

## Stressors Affecting Baccalaureate Nursing Students in the Clinical Area in Palestinian Universities

Dr.Imad Fashafsheh\*, Mr. Ahmad Ayed: Nursing Department, Arab American University, Palestine  
Dr. Aidah Alkaissi, An-Najah National University-Faculty of Medicine and Health Sciences-Nursing & Midwifery Department- Nablus-Palestine.  
Mr. Wisam Salim, Clinical Nurse Specialist, Canada

### Abstract

Stress is one of the issues that nursing student face during their transition from theoretical education to clinical application and it can affect the psychosocial status; it may influence academic performance and student well-being. **Aim of the study:** This paper aims to identify sources of stress and the intensity of stressors facing baccalaureate nursing students in clinical training in governmental and private hospitals in Palestinian Universities.

**Background:** Stress among nursing students is familiar especially in training as the student exposed to new area with different types of patients, professionals, equipment's, instructors and hospitals; these stressors mostly affect the student's ability to achieve good outcome. **Method:** This descriptive study use face-to-face questionnaire. **Results:** the mean total response degree about the stress factors due to the career, training environment, working with various kinds of patients, and the evaluation by supervisors were medium (2.52, 2.59, 2.81, 2.59) respectively. There is relationship between the degree of the stress factors towards the university, place of training, years of study, and training period,  $F= 3.858(0.002)$ ,  $3.194(0.042)$ ,  $4.214(0.015)$ ,  $4.778(0.009)$  respectively.

**Conclusions:** stress that nursing students face must be consider as an important factor that affect their achievement and ability to have good experience, there are differences between the variables which needs more attention trying to decrease the number and intensity of these stressors.

**Keywords:** clinical learning, Palestinian Universities, Stressors, Training settings.

### 1. Introduction

The human biology deals with stress as a state produced by changing of the environment and it perceived as challenging, threatening, or damaging to a person's dynamic balance or equilibrium. The person feels unable to meet the new demands of the new situation so he/she is in a state of stress. (Smeltzer, 2010).

Stress has a multidimensional influence ; it can have physical, emotional, intellectual, social, and spiritual consequences, usually the effects are mixed, because stress affects the whole person. Physically, stress can threaten a person's physiologic homeostasis. Emotionally, stress can produce negative or non constructive feelings about the self. Intellectually, stress can influence a person's perceptual and problem- solving abilities. Socially, stress can alter a person's relationships with others while spiritually, it can challenge one's beliefs and values. (Kozier, 2016).

The clinical setting is a stressful environment, it is important to provide a supportive environment for students to facilitate their learning, to achieve this goal, clinical educators, students, and clinical staff should work together (Chan, So, & Fong, 2009).

However, some professions have in themselves a higher probability of being perceived as stressors than others, nursing has been identified as such profession. Trainees commonly report stressors such as anxieties regarding professional relationships, procedures, handling the critically ill and dying, fear of failure, observing the suffering of others and feelings of guilt . Levels of stress and sources of stress have been reported in studies of nursing students in Western population (Evans & Kelly, 2004). Stress and the stressful events for nursing students during clinical practice have been studied by many researchers ( Mahat, 1988).

Several investigators have found that more stress occurs during the initial period of clinical practice than in any other periods ( Sharif & Masoumi, 2005; Jimenez, Navia-Osorio, & Diaz, 2010). But on the other hand there is a lot of studies found that senior student have higher degree of stress due to the more exposure to critically ill patients and the more duties and responsibilities (Chan, So, & Fong, 2009).

Stressful events include difficulty in developing relationships with professionals, lack of familiarity with operating procedures and with the hospital environment (Kessler, Price, and Wortman, 1985), lack of professional proficiency, committing errors, uncertainty of patients, expectations, use of improper clinical teaching methods (Pagana, 1988), learning incompetence, unclear instructors' expectations slow responding ability to stressful situations, and poor social relations (Su& Ko, 1993).

Nursing students experience several difficulties during their initial clinical experience (Sheu et al. 2002). Current nursing curricula seems to be not enough to prepare nursing students adequately to handle this clinical experience (Karabacak et al. 2012).

Nursing is a practice-based profession; therefore clinical education is an essential part of the undergraduate nursing curriculum. The quality of nurse education depends largely on the quality of the clinical experience (Elliot, 2002).

