

STRESS LEVEL AND ITS RELATIONSHIP BETWEEN MALE AND FEMALE NURSING STUDENT DURING CLINICAL POSTING

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Abstract:

This paper is a report of a study conducted to identify stress difference between male and female nursing student and to examine the relationship between levels of stress in nursing student with their gender during clinical posting.

The study used quantitative design analyses to examine relationship between independent variable [gender (male, female)] and dependent variable (stress level). This study was carried out with 150 participants from semester 1 year 1 till semester 1 year 3 throughout 3 years of nursing diploma programme at College University Islam Melaka (70% response rate). The data were collected over a month.

Results shows that stress level among student nurses are varies from low to medium during clinical posting. But mostly student nurses experiences medium stress level during clinical posting. Comparing with stress level between both gender shows that there is no difference in level of stress between both gender and relationship between level of stress and both gender shows that it is found that significant value for gender between male and female student nurses is 0.435 more than significant value of 0.05. These shown that there is no significant relationship level of stress to gender in nursing student.

Keyword: *Stress Level, Nursing Student, Clinical Posting*

TAHAP STRES PELAJAR KEJURURAWATAN AND PERKAITAN DIANTARA LELAKI DAN PEREMPUAN SEMASA PENEMPATAN KLINIKAL

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Abstrak:

Penulisan ini merupakan laporan berdasarkan kajian yang dijalankan bagi mengenalpasti perbezaan tahap stress diantara pelajar lelaki dan perempuan bagi program diploma kejururawatan dan mengenalpasti hubungkait diantara stress dengan jantina semasa penempatan klinikal.

Kajian ini menggunakan kaedah kuantitatif bagi menganalisa perkaitan diantara pembolehubah bebas (lelaki, perempuan) dan pembolehubah bersandar (tahap stress). Kajian dijalankan 150 orang pelajar diploma kejururawatan semester 1 tahun 1 sehingga pelajar semester 6 tahun 3 Kolej Universiti Islam Melaka (kadar respon 70%). Pengumpulan data berlangsung selama sebulan.

Keputusan menunjukkan terdapat perbezaan pada tahap stress dari rendah ke sederhana pada pelajar diploma kejururawatan semasa penempatan klinikal. Kebanyakan pelajar mengalami stress pada tahap sederhana semasa penempatan klinikal. Perbandingan tahap stress diantar kedua-dua jantina mendapati bahawa tidak terdapat perbezaan tahap stress pada kedua-dua jantina dan perkaitan antara tahap stress dan jantina menunjukkan nilai signifikan pelajar perempuan adalah 0.435 lebih dari 0.05. Ini menunjukkan bahawa tiada perkaitan diantara tahap stress dengan jantina pelajar kejururawatan.

Kata kunci: *Tahap Stress, Pelajar Kejururawatan, Penempatan Klinikal*

1.0 INTRODUCTION

Stress is an important issue in education because it has potential to impede learning and performance. When compared to students from other health-related disciplines, nursing students have been reported to experience higher level of stress and more physical and psychological symptoms (Beck et al., 1997). Extensive and compelling evidence reveals that high stress in nursing students may affect memory, concentration, and problem-solving ability, and lead to decreased learning, coping, academic performance, and retention (Al-Kandari & Vidal, 2007; Higginson, 2006; Prymachuk & Richards, 2007; Sarid et al, 2004; Wells, 2007). High stress levels are also associated with depression, low self-esteem, poor adjustment to college, and lack of social support, significantly affