

***Stress and Stress Factors of Nursing Students During  
Practice of Maternal and Newborn Nursing and  
Midwifery Practicum, Boromarajonani College of  
Nursing, Udon Thani***

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**ABSTRACT**

Background: Stress is a stimulus of people when they are threatened and in danger. When people have high stress levels, stress leads to physical, psychological, and social problems. Therefore, stress could decrease productivity of their ability to work. There are many stress factors affecting nursing students, such as the challenges of studying under a typical nursing curriculum, pressures from teachers and nursing staff, the high level of competence needed for nursing procedure requirements, pressures from friends and other factors. These factors might have an influence when they begin their practice especially during working at maternal care and children health departments.

The objective of the study: The purpose of this study was to examine stress and stress factors of nursing students during actual nursing practice specifically in Maternal and Newborn Nursing and Midwifery at Boromarajonani College of Nursing, Udon Thani. One hundred and sixty one participants were recruited from third-year undergraduate students at Boromarajonani College of Nursing, Udon Thani. The instruments were comprised of the Suanprung Stress Test – 20 (SPST – 20; Mahatnirunkul, et al., 1997), and six types of stress factors were modified from Insawang and colleagues' questionnaire (2005). Data was analyzed by using descriptive statistics and multiple regressions.

**Results:** The results revealed that a majority (68%) of participants were experiencing a high level of stress while practicing midwifery. Thirty-two percent of participants had stress at the moderate level. The mentors ( $\beta = 0.23, p < 0.05$ ) and the students' competency ( $\beta = 0.28, p < 0.05$ ) factors significantly predicted stress of nursing students, and explained 21.4% of the variance in stress of nursing students.

**Conclusions:** Mentors and students' competency in training needed to be improved. The characteristics of mentors should be overly friendly and accessible. The mentors also needed to promote a higher level authentic learning for students and they should not force pressure to students to perform beyond their abilities. Mentors should recognize their need to be exploring the stress levels of their students before they are allowed to start working at the hospital. Appropriate information about the nursing practice should be provided constantly while beginning their actual practical work. Also, the mentor should give students a chance for asking the questions about their work without difficulty as that would help students to decrease their stress and also they would gain the ability to work with self-confidence. As a result, nursing students will have a good practical work experience with patients.

**Keywords:** Stress, nursing students, Maternal & Newborn Nursing & Midwifery Practicum

**Title:** Stress and Stress Factors of Nursing Students During Practice of Maternal and Newborn Nursing and Midwifery Practicum, Boromarajonani College of Nursing, Udon Thani

## 1. Introduction

When a person begins to experience stress there is a natural physical mechanism that tries to escape the stressor perceived by "fight or flight." When these stress factors stem from the environment or stressful conditions that may be experienced by an individual over a long period of time it may produce a reaction of hopelessness and affect the physical or mental condition such as becoming irritable or moody, fearful, have anxiety, headaches, dizziness, stomach disorders, constipation, insomnia,

physical weakness, obsessive-compulsive disorder, neurotic disorder or psychotic behavior and exhaustion.

The third year nursing students face a requirement to be exposed to intern experience as practical studies doing the actual work in the clinical wards and among the community. The experience of in maternity wards require that the student nurses care for pregnant women, midwifery, assist in child birth in the delivery room and they must acquire actual experience in assisting delivery in the provincial hospitals as well as community hospitals under the supervision of health care teams including teachers and mentors who are there to help and provide assistance. These are first hand experiences in actual wards with patients are one of the new experiences that places a lot of stress on these nursing students.

## **2. The objective of the study**

1. To explore the level of nursing student stress during nursing practice on Maternal and Newborn Nursing and Midwifery Practicum.
2. To examine the stress factors of nursing students during nursing practice on Maternal and Newborn Nursing and Midwifery Practicum.