Clinical experience has been always an integral part of nursing education. It prepares student nurses to be able of "doing" as well as "knowing" the clinical principles in practice. It stimulates students to use their critical thinking skills for problem solving. Awareness of the existence of stress in nursing students by nurse educators and responding to it will help to diminish student nurses experience of stress. Stress and the identification of potential stressors among nursing students have received much attention in the literature (Nicholl& Timmins, 2005). Nursing students have the same academic stressors as other college students, such as midterm and final examinations, research papers and other assignments (Evans& Kelly, 2004).

In addition to that, nursing students experience a clinical component, which is highly stressful; students have a large amount of preparatory work before their clinical assignments. Mostly they travel long distances to clinical sites and use highly technical equipment (Mahat, 1998; Shriver& Scott-Stiles, 2000).

Nursing students must perform procedures that can cause serious harm to their patients, thus enhancing their fear of making mistakes, studies indicate that nursing students may be more prone to stress than other students (Beck& Srivastava, 1991).

Lack of clinical experience, unfamiliar areas, difficult patients, fear of making mistakes and being evaluated by faculty members were expressed by the students as anxiety-producing situations in their initial clinical experience. In study done by Hart& Rotem (1994) stressful events for nursing students during clinical practice have been studied. They found that the initial clinical experience was the most anxiety producing part of their clinical experience.

Stress-inducing academic demands include grade competition; lack of time and issues relating to time or task management, the need to adapt to new learning environments in terms of the increased complexity of the material to be learned and the greater time and effort required to do so; and the need to constantly self-regulate and to develop better thinking skills, including learning to use specific learning techniques. Another category that evokes stress is social adjustment, particularly adjusting to university life and separating from family and friends. Finally, there are financial pressures and other technical difficulties (Kariv& Heiman, 2005).

Without doubt, clinical practice is one of the crucial components in nursing education, and it can be highly stressful for students. They may face many challenges or threats in dynamic and complex clinical environments, such as how to use high-tech medical equipment, how to maintain good relationships with clinical staff and instructors, how to manage sudden changes in a patient's condition, and how to deal with the demands of patients' relatives (Elliott, 2002).

The researchers came to realize that nursing students have a great deal of anxiety when they begin their clinical practice in the second year. It is hoped that an investigation of the student's view on their clinical experience can help to develop an effective clinical teaching strategy in nursing clinical education.

### **Significance/Relevance of the problem:**

Clinical training for Palestinian nursing students started in first year and continued to the fourth year, student's distributed in different clinical areas in the hospitals in order to integrate their theory with clinical practice skills, level and sources of stressors have been reported from the students, however there have been limited researches on clinical stress among Palestinian baccalaureate nursing students.

Although few studies have been reported regarding the nature of nursing profession, clinical settings, working with different types of patients and the evaluation process of the students as major sources of stressors for nursing students in clinical training in Arab countries and Palestinian Universities. It is hoped that an examination of the above-mentioned issues can help develop an effective clinical teaching strategy and help in decreasing the level of stress for nursing students in Palestinian Universities.

### **Aim of the study**

The aim of study is to identify types and intensity of stressors that affect baccalaureate nursing students and relationship between these stressors in clinical areas, in Palestinian Universities.

**Research question:** What are types and level of stress perceived by baccalaureate nursing students in clinical practice in Palestinian Universities?

### **Research hypothesis**

1. There are no significant differences at ( $\alpha =0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the university.
2. There are no significant differences at ( $\alpha =0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable

of the place of training.

3. There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the gender.

4. There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the age groups.

5. There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the year of study.

6. There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the training period.

**2. Method and Procedure:** Research design: The study use cross-section descriptive design, and analytic method for its suitability for the study purposes, to identify nursing student's stressors in clinical training.

**2.1 Study Sample:** The study consists of 396 nursing students. The study was conducted in six Palestinian universities and had clinical training at hospitals (Arab American university Jenin, An-Najah National University, Al-Quds University, Beir Zeet University, Hebron University, and Beithlehem University).

