



## Assessment of Stress Factors for Nursing Student Toward Training in the Critical Areas of Princess Basma Hospital

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### ABSTRACT

**Background:** Stress has been defined as a barrier to concentration, problem-solving, decision making, and other necessary abilities for students' learning; it also has some symptoms and illnesses in the students such as depression and anxiety.

**Objective:** The aim of this study was to assess Stress for nursing students at Jordan University of Science and Technology (JUST) toward training in the critical areas of Princess Basma Hospital. A study design: A cross-sectional descriptive study was used in this study. Setting: conducted in Princess Basma educational hospital in three months from November 2015 until January 2016.

**Materials and Methods:** a purposive sample to select the student (103) from three academic levels. An interviewing questionnaire to assess factors of stress related to workload, Factors of stress related to lack of support and involvement, Stress factors related to patient and family and scale of 1 to 5 describe your satisfaction of being a critical area nurse.

**Findings:** The study results revealed that shortage of staff ( $2.17 \pm 0.39$ ) and lack of time to spend with the patients ( $2.01 \pm 0.77$ ) also revealed that support from college was the most stressing factor ( $2.64 \pm 0.39$ ) and Results indicate that "patients' families making unreasonable demand" was the highly estimated stress factors ( $2.18 \pm 0.67$ ). while study sample participants are having a high satisfaction level about becoming a future nurse in the critical areas ( $2.52 \pm 0.60$ ).

**Conclusion:** The study concluded that shortage of staff, lack of support from the college, "patients' families making unreasonable demand" and "being blamed for anything that goes wrong were the most stressing factor for the participants. The study recommended to design and implement health promotion program for all students nursing college at Jordan University of Science and Technology about prevention of Stress factors toward training in the critical areas.

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**Keywords:** Stress, training, critical areas.

#### 1. Introduction:

The critical area is probably the most stressful department in the hospital, This stress is not limited to Doctors, it also affects other medical personnel in the department including nurses, technicians, and others. Many studies have shown that medical and nursing students perceive stress more than others , probably because of the academic responsibilities of exams , quizzes , rotations, Those students have not been exposed to extreme situations as to work for long hours , facing patients with major morbidities and let's not forget about the high rates of mortality seen in the critical area , all these factors make nursing students more vulnerable to stress

and stress causing illnesses. Stress is a very important factor for the development of many illnesses such as; Hypertension, diabetes mellitus, obesity, Coronary artery disease, anxiety disorders and Depression. Stress is an important psycho-social factor in the educational process that may influence academic performance and student well-being. Significantly profound stress is experienced by nursing students as they work with patients in the clinical setting.

The most stressful aspect of student nurses' clinical practice was seeing the pain and suffering of the patients. However, for nursing students, the level of academic stress was even higher than that of clinical stress.



Studies had been performed worldwide in the field of nursing students attitudes toward stress factors and their descent in the critical area. For example, had performed a study that aimed to explore nursing students attitudes toward stress and help-seeking. Moreover, nurse employers and educators were recommended to foster more supportive and accepting attitudes toward stress.

Anxiety and depression are often experienced simultaneously. Depression affects about 67% of students with anxiety, and anxiety was a major predictor of depression while 48.83% mild stress and 11.62% moderate stress among nursing students.

This study is aiming to assess Stress for a student in the faculty of nursing at Jordan University of Science and Technology toward training in the critical areas of princess Basma educational Hospital.

## 2. Materials and Methods:

### 2.1. Research design:

A cross-sectional descriptive study, including 103 Saudi adult females, enrolled in the faculty of nursing at Jordan University of Science and Technology in the second, third, and fourth-year academic levels.

### 2.2. Setting:

The study was conducted in princess Basma educational hospital, in Irbid governorate.

### 2.3. Sample Size, Selection of Sample and Data Collection:

#### 2.3.1. A purposive sample was used in this study:

The researcher had distributed a total of 121 questionnaire packages and got back a total of 103 complete and valid questionnaires, which represents 85.1% response rate. 18 questionnaire were not completed due to the absence or refusal of nursing students in the study setting. They were chosen according to the following

#### 2.3.2. Inclusion criteria :

Study sample should be composed of nursing students from the faculty of nursing at Jordan University of Science and Technology having field training in princess Basma educational hospital, In Irbid governorate. Participants are in the second, third or fourth years academic levels.