## **3. Conceptual framework**

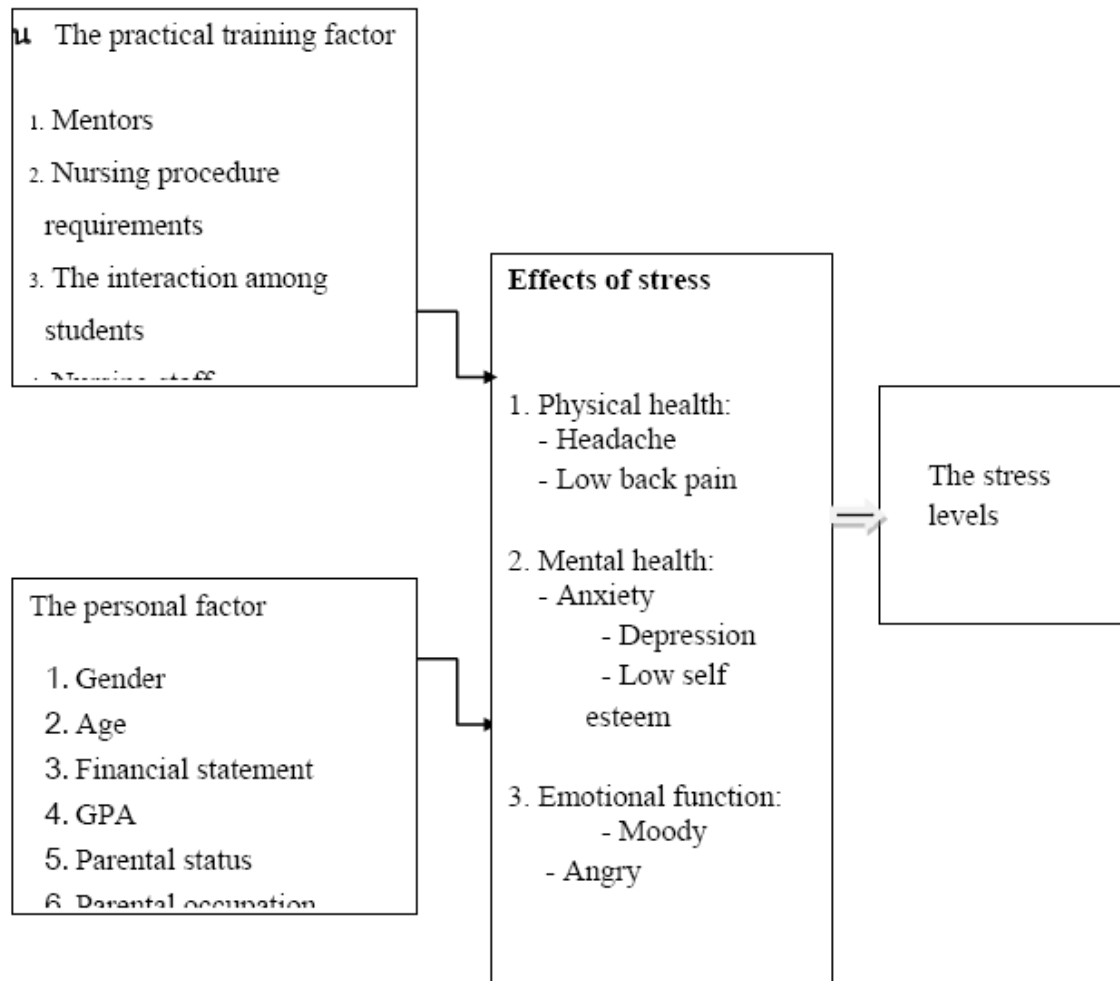
This study focused on the stress levels and stress factors of nursing students during nursing practice on Maternal and Newborn Nursing and Midwifery Practicum. The emphasis of the study will be those things that cause stress in internship when students must experience conditions that cause stress since student must meet the requirement to have practical experience in the environment which has events that are happening that they have no control over or meet challenges that they did not expect<sup>4</sup>. For example, the emergency delivery, or various task assigned to them while under the scrutiny of staff nurses and their supervisors, among the patients, or other hospital staff at the same time they are not familiar with and may fear the new

environment of the ward where they are training, the various health care personnel. They may be tense and worry about the unexpected things that could happen. They fear the disapproval of the supervisor and they are also fearful of failure or causing endangerment while helping patients. They fear interaction with patients, family members, nurses, and health care teams which are sources of stress.