**2.2 Study period** The study sample collected between march 2012 and finished at August 2012.

### 2.3 Tool of the study

A structured questionnaire was developed by the investigators to be used in this study after surveying some previous studies dealing with the same subject and extensively review of literature by the researcher. It includes the biographical and student clinical stressor scale (SCSS). The SCSS questionnaire evaluates the main stressors affecting nursing stressor during their practical training and consists of four parts:

**Part One:** Includes general information dealing with the demographic and educational status like university, place of training, training need for transportation, gender, year of study, place of residence, income, family members, marital status and training period.

**Part Two:** Includes questions dealing with clinical training at hospitals. The questions cover four areas: first 7 questions covers professional stressors, from 8 to 19 questions covers environmental stressors, from 20 to 35 questions covers stressors related to working with different types of patients and from 36 to 45 questions covers stressors related to instructors evaluation for students. the rating scale as follows: Un stressful; 1= Slightly stressful; 2 = Moderately stressful; 3= Markedly stressful; and 4= Highly stressful. Every part means described as the following scale: More than 3 High; From 2-3 Medium; and Less than 2 Low.

**2.4 Ethical consideration:** Students informed that participation in this study is voluntary and the data acquired to be used for scientific study and will be confidentially treated. In addition, the research proposal approved by institutional reviewed board (IRB).

**2.5 Credibility** The study tool was subjected for the test by experts who recommended for its validity for the achieving of the study purposes.

**2.6 Reliability** Was tested by using Khronbach Alpha test which was (93.7); this result is acceptable for the study purposes.

**2.7 Data analysis:** The quantitative data were entered and analyzed using the SPSS (Statistical Package for Social Sciences version 20.0), and the level of significance ( $\alpha$ ) was set at 0.05. Demographic and baseline variables were analyzed using frequency, percentage. Hypothesis were tested and analyzed by using t. test and Anova one way test.

## 3. Results

The results of the study composed of three parts; part one description of the sample; the second part answering the research question; and the third part answering the research hypothesis.

The study sample consists of (396) students of nursing at the Palestinian universities who have had clinical training at hospitals. Distributed as 80(20.2%) students from AAUJ, 66(16.7%) from An-Najah National University, 55(13.9%) from Al-Quds University, 45(11.4%) from Beir Zeet University, 75 (18.9%) from Hebron University, and 75 (18.9%) from Beithlehem University.

**Table 1** showed that the study sample revealed that more than half of the respondent were from governmental and private hospitals 209 (53.5%), the majority of them did not need transportation 384 (98.2%), approximately 199 ( 50.9 %) were male, large age group 301 (77%) of them between 20-22 years old. One third were juniors 147 (37.6%), two thirds were from villages 253 (64.7%), about ( 66 %) of them had 2000-3000 NIS, approximately (40%) of them had 6-7 family members, most of them (91.8% ) were single and nearer half of the studied sample ( 43.7% ) had two and half years training period.

**Table (1) The Description of the study sample ( N=391)**

Parameters	Items	No.	Percentage
<b>Place of training</b>	Governmental Hospitals	111	28.4%
	Private Hospitals	71	18.2%
	Both ( Governmental and Private Hospitals)	209	53.5%
<b>Training Needs of transportation</b>	No need for transportation	7	1.8%
	Need for transportation	384	98.2%
<b>Gender</b>	Male	199	50.9%
	Female	192	49.1%
<b>Age</b>	18-19	40	10.2%
	20-22	301	77.0%
	23-25	39	10.0%
	More than 25 years	11	2.8%
<b>Year of study</b>	Sophomore	119	30.4%
	Junior	147	37.6%
	Senior	125	32.0%
<b>Place of residence</b>	City	120	30.7%
	Village	253	64.7%
	Refugee camp	18	4.6%
<b>Family income</b>	2000-3000 NIS	261	66.8%
	3500- 4000 NIS	82	21.0%
	4500-5000 NIS	29	7.4%
	More	19	4.9%
<b>Family members</b>	Two –three individuals	35	9.0%
	Four - five	67	17.1%
	Six -seven	162	41.4%
	More than eight	127	32.5%
<b>Marital status</b>	Married	25	6.4%
	Single	359	91.8%
	Divorced	5	1.3%
	Widowed	2	0.5%
<b>Training period / year</b>	One and half semester	146	37.3%
	Two and half	171	43.7%
	Three and half	74	18.9%