### 2.4. Tools for Data collection:

#### 2.4.1. An interviewing questionnaire:

Was developed by the researchers, which covered two parts. The first part was concerned with collection data about studied participants, characteristics (as academic level, marital status and residence, the second part was concerned with (a) factors of stress related to workload as a shortage of staff, lack of time to spend with patient and Workload too high. (b) was concerned with

factors of stress related to lack of support and involvement as lack of friendly working condition , lack of support from college ,Pressure from other staff , lack support from instructor , criticism by a physician , feeling tired, fear and sadness without cause ,you have skills adequate for the critical area, do you have any psychological issues related to work, sleep disorders or depression and measures for protection against violence in the critical area. (c) stress factors related to patient and family as Patients' families making unreasonable demands, being blamed for anything that goes wrong and witnessing aggression from patients, their relatives. and (d) student satisfaction of being an critical area nurses as critical area nurses is always learning new things and are exposed to cases every day, critical area nurses have better teamwork ability than other nurses, building great working relationships with other critical area doctors and staff members and experience of critical area nurses is very vast and will be of great benefit if you choose to go to another nursing area.

#### 2.4.2. Field of work:

Data collection took about three -months from November 2015 until January 2016. The interviewing questionnaire was filled in by the researcher for the student in the selected settings at the college. Each interview took about 30-45 minutes. The average number interviewed were three students per day depending up break time in the hospital, in addition to the outside factors such as noise and interruptions. The researcher asked the questionnaire in a simple Arabic language, taking the legal aspects of ethics in research into consideration.

#### 2.5. Statistical analysis:

The collected data were tabulated and analyzed using Statistical Package of Social Science (SPSS), version 24. Data in this study were analyzed as frequencies, percentage, means and standard deviations.

## 3. Results:

Table (1) shows that 100% of the study participants were ranging between 18 to 25 years. These results could be referred to the targeted study population which is composed of students enrolled in the faculty of nursing, where the normal range of students is between 18 and 25 years. also shown that second and fourth-year students were close in percentages, they represented 41.7% and 40.8%, respectively. On the other hand, there was a less representation for the third-year academic level participants who represented 17.5% of the total study sample count

The study sample represents distribution according to their living area. More than half of the study sample (52.4%) were living in urban areas, while students living in rural areas had constituted 47.6% of the total study



sample count and indicate that the majority of the study sample (86.4%) were non-married subjects, while married participants constituted 13.6% of the total study sample count.

As shown in the table (2) the mean and standard deviation scores for study participants' responses for questionnaire items regarding factors of stress related to workload. Results indicate that shortage of staff had represented the most stressing factor for the participants (2.17±0.39), followed by lack of time to spend with the patient (2.01±0.77). the least estimated stress factor was "workload too high" that got a score of 1.97±0.54.

Table (3) shows that mean and standard deviation scores for stress factors related to lack of support and involvement were ranging between 2.64 and 1.06. results had shown that lack of support from college was the most stressing factor as reported by the study participants (2.64±0.39), followed by the lack of support from instructors (2.18±0.51). The least reported stress factors were lack of friendly working environment (1.06±0.55) and having skills adequate for the critical areas (1.09±0.53)

Results presented in table (4) reveal that mean and standard deviation scores for the statements regarding factors of stress related to patient and family. Results indicated that "patients" families making unreasonable demand" was the highly estimated stress factors (2.18±0.67) followed by "being blamed for anything that goes wrong" that got a 2.01±0.56 score. The least reported stress factor was "witnessing aggression from patients or their relatives" which got a score of 1.13±0.43.

Results shown in the table (5) represent the study participants' responses regarding items exploring their satisfaction level about becoming a future nurse in the critical areas. Participants had highly reported that critical care nurses have better teamwork ability than other nurses (2.73±0.38), followed by "critical area nurses are always learning new things and are exposed to cases every day that got a score equals to 2.61±0.61. In general, the total score of the satisfaction scale (2.52±0.60) shows that study sample participants are having a high satisfaction level about becoming a future nurse in the critical areas.