Two main stress factors influencing nursing students are:

1. The practical training factor including mentors, nursing procedure requirements, the interaction among students being trained at the same time, as well as nursing staff, the location and environment, and patients and their families.
2. The personal factor including gender of students, age, financial status, the Grade Point Average (GPA), the status of parents, the occupation of their parents, the personality and so on. The results of these various effects are influences on students' moods and feelings, which is reflected physically such as headaches, irritability, anxiety, backaches, lower back pain, insomnia, and effects to their academics, pressure to achieve, confusion, lack of concentration, and increasing stress which can be charted as the figure 1.

Figure 1: Conceptual framework of stress levels and stress factors influencing nursing students during practice on Maternal and Newborn Nursing and Midwifery Practicum.



#### 4. Method

This descriptive research focused on 161 third-year-undergraduate students at Boromarajonani College of Nursing, Udon Thani in 2010 during the nursing practice on the prenatal care ward, the delivery room, and the postpartum care ward.

The instruments were comprised of the Suanprung Stress Test – 20 (SPST – 20; Mahatnirunkul, et al., 1997), and six types of stress factors were modified from Insawang and colleagues' questionnaire (2005); teachers, nursing procedure requirements, the students' relationship, nursing staff, location and environment, and patients and their families. Data was analyzed by using descriptive statistics and multiple regressions. The reliability of the instruments were test by using Alpha cronbach coefficient found alpha of six stress factors were 0.89, 0.79, 0.60, 0.90, 0.82 and 0.68.

#### 5. Results

##### 1. Characteristics of participants

Most participants were female (84,5%). The mean age was 23.3, most participants were single (93.2%). With 60.2% had a monthly income between 2001-4000 Baht a month and 72.7% had financial status with adequate income and have no debts. Forty-four percent had a grade point average of 2.5-2.99. Most participants had parents worked as farmers, found 37.3% of fathers and 32.3% of mothers, and parents who were living together found 60.3%. their parents had the status of couple. Most participants had good personal characteristics such as happy and cheerful (74,5%), around 10.6% were sensible and 9.9% were easily stressed.

2. Exploring stress levels found that most students had stress at high levels (68%) and some found severe stress levels (32%).

3. The stress factors that caused nursing students to have stress while doing practice with patients in Maternal and child health wards. The personal factor including marital status, financial status, the status of parents, and the personal characteristics explained 96.1% of invariance in stress of nursing students. Equation of regression of stress is  $-3.662 + 1.359 (\text{marital status}) + 0.376 (\text{financial status}) + 1.155 (\text{parental security}) + 0.443 (\text{personal characteristics of students})$ , as shown in Table 1.

Table1: The multiple regression of the personal factor influencing the stress of nursing students.

Variables	B	Beta	R	R Square	R Square Change	F Change
Constant	-3.662					
1. Marital status of students	1.359	.344	.470	.221	.221	45.006*
2. Financial status	.376	.334	.600	.361	.140	34.564*
3. Parental security	1.155	.365	.721	.519	.159	51.833*
4. Personal characteristics of students	.443	.674	.980	.961	.442	1781.824*

\*  $P < 0.05$

The practical training factor cause stress among nursing students during they trained in Maternal and Newborn Nursing and Midwifery Practicum. The practical training factor including the mentors and nursing procedure requirements explained 21.4% of invariance in stress of nursing students. Equation of regression of stress is  $1.243 + 0.245$  (teachers) +  $0.303$  (nursing procedure requirements), as shown in Table 2

Table2: The multiple regression of the practical training factor influencing the stress of nursing students.