**Part Two: The study question**

What are types and level of stress perceived by baccalaureate nursing students in clinical practice in Palestinian Universities? The following tables show the study results about this question

**Table (2): The response degree of Stressors due to the career**

Stressors due to the career				
No.	Item	Mean	S.D	Response Degree
1.	Smelling or unfavorable odors in the hospital surrounding ( e.g. excrete, infected wounds, cleaning products )	3.10	1.11	High
2.	Performing procedures with inadequacies or unlearned ones	2.50	1.09	Medium
3.	Performing frightening procedures ( e.g. IV Cannula)	1.75	1.03	Low
4.	Having the feeling of insecurely	2.28	1.26	Medium
5.	Being subject for hazards while performing ( e.g. getting infection or exposed to radiation )	3.05	1.33	High
6.	Training in an irregular rotating working houses	2.81	1.44	Medium
7.	Training in night shifts	2.19	1.43	Medium
	Total degree of (stress factors due to the career )	2.52	0.68	Medium

The previous table showed that the response degree about the stress factors due to the career was medium (2.52), while the items of (Smelling or unfavorable odors in the hospital surrounding (3.10) and Being subject for hazards while performing (3.05) had the high response degree among the stressors due to the career.

**Table (3): The response degree of stress factors due to the training environment**

Stress factors due to the training environment				
No	Item	Mean	S.D	Response Degree
8.	Discrepancy between learned procedures and those seen to be practiced at the hospital	3.14	1.25	High
9.	Dealing with other health team members ( e.g. doctors, nurses, technicians, auxiliaries )	2.24	1.17	Medium
10.	Training and transferring in various ward situations	2.03	1.16	Medium
	Training at unfavorable space ( too small or too large)	2.90	1.32	Medium
12.	Training in light conditions that seems to be uncomfortable ( inadequate light or excessive light )	2.49	1.23	Medium
13.	Training by using different equipments	2.23	1.05	Medium
14.	Initial clinical experience	2.72	1.31	Medium
15.	Having insufficient procedures to meet the patients' needs	2.65	1.20	Medium
16.	Training while surrounded by unfavorable colors	2.06	1.08	Medium
17.	Training in noisy place	3.18	1.34	High
18.	Training in areas that need constant attention to patient with critical situation( e.g. ECU, ICU ...etc)	2.83	1.26	Medium
	Total degree of (stress factors due to the training environment)	2.59	0.65	Medium

It has shown from the previous table (3) that the response degree about the stress factors due to the training environment was medium (2.59). While the items of Discrepancy between learned procedures and those seen to be practiced at the hospital (3.14) and Training in noisy place (3.18) had the high response degree among the stress factors due to the training environment.

**Table (4): The response degree of Working with various kinds of patients**

Working with various kinds of patients				
No.	Item	Mean	S.D	Response Degree
19.	Caring of patient with disfigurements	2.85	1.28	Medium
20.	Caring of patients with pain	2.28	1.18	Medium
21.	Caring of terminally ill or dying patients	2.98	1.29	Medium
22.	Training with patient in life threatening situations ( e.g. cardiac arrest, respiratory arrest, epileptic fit)	3.33	1.33	High
23.	Training or dealing with amputated patient	2.76	1.22	Medium
24.	Dealing with mentally disturbed patient	3.08	1.29	High
25.	Caring for incontinent patient	2.81	1.20	Medium
26.	Dealing with patient with abnormal body opening ( colostomy, ileostomy )	2.80	1.24	Medium
27.	Handling human excretion ( sputum, vomits, urine, stool)	3.44	1.31	High
28.	Being responsible for patient connected to tubes or machines	2.71	1.22	Medium
29.	Being responsible for big numbers of patients	3.21	1.26	High
30.	Caring for confused / unconscious / postoperative patient	2.60	1.14	Medium
31.	Dealing with patient or his family ( e.g demanding, flirtatious, uncooperative )	3.25	1.24	High
32.	Communicating with patient having difficulties in communication	2.61	1.07	Medium
33.	Dealing with patient of the opposite sex	2.20	1.25	Medium
34.	Dealing with sick babies	2.35	1.27	Medium
35.	The presence of the instructor most of the time	2.52	1.36	Medium
	Total degree of (Working with various kinds of patients)	2.81	0.71	Medium

It has been shown from the previous table (4) that the response degree of stress due to the working with various kinds of patients was medium (2.81). While the items of Training with patient in life threatening situations (3.33), Dealing with mentally disturbed patient (3.08), Handling human excretion (3.44), Being responsible for big numbers of patients (3.21), and Dealing with patient or his family(3.25 ) had the high response degree among the Working with various kinds of patients.