Table 1: Demographic characteristics of the students

Academic level	Frequency	Percentage
Second	43	41.7%
Third	18	17.5%
Fourth	42	40.8%
Total	103	100%
<b>Living area</b>		
Urban	54	52.4%
Rural	49	47.6%
<b>Marital status</b>		
Married	14	13.6%
Non-married	89	86.4%
Total	103	100%

Table 2: Mean and standard deviation scores for stress factors related to workload

Stress factor	Mean	Standard deviation
Shortage of staff	2.17	0.39
Lack of time to spend with the patient	2.01	0.77
Workload too high	1.97	0.54

Table 3: Mean and standard deviation scores for stress factors related to lack of support and involvement

Factor	Mean	Standard deviation
Lack of friendly working condition	1.06	0.55
Lack of support from college	2.64	0.39
Pressure from other staff	2.03	0.71
lack support from instructors	2.18	0.51
Criticism by a physician	1.97	0.63
Feeling tired, fear and sadness without cause	1.13	0.44
you have skills adequate for the critical area	1.09	0.53
Do you have any psychological issues related to work? Sleep disorders or depression	1.13	0.31
Measures for protection against violence in the critical area	2.11	0,81

Table 4: Mean and standard deviation scores for stress factors related to patients and family

Stress factor	Mean	Standard deviation
Patients' families making unreasonable demands	2.18	0.67
Being blamed for anything that goes wrong	2.01	0.56
witnessing aggression from patients, their relatives	1.13	0.43

## 7. Discussion:

The current study aims to assess the nursing students' stress factors related either to workload, lack of support and involvement, or patients and family. Moreover, it aims to investigate their satisfaction level about becoming a future nurse in the critical areas.

The study included 18 to 25 years old female nursing students from the second, third, and fourth years academic levels, which represents the closest levels to the working area.

Results showed that shortage of staff and lack of time to spend with the patients were the most stressing factors for the training students. In general, shortage of staff is an obstacle that could be faced in the medical field, not only in nursing. Nursing profession is considered as a highly demanded profession in the job market, especially in the surrounding countries, which consequently causes the continuous changing of the working staff. Consequently, a shortage of staff still presents in the healthcare services despite the continuous efforts of the Jordanian government to recruit staff and establish colleges for the medical professions.

As a result of staff shortage, an increasing workload is expected to occur and cause a stressing factor to the employees and the trainees.

Regarding results which indicated that lack of friendly working conditions is a contributing factor for stress encountered by trainee students, this could be referred to the formal working environment and the high working load which affects the psychosocial status of the people in the workplace.

Study respondents had reported as well that lack of support from the faculty is a stressing factor which could be referred to that Jordan University of Science and Technology is supervising a high number of trainees, and this could minimize the quality and sufficiency of the resources and budget, which makes it difficult for the university to cover all the educational and institutional expenses and demands.

On the other hand, results regarding stress factors related to patients and family had indicated that the most stressing factor was the unreasonable demands of the patients' families, and this could be referred to the absence or non-clear declaration of the patients' duties and responsibilities rules and regulations. Besides that, it could be referred to the community nature that is characterized by the low level of knowledge regarding these regulations.

Nursing students had showed that they are having a high satisfaction level regarding becoming a future nurse in the critical areas, which could be referred to the nursing job profession features, such as the high salary and the suitable working schedule besides that working in the critical areas is an of a great importance for the professional skills development in the nursing specialization. Results are in contrast with Papastavrou et al (2016) study results, that reported that nursing students were highly satisfied with the clinical learning environment and their satisfaction has been positively related to all clinical learning environment construct namely the pedagogical atmosphere, and the support from the instructor (12). On the other hand, results show that

they are in accordance with the results of Sharif and Masoumi (2005) study, which indicated that nursing students were not satisfied with the clinical components of their education, and the experienced anxiety and stress as a result of feeling incompetent and lack of professional nursing skills and knowledge to take care of various patients in the clinical setting.

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