was conducted to show correlation between scores of stress assessment and self-efficacy assessment at workplace among the studied nurses using Pearson correlation coefficient
- The significance of the results was at the 5% level of significance.

Regarding scoring system; the total score for each dimension was transferred into score percentage as follows: 
$$\text{Score \%} = \frac{\text{actual score} \times 100}{\text{Maximumscore}}$$

The score percentage was later categorized into::  
low –high using the following cutoff points < 60% for low, and >60% for high

#### 4. Results and Discussions

Table (1) shows the socio-demographic characteristics of nurses in the study sample. More than two thirds of the nurses (78.8%) being in the age group less than 30 years (Mean age of the sample was  $39.6 \pm 12.0$ ). One third of the sample (33.3%) had nursing diploma, also One third of the sample (33.3%) had nursing institute. In addition, the more than half of nurses (54.6%) were married, while a great sector were still single (42.4%). On the other hand, regarding the experience in nursing 42.5% of the nurses have experienced more than nine years. Moreover, 36.4% of the subjects experienced less than three years in NICU. While, 30.3% have experienced more than nine years. Almost all the sample were living in same governorate while only 12.1% were living in other governorate.

Table (2): Shows the scores of workplace stress assessment and self-efficacy assessment among the studied nurses. In order to determine the most important stress sources, the highest mean values of items in each category of physical was introduced as high stressors by 81.8% of nurses, followed by 72.7% of nurses in psychological domain. Among workplace environment, the most important stressors for the nurses were social environment with nurses 93.9% and social environment with physicians 72.7% was reported by nurses as a main cause of high stress. The mean (SD) value in stress was  $63.7 \pm 8.5$  and Stress scores were divided ranges of 46.4-82.7. Therefore, stress scores in total were reported by 66.7% of nurses as high stress. The mean (SD) value in self efficacy was  $32.9 \pm 9.7$  and self efficacy scores were divided ranges of 22.1-66.2. Therefore, self efficacy scores in total were reported by 97.0% of nurses as low stress.

Table (3): Shows Correlation between scores of stress assessment and self-efficacy assessment at workplace among the studied nurses. It reveals that there were statistically significant correlations between staff nurses Self-efficacy and their stress toward financial environment. There were negative correlation between stress psychological domain, physical environment and services, social environment with nurses and social environment with physicians and self-efficacy assessment.

Table (4): Shows the relation between level of total workplace stressors and socio-demographic characteristics of the studied nurses. It reveals that, there are no statistical significant relation between workplace stressors and their Socio-demographic characteristics.

Table (5): Illustrated the relationship between total self efficacy score and socio-demographic characteristics of the studied nurses. There were no statistically significant relation between staff nurses self efficacy and socio-demographic characteristics of the studied nurses. But there are statistically significant relation was found between staff nurses self efficacy and their duration of nursing experience.

Table 1: Socio-demographic characteristics of the studied nurses

Socio-demographic characteristics	Studied nurses (n=33)	
	No.	%
Age (years)		
Less than 30	26	78.8
30-<40	6	18.2
40-<50	1	3.0
Mean±SD	27.4±4.9	
Educational level		
Nursing diploma	11	33.3
Nursing institute	11	33.3
Faculty of nursing	8	24.3
Master degree	3	9.1
Duration of nursing experience (years)		
Less than 3	8	24.2
3-<6	7	21.2
6-<9	4	12.1
9 or more	14	42.5
Mean±SD	6.7±3.7	
Marital status		
Single	14	42.4
Married	18	54.6
Divorced	1	3.0
Residence in relation to workplace		
Same governorate	29	87.9
Next governorate	1	3.0
Away by at least 2 governorates	3	9.1
Place of work		
El-Nasr Hosp		
Port Fouad Hosp	22	66.7
El-Tadamon Hosp	7	21.3
	4	12.0
Duration of experience in department (years)		
Less than 3	12	36.4
3-<6	8	24.2
6-<9	3	9.1
9 or more	10	30.3