**Table (5): The response degree of the evaluation by supervisors**

The evaluation by supervisors				
No.	Item	Mean	S.D	Response Degree
36.	Performing nursing procedures while under direct supervision of the instructor	2.91	1.30	Medium
37.	Being rated against peers by the patient and his family	2.65	1.27	Medium
38.	Being judge by the other health personnel while performing nursing skills	2.71	1.23	Medium
39.	Offering written records with standards for evaluation	2.49	1.28	Medium
40.	Always adhering to professional conduct (e.g . expected to behave always correctly ) and appearance ( keeping always neat appearance )	2.17	1.30	Medium
41.	Being evaluated by the instructor	2.63	1.30	Medium
42.	The instructors' treatment for the students	2.50	1.29	Medium
43.	Post – clinical conferences	2.18	1.25	Medium
44.	Expected to examined without being informed	2.97	1.39	Medium
45.	Questioning the students by the instructors	2.67	1.27	Medium
Total degree of (The evaluation by supervisors)		2.59	0.86	Medium

It has been shown from the previous table (5) that the response degree of stress due to the evaluation by supervisors was medium (2.59).

#### 4. Part three: Study Hypothesis

**Hypothesis (1):** There are no significant differences at ( $\alpha =0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the university. For achieving this, One Way Anova Test was used (table-6).

**Table (6): The relationship of the degree of the stress factors and the variable of the university**

Stress factors due to the career	Sum of squares	D f	Mean	F	Sig.
Between groups	9.642	5	1.928	4.263	0.001*
Within groups	176.412	390	0.452		
Total	186.054	395			
Stress factors due to the training environment	Sum of squares	D f	Mean	F	Sig.
Between groups	8.230	5	1.646	2.799	0.002*
Within groups	165.906	390	0.425		
Total	174.136	395			
Working with various kinds of patients	Sum of squares	D f	Mean	F	Sig.
Between groups	7.042	5	1.408	2.766	0.018*
Within groups	198.578	390	0.509		
Total	205.620	395			
The evaluation by supervisors	Sum of squares	D f	Mean	F	Sig.
Between groups	10.141	5	2.028	2.738	0.019*
Within groups	288.944	390	0.741		
Total	299.085	395			
Total Degree	Sum of squares	D f	Mean	F	Sig.
Between groups	6.567	5	1.313	3.858	0.002*
Within groups	132.782	390	0.340		
Total	139.349	395			

The previous table showed that there were significant differences between Stress factors due to the career, Stress factors due to the training environment, Working with various kinds of patients, and The evaluation by supervisors (0.001, 0.002, 0.018, and 0.019) respectively and universities at ( $\alpha =0.05$ ) level. At the same time, there were significant differences between the total domains and the universities (0.002) at the level ( $\alpha =0.05$ ).

**Hypothesis (2):** There are no significant differences at ( $\alpha =0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the place of training. For achieving this, One Way Anova Test was used (table- 7)

**Table (7): The relationship of the degree of the stress factors and the variable of the place of training**

stress factors due to the career	Mean	F	Sig.
Between groups	2.338	5.067	0.007*
Within groups	0.462		
Stress factors due to the training environment	Mean	F	Sig.
Between groups	0.655	1.489	0.227
Within groups	0.440		
Working with various kinds of patients	Mean	F	Sig.
Between groups	0.299	0.572	0.585
Within groups	0.522		
The evaluation by supervisors	Mean	F	Sig.
Between groups	2.449	3.271	0.039*
Within groups	0.749		
Total Degree	Mean	F	Sig.
Between groups	1.114	3.194	0.042*
Within groups	0.349		

The previous table showed that there were significant differences between Stress factors due to the career and The evaluation by supervisors (0.007 and 0.039 respectively and the place of training at ( $\alpha = 0.05$ ) level. While there were no significant differences between stress factors due to the training environment and Working with various kinds of patients (0.227 and 0.585) respectively and the place of training at ( $\alpha = 0.05$ ). At the same time, there were significant differences between the total domains and the place of training (0.042) at the level ( $\alpha = 0.05$ ). **Hypothesis (3):** There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the gender. For achieving this hypothesis, t-test for two independent samples was used.(table-8).