Variables	B	beta	R	R Square	R Square Change	F
Constant	1.243					
1. Mentors	.245	.232	.406	.165	.165	31.472*
2. Nursing procedure requirements	.303	.280	.462	.214	.048	9.701*

\*  $P < 0.05$

## 6. Discussions

1. The results revealed that the stress levels of nursing student during nursing Practice in Maternal and Newborn Nursing and Midwifery Practicum were at a high level (68%). The findings show the level the persons experienced stressors during a short period of time which may cumulate in a dangerous level. But if they lose the opportunity to recover before it has become prolonged and causing various illness afterwards<sup>2</sup>, it will lead to the problems such a learning abilities, decision making, problem solving, and practical skills of the nursing students<sup>4</sup>.

2. The personal factor influencing the stress of nursing students could be explained as follows; the nursing students In this study generally receiving a monthly salary of 2,001- 4,000 Baht a month, the employment of the parents are agriculture, the personal characteristics of the students, the sensibility about various pressure and easily stressed, lack of self confidence, the ability to adjust to new environments from the norm over a period of time, and the internship in the delivery ward are requirements continually which are part of the course of study of new experiences and environments as indicated, are the stressors of nursing students.

3. The practical training factor influencing the stress of nursing students including;

### 3.1 Mentors

The students usually have received training from different teaching styles of mentors. If the nursing student is not able to assimilate and adjust to the challenges of this situation, and is intimidated they will be under stress and not be happy in the practical experience. Therefore, the nursing students should understand the differences in the various mentors.

### 3.2 Nursing students

Regarding the internship nursing students had characteristics of being responsive to pressures and were easily affected and were stressed quickly, they were not skilled in practical work, lacked self confidence. If some had self confidence they were able to adjust to various situations, and were confident in their abilities to control various situation as they arise and felt self-confident<sup>5</sup>. Those



who were not confident in their ability to control events they were generally feeling that there were situations that they could lose control and were under stress. Other than that, students were required to work in tasks assigned by their mentors that the students had display their capabilities to complete each of the tasks in the prescribed time in their daily routine. This resulted in not enough rest which resulted in stress and illness. From the high stress level there was a high incidence of physical illness, which is consistent with the previous study by Bake and Srivastara (1991) that students experienced high stress levels causing physical illness as well as mental illness<sup>6</sup>.

### 3.3 The interaction among students

Regarding the mutual interaction among students who were doing internship at the same time, if the students helped each other the levels of stress was greatly reduced during practice in wards.

### 3.4 Nursing staffs

The different techniques used in teaching of the mentors and nursing staff in the wards may produced confusion in actual practical experience which caused the students to feel frustrated and to have experienced high stress levels.

### 3.5 Location and environment

Regarding the new place and environment of the internship study, the students, had work in the actual hospitals. This often caused the students stress because the students were required learn to apply knowledge to solve problems of patients in prenatal care units, delivered room, and post partum wards These three wards were the first time for practical training for the students that may be why they were easily under stress<sup>8</sup>.

These wards where there were often events that required that they make decision

in practical studies since the patients are constantly changing, that nursing students experience stress doing internship often facing situations in internship that are not as expected which are factors causing the nursing students to experience stress<sup>7</sup>.

### 3.6 Patients and families

Regarding the patients and families, the students who lack self confidence when doing practical studies who make suggestions may fear actually catching the disease of the patients. In addition, sometimes the patients resist of the students, and if the student is not good prepared, lacking knowledge in the subject they are prescribing to patients and their family members, which is a cause of stress.

## 7. Implications for practice

The mentors also needed to promote a higher level authentic learning for students and they should not force pressure to students to perform beyond their abilities. Mentors should recognize their need to be exploring the stress levels of their students before they are allowed to start working at the hospital. Appropriate information about the nursing practice should be provided constantly while beginning their actual practical work. Also, the mentor should give students a chance for asking the questions about their work without difficulty as that would help students to decrease their stress and also they would gain the ability to work with self-confidence. As a result, nursing students will have a good practical work experience with patients.

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