Table 2: Scores of workplace stress assessment and self-efficacy assessment among the studied nurses

Scores	Scores of Studied nurses (n=33)					
	Min-Max	Mean±SD	Low (<60%)		High (60%≤)	
			No.	%	No.	%
Workplace stress assessment						
Psychological domain	33.3-97.0	69.6±15.5	9	27.3	24	72.7
Physical domain	36.7-100.0	69.8±13.9	6	18.2	27	81.8
Workplace environment						
Physical environment and services	36.4-78.8	56.1±11.9	21	63.6	12	36.4
Work relationships with nurses	53.3-93.3	78.4±11.4	2	6.1	31	93.9
Work relationships with physicians	38.1-100.0	66.9±14.8	9	27.3	24	72.7
Work relationships with infants	33.3-86.7	58.4±13.7	14	42.4	19	57.6
Work relationships with visitors	33.3-100.0	57.7±12.8	21	63.6	12	36.4
Work relationships with managers	41.0-87.2	64.7±9.5	17	51.5	16	48.5
Total Work relationships score	45.9-82.9	63.8±8.3	11	33.3	22	66.7
Financial domain	33.3-86.7	49.3±16.4	22	66.7	11	33.3
Total workplace environment	42.8-79.2	60.8±8.2	14	42.4	19	57.6
Total score	46.4-82.7	63.7±8.5	11	33.3	22	66.7
Self-efficacy assessment						
Total score	22.1-66.2	32.9±9.7	32	97.0	1	3.0

Table 3: Correlation between scores of stress assessment and self-efficacy assessment at workplace among the studied nurses

Stress assessment	Self-efficacy assessment (n=33)	
	R	P
Psychological domain	-0.097	0.593
Physical domain	0.135	0.456
Workplace environment		
Physical environment and services	-0.085	0.638
Work relationships with nurses	-0.088	0.627
Work relationships with physicians	-0.024	0.895
Work relationships with infants	0.314	0.076
Work relationships with visitors	0.189	0.292
Work relationships with managers	0.156	0.386
Total Work relationships score	0.164	0.362
Financial domain	0.354	0.043*
Total workplace environment	0.156	0.386
Total score	0.114	0.529

r: Pearson correlation coefficient

\*significant at P≤0.05

Table 4: Relation between level of total workplace stressors and socio-demographic characteristics of the studied nurses

Socio-demographic characteristics	Studied nurses(n=33)				Significance
	Low stressors (n=11)		High stressors (n=22)		
	No.	%	No.	%	
Age (years)					
Less than 30	9	81.8	17	77.3	FEP=1.0
30 or ore	2	18.2	5	22.7	
Educational level					X2=1.091 MCP=0.723
Nursing diploma	3	27.3	8	36.4	
Nursing institute	3	27.3	8	36.4	
Faculty of nursing or higher	5	45.4	6	27.2	
Duration of nursing experience (years)					X2=0.295 MCP=1.0
Less than 3	3	27.3	5	22.7	
3-<6	2	18.2	5	22.7	
6-<9	1	9.1	3	13.7	
9 or more	5	45.4	9	40.9	
Marital status					X2=0.550 P=0.458
Single/divorced	4	36.4	11	50.0	
Married	7	63.6	11	50.0	
Duration of experience in NICU (years)					X2=4.50 MCP=0.212
Less than 3	2	18.2	10	45.5	
3-<6	2	18.2	6	27.3	
6-<9	2	18.2	1	4.5	
9 or more	5	45.4	5	22.7	

X2: Chi-Square test      MCP: Monte Carlo corrected P-value      FEP: Fisher's Exact test  
 \*significant at P≤0.05

Table 5: Relation between total self efficacy score and socio-demographic characteristics of the studied nurses