**Table (8): The relationship of the degree of the stress factors and the variable of the gender**

	Item	N	Mean	S.D	t. test	Sig.
Stress factors due to the career	Female	195	2.47	0.66	1.692	0.091
	Male	201	2.59	0.70		
stress factors due to the training environment	Female	195	2.61	0.68	-0.256	0.798
	Male	201	2.60	0.64		
Working with various kinds of patients	Female	195	2.89	0.74	-1.495	0.100
	Male	201	2.77	0.69		
The evaluation by supervisors	Female	195	2.67	0.90	-1.495	0.136
	Male	201	2.54	0.82		
Total degree	Female	195	2.66	0.60	-0.629	0.530
	Male	201	2.62	0.58		

The previous table showed that there were no significant differences between Stress factors due to the career, Stress factors due to the training environment, Working with various kinds of patients, and The evaluation by supervisors (0.091, 0.798, 0.100, and 0.136) respectively and gender at ( $\alpha = 0.05$ ) level. At the same time, there were no significant differences between the total domains and the gender (0.530) at the level ( $\alpha = 0.05$ ).

**Hypothesis (4):** There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the age groups. For achieving this, One Way Anova Test was used (table-9)

**Table (9) : The relationship of the degree of the stress factors and the variable of the age groups**

Stress factors due to the career	Mean	F	Sig.
Between groups	0.512	1.089	0.354
Within groups	0.471		
stress factors due to the training environment	Mean	F	Sig.
Between groups	0.434	0.985	0.400
Within groups	0.441		
Working with various kinds of patients	Mean	F	Sig.
Between groups	0.803	1.544	0.201
Within groups	0.518		
The evaluation by supervisors	Mean	F	Sig.
Between groups	0.473	0.623	0.601
Within groups	0.759		
Total Degree	Mean	F	Sig.
Between groups	0.160	0.452	0.716
Within groups	0.354		

The previous table showed that there were no significant differences between Stress factors due to the career, Stress factors due to the training environment, Working with various kinds of patients, and The evaluation by supervisors (0.354, 0.400, 0.201, and 0.601) respectively and age group at ( $\alpha = 0.05$ ) level. At the same time, there were no significant differences between the total domains and the age group (0.716) at the level ( $\alpha = 0.05$ ).

**Hypothesis (5):** There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the year of study. For achieving this, One Way Anova Test was used (table-10).

**Table (10): The relationship of the degree of the stress factors and the variable of the year of study**

Stress factors due to the career	Mean	F	Sig.
Between groups	2.981	6.506	0.002*
Within groups	0.458		
stress factors due to the training environment	Mean	F	Sig.
Between groups	2.171	5.025	0.007*
Within groups	0.432		
Working with various kinds of patients	Mean	F	Sig.
Between groups	0.894	1.723	0.180
Within groups	0.519		
The evaluation by supervisors	Mean	F	Sig.
Between groups	0.654	0.863	0.423
Within groups	0.758		
Total Degree	Mean	F	Sig.
Between groups	1.463	4.214	0.015*
Within groups	0.347		

The previous table showed that there were significant differences between Stress factors due to the career and stress factors due to the training environment (0.002 and 0.007 respectively and year of study at ( $\alpha = 0.05$ ) level. While there were no significant differences between Working with various kinds of patients and The evaluation by supervisors (0.180 and 0.423) respectively and year of study at ( $\alpha = 0.05$ ). At the same time, there were significant differences between the total domains and the year of study (0.015) at the level ( $\alpha = 0.05$ ).

**Hypothesis (6):** There are no significant differences at ( $\alpha = 0.05$ ) level about the stress factors that affect the students of nursing who have had clinical training at the Palestinian governmental hospitals in West Bank due to the variable of the training period. For achieving this, One Way Anova Test was used. (table-11).