Socio-demographic characteristics	Score of self-efficacy		Significance
	n=33	Mean±SD	
Age (years)			
Less than 30	26	33.5±10.9	t=1.072 P=0.292
30 or ore	7	31.0±2.1	
Educational level			F=1.08 P=0.351
Nursing diploma	11	30.5±5.7	
Nursing institute	11	31.9±8.3	
Faculty of nursing or higher	11	36.4±13.5	
Duration of nursing experience (years)			F=2.500 P=0.079
(1) Less than 3	8	34.8±9.6	
(2) 3-<6	7	28.7±4.7	



(3) 6-<9	4	43.2±17.0	(2,3)* (3,4)*
(4) 9 or more	14	31.0±7.7	
Marital status			
Single/divorced	15	36.2±11.5	t=1.824
Married	18	30.2±7.2	P=0.078
Duration of experience in NICU(years)			
Less than 3	12	35.2±13.0	F=0.653 P=0.588
3-<6	8	31.8±7.3	
6-<9	3	36.6±16.3	
9 or more	10	30.1±3.2	

t: Student t-test F: ANOVA test\*significant at  $P \leq 0.05$

(2,3)\* (3,4)\*: Significant statistical difference between categories by LSD Post Hoc test

## 5. Discussion

One of the main goals of the third millennium is to reduce mortality in infants and children. Factors enhancing service quality would obviously reduce mortality. Since human resources can affect service quality, identifying current situation and planning strategies to reduce or eliminate weaknesses and stressors can definitely maximize the self efficacy of human resources and thus the quality of nursing services (Valizadeh et al., 2012). Therefore, the present study aimed to determine the relationship between stress and self efficacy among staff nurses in neonatal intensive care units (NICU) in Port Said city.

Stress of nurses in intensive care units has been particularly described to have special sensitivity. In the present study, most nurses in NICUs were total score of stress high level .this due to the specificity of their job are liable of developing occupational stress, and consequently burnout. Also, this is a fact that NICU is a place that produces stress and pressure. NICU staff members thus turn out to be irritable due to relationships between staff, special emotional feelings when facing patients at risk of dying, frequent fluctuations between success and failure, and demands imposed by teamwork. All these stimuli provoke feelings such as insufficiency and insecurity that will in turn negatively impact on interpersonal relationships and disturb the capabilities of the staff in making good connections with colleagues and families of patients (Mohamed et al., 2011). In the same line study on stress in ICUs revealed the high levels of stress by Engkvist (2008) . While Hays et al., (2006) showed all factors to cause mild levels of stress for nurses. The current study also, showed that the most nurses generally reported a low level of self-efficacy but scored high level of stress. May be due to failure in cooperation and teamwork, physicians' negative attitudes toward nurses, managers' lack of support, and nurses' capabilities and power. in addition to exposure to job stress as a result of the burden of tasks without adequate reward, these factors lead to lower their level of efficacy. These results are consistent with Abou Elala (2012) investigated the relationship between self efficacy and job related stressors as perceived by the nursing staff in critical care units. The study concluded that the job related stressors affected nurses' self efficacy as improved self efficacy resulted in reduced stress.

The results of the current study revealed that the highest percentage of staff nurses have high level of stress in psychological and physical domain. This result could be attributed to the possibility that the level of stress when is prolonged or extremely severe a nurse may develop

physical or psychological symptoms. The effect of occupational stress in nurses from intensive care units, as well as the physical and psychological overload is emphasized by Monalisa et al., (2008).

Work environment has been acknowledged as a significant problem in NICU, the current study revealed that the highest percentage of nurses' highly level of stress was in total score of work environment. This may be due to the elements of work environment such as lack of sufficient equipment and inadequate work space were considered as the major sources of stress. In this respect Fogaça et al., (2008) reported that NICU is an environment with very advanced technology, demanding constant updating of the team. In the present study the most of the nurses low level of stress was in physical environment and services. may be due to the fact that the nurses are liable to work in any physical environment and services. The current study did not agree with Kawther et al., (2016) who showed that the overall atmosphere in units and the lack of aids and resources were rated as high job stressors among nurses. Furthermore, Al Omar (2004) reported that the first cause of work stress in nursing was the insufficient technical facilities. Additionally, literature found that the enclosed atmosphere, time pressures, excessive noise were the most common stressors reported by the ICU nurses Cox et al., (2012). Finally, the physical aspects of work such as sudden noise from the equipment in the unit were reported as a source of stressors for nurses (Mohamed et al., 2011).

The highest percentage of staff nurses' highly stress was in total score in work relationships sub-dimension. This may be attributed to the fact that, staff nurses are not receiving support from physicians when their colleagues as well as their head nurses are taking nursing decisions toward their patients. In this respect, Daud (2010) concluded that strong relationships and cohesiveness among employees in the work place will improve their satisfaction with quality of work and a sense of stress.

According to the results of this study, the majority of nurses believed relationship with nurses cause high stress. May be attributed to Unpredictable, unorganized working shift schedules, inadequate number of nurses and taking care of too many patients (2-3 or more) by one nurse. Valizadeh et al (2012) reported similar findings about stressors and their specifications among nurses. In addition to, Greyling and Stank (2010) they stated that poor communication and in-coordination between nursing staff in units may results in feeling bored with and restlessness about their job. In this respect **Sherbafynagad, (2008)** reported that eliminating disproportionate workload and staffing through appropriate scheduling and decreasing unpredicted changes would lead to lower stress levels.

Furthermore, the findings of the current study revealed, relationship with physicians in NICUs was reported by 72.7% of the nurses as causing high level of stress. This may be due to the presence of a doctor is crucial during crises since his/her absence will cause legal and operational problems for the nurses. Also, weak performance and dependency of nurses on doctors in times of crises. This result goes relatively with Valizadeh et al., (2012) indicated to interactions with physicians in NICUs was reported by 81.5% of the nurses as another factor causing moderate to high level of stress. Also, Kanstantions and Christina (2008) assured that problems in professional relationships were manifested in the lack of collaboration between doctors and

nurses, conflicts between nurses and doctors and lack of doctor's respect for nurses 'opinions and their participation in decision making about patients care.

In the present study, more than half of the nurses in NICUs reported that relationship with infants cause high level of stress. This may be attributed to the fact NICU is a unit for taking care of ill infants during transitional period after birth. With the presence of preterm infants suffering from the greatest amounts of change, the nature of this unit is quite different from adult intensive care units. According to Valizadeh et al., (2012) reported similar findings about relationship with infants as factor causing moderate to high level of stress .furthermore, consistent with studies of Cronqvist et al.( 2006) and Chang et al., (2006) taking care of too many patients (2-3 or more) by one nurse was found to cause considerable and high stressors.

The current study, half of the nurses in NICUs reported that relationship with managers cause high level of stress, may be due to the fact that they don't receive surveillance from their managers. The current study did not agree with the study by Kawther et al.(2016) regarding the relationship between stressors and performance all factors cause stress except managers' support probably.

In spite of financial domain was found to be the least stressful factor experienced by two thirds of nurses, this may be due to the recent increase in their salaries but this percent is still high because this increase is still not covering their economic demands of life. These results are consistent with, a study done in Jordan in 2013 by Akif who found that there was a significant positive relationship between four stressors and performance as follows: organizational climate had the most influence on performance followed by the economic factors, then Job difficulty and finally peers' competition. According to, Khani et al., (2008) they concluded that ineffective communication, inadequate salary, lack of autonomy and recognition are the leading factors for increased nurses' job dissatisfaction that lead to emotional problems.

Regarding the correlation between scores of stress assessment and self-efficacy assessment at workplace among the studied nurses, our findings highlighted statistically significant correlations between staff nurses self-efficacy and their stress toward financial domain. This may be attributed to the fact that, they were not given opportunities in job with benefits. These are additional financial benefits other than salary, adequate funding for health care premiums, sick leave, vacation as well as satisfactory work hour's pattern. Also, this may be due to the limitation of the financial affected on self efficacy. This in contrast with the studies of Heckman et al. (2014) who reported that nurses with greater financial were less likely to report financial stress. Lastly, nurses who were more optimistic about their financial futures were less likely to report financial stress.