**Table (11) : The relationship of the degree of the stress factors and the variable of the training period**

stress factors due to the career	Mean square	F	Sig.
Between groups	1.999	4.316	0.014*
Within groups	0.463		
Total			
stress factors due to the training environment	Mean square	F	Sig.
Between groups	3.722	8.774	0.000*
Within groups	0.424		
Total			
Working with various kinds of patients	Mean square	F	Sig.
Between groups	1.175	2.272	0.104
Within groups	0.517		
The evaluation by supervisors	Mean square	F	Sig.
Between groups	0.693	0.915	0.401
Within groups	0.758		
Total Degree	Mean square	F	Sig.
Between groups	1.654	4.778	0.009*
Within groups	0.346		

The previous table showed that there were significant differences between Stress factors due to the career and stress factors due to the training environment (0.014 and 0.000) respectively and the training period at ( $\alpha = 0.05$ ) level. While there were no significant differences between Working with various kinds of patients and The evaluation by supervisors (0.104 and 0.401) respectively and training period at ( $\alpha = 0.05$ ). At the same time, there were significant differences between the total domains and the training period (0.009) at the level ( $\alpha = 0.05$ ).

## 5. Discussion

The students showed high levels of stress in the first domain (The career). Item no.1 which is about smelling unfavorable odors during the work duty and being subjected to hazard factors have high degrees of stress with an average of (3.10) and (3.05). Despite the fact that the examined sample was juniors and seniors, they showed low degree of familiarity with hospital environment. This results goes with the study done by (Gorostidi, Egilegor, Erice, Iturriotz, Garate, Lasa, Cascante, 2007), Stress sources in nursing practice.

Evolution during nursing training, in which the most powerful stressors identified by students both at the beginning and at the end of their studies were: lack of competence, uncertainty and impotence, being harmed by the relationship with patients, emotional involvement, lack of control in relationships with patients, contact with suffering, relationships with tutors and companions, and overload.

In the second domain (The training environment), the gap between theoretical and practical study showed a high degree of stress among the trainees and the noisy environment (3.14) and (3.18). The researchers consider that logical result as the nursing standards are not implemented entirely in hospitals. This results in the same direction of the study done by (Sharif & Masoumi, 2005) titled; nursing student experiences of clinical practice, in which nursing students were not satisfied with the clinical component of their education. They experienced anxiety as a result of feeling incompetent and lack of professional nursing skills and knowledge to take care of various patients in the clinical setting.

The third domain which has five items (caring with patients with emergency situation, mental problems, Dealing with excretion, dealing with many patients at the same time and treating the uncooperative patients' families) showed high degree of stress. The assumptions in these situations are students should have background about how to act correctly in these situations, in the practical situations, the students shouldn't express a high level of stress. Regarding to the item (Dealing with excretion), the student may feel fair or he may feel that cleaning excretion is inferior to what he has learned in his theoretical studies.

On the other hand, the fourth domain (Evaluation by the supervisor) showed no high levels of stress. All items showed medium degree of stress which is accepted in this situation because they have previous familiarity due to their competency in the career.

The results show significant differences in the trainees' stress between the different universities due to Beerzeit University students who have expressed low level of stress than the others. The researchers due this result to the fact that familiarity and awareness of the students regarding nursing as profession.

Also, there are significant differences between the students' levels of study. The results shows that the more the level, the high degree of stress, the researchers due this result to more responsibilities and exposure of students to difficult and serious cases. The significant differences between different family's numbers. The significant differences between training periods are similar to (Ruth Lo, 2001) who found that the training program is not adequate in preparing the students for encountering the stress.

However, there are no significant differences between males and females, marital status, place of residence, and age of the groups, the same results shown by (Burnard, 2007), although the study done by Hamaideh (2011) titled “Gender differences in stressors and reactions to stressors among Jordanian university students” showed significant difference between male and female students. Also, the significant differences between place of residence in (Amer, 2011) contrasts with the result of this study results which found no significant differences between the different levels of residences .

## 6. Conclusion

Clinical placements is a challenge for educators, clinical instructors and students. Clinical educators and clinical staff has to appreciate the complexity of training part of student program and must provide a healthy supportive training environment. Nursing instructors should encourage students to discuss their feelings and their stressors in order to provide appropriate interventions. The study results showed clearly that many areas can be of high to moderate stress on nursing students , which need to be discussed and managed to decrease this high stressful situations for the better outcomes of the students and the universities.

## References

- Amer M, El-Gilany A, El-Moafee H, Salama L & Jimenez C. (2011): Stress among Mansoura (Egypt) baccalaureate nursing students. *The Pan African Medical Journal.*; 8:26.
- Beck DL, Srivastava R. (1991): Perceived level and sources of stress in baccalaureate nursing students. *Journal of Nursing Education*, 30 (3):127-133.
- Brunner&Suddarth's (2010): *Textbook of Medical-Surgical Nursing*, 12th edition. Philippines Lippincott Williams&Wilkins. Pp.92-93.
- Burnard, P., Rahim. H.T.B., Hayes, D., Edwards, D. (2007): A descriptive study of Bruneian student nurses' perceptions of stress, *Nurse Education Today* volum 27, issue 7, pages 808-818.
- Chan, K., So, W., & FONG, T. (2009): Hong Kong Baccalaureate Nursing Students' Stress and Their Coping Strategies In Clinical Practice, *Journal of Professional Nursing*, Vol 25, No 5 (September–October), pp 307–313
- Elliott, M. (2002): The clinical environment: A source of stress for undergraduate nurses. *Australian Journal of Advanced Nursing*, 20, 34–38.
- Evans W, Kelly B. ( 2004): Pre-registration diploma student nurse stress and coping measures. *Nurse Education Today* , 24 (6): 473-482.
- Gorostidi X et al. (2006) : Stress sources in nursing practice. Evolution during nursing training: *Nurse Education Today* (2007) 27, 777–787
- Hamaideh S . (2011): Gender differences in stressors and reactions to stressors among Jordanian university Students : *International Journal of Social Psychiatry* 58(1) 26–33
- Hart G, Rotem A .(1994): The best and the worst: Students' experience of clinical education. *The Australian Journal of Advanced Nursing*, 11(3): 26-33.
- Jimenez C, Navia-Osorio P & Diaz C .(2010): Stress and health in novice and experienced nursing students. *Journal of Advanced Nursing* 66(2), 442–455.
- Karabacak, Ü., et al. (2012): First day in clinical practice: evaluating stress of nursing students and their ways to cope with it. *HealthMED*, 6 (2), 596– 602.
- Kariv D, Heiman T .( 2005): Task-oriented versus emotion-oriented coping strategies: *College Student Journal* , 39(1):72-84.
- Kessler R C, Price R H, and Wortman C B .(1985): Social Factors in Psychopathology: Stress, Social Support, and Coping Processes. *Annual Review of Psychology*, Vol. 36: 531-572
- Kozier&Erb's *Fundamentals of Nursing, Concepts, Process, and Practice* (2016) 10th edition. U.S.A: Pearson Education Inc. pp.972, 973
- Mahat G. ( 1998): Stress and coping, junior baccalaureate nursing students in clinical settings. *Nursing Forum*, 33 (1):11-19.
- Nicholl H, Timmins F .(2005): Programme-related stressors among part-time undergraduate nursing students. *Journal of Advanced Nursing*, 50(1):93-100.
- Pagana, K.D .(1988): Stresses and threats reported by baccalaureate students in relation to an initial clinical experience. *Journal of Nursing Education* 27 (9), 418–424.
- Ruth Lo .(2001): A longitudinal study of perceived level of stress, coping and self-esteem of undergraduate nursing students : an Australian case study . *Journal of Advanced Nursing*, 39(2), 119–126
- Sharif F and Masoumi S. (2005): A qualitative study of nursing student experiences of clinical practice. *BMC Nursing*.
- Sheu, S., Lin, H.-S. & Hwang, S.-L. (2002): Perceived stress and physiopsychosocial status of nursing students during their initial period of clinical practice: the effect of coping behaviors. *International Journal of*

- Nursing Studies, 39 (2), 165–175.
- Shriver CB, Scott-Stiles A.(2000): Health habits of nursing versus non-nursing students: a longitudinal study. Journal of Nursing Education , 39(7):308-314.
- Su, L.J., Ko, S.W. (1993): Assessment of stress among nursing students during first clinical practice. Nursing Research (Republic of China) 1 (2), 166–173 (in Chinese).

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

### CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

**Prospective authors of journals can find the submission instruction on the following page:** <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

### MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

### IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