As found in the current study, a negative correlation was evident between psychological domain, physical environment and services, work relationship with nurses and work relationship with physicians and self-efficacy assessment. This could be attributed to the fact that the majority of nurses are unaware of their emotions and could not regulate them in ways that can assist them in dealing with occupational stress these factors lead to lower their level of efficacy. In this respect Ghanji and Farahani (2008) reported that the strong sense of efficacy enhances human accomplishment and personal well-being in many ways including the ability to cope with stress.

People with a low sense of efficacy on the other hand may have the tendency to look at things as if they are tougher than they really are, a belief that fosters stress, depression and a myopic vision of how best to tackle problems. These results are incongruence with a number of previous studies by (Rezayat and Dehgannayeri , (2013); Mahdizodeh et al., (2016 ) have showed that high levels of stress were associated with lower levels of self-efficacy. In addition to Alidosti et al., (2016) stated that these increasing self-efficacy among nurses can lead to a decrease in burnout in the subscales of depersonalization, stress, emotional exhaustion, and lack of personal accomplishment.

The results of the present study imply that there are not a statistically significant between stress and socio demographic characteristics of the sample .The major explanation for such a finding is that, older nurses with more experience in nursing are more experienced and adaptable to the environment that helping to use active coping strategies and had a less job stress than younger staff. These results are in line with Hoseini et al., (2011) study reported that people with more job experience have better capacity to deal with stressful events, which occur in their workplace

The findings of the current study demonstrate, there are a statistically significant relation between the years of nursing experience and self efficacy. This may be due to the nurses, who, the greater length of nursing experience may higher the amount of maturation which ultimately leads to possess emotional and social competences and tend to find better strategies to improve their performance over time, thus increasing their sense of efficacy. In this regard, Mahdizodeh et al., (2016) mentioned that past experiences are either positive or negative, and the process of learning from those past experiences will affect self-efficacy of future experiences. The greater the exposure to the experience, the greater was the level of self-efficacy. Throughout a nurse's professional career there will be experiences that must be evaluated and reflected on to increase learning and improve performance in the work place. This goes with McNeill (2016) who found that There was a positive correlation between years of pediatric experience and years of experience as well as a positive correlation between self-efficacy and years of nursing education. Furthermore, Soudagar et al. (2015) found that The nurses who had more than 16 years of working experience in the field of nursing reported a better self-efficacy score. Overall, self-efficacy was predicted by the years of experience in the field of nursing. Also, Masoome et al ., (2015) reported that increasing age and work experience had increased self-efficacy. On the contrary, Mercedes and Deborah (2013) noted that the years of nursing experience did not demonstrate a relationship with the level of pain management knowledge or self-efficacy. However, the years of pediatric experience demonstrated a positive relationship to knowledge but not self-efficacy.

## **6. Conclusions & Recommendations**

In conclusion, the findings of the present study show that increasing in stress in the aspects of psychological physical environment and services domain, in addition to, social environment with nurses and physicians among nurses would lead to decreasing self-efficacy. Also the present study reveals that there were statistically significant correlations between staff nurses self-efficacy and their stress toward financial environment.

## Recommendations

- All nurses especially those who work in NICU should be screened on the emotional states (stress) and be given the appropriate counseling if their scores on the instruments are high, and they should have rational emotional therapy.
- All staff nurses should have training on interpersonal and social skills-team building.
- Staff nurses should attend continuing education programs on staff nurses' quality outcomes such as enhancing staff nurses' self efficacy and strategies coping to reduce stress.
- The hospital administrator pay more attention regarding the work related aspects to decrease staff nurses' stress and maintain self efficacy well being.

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\*Corresponding author.

E-mail address: rehabhani@yahoo.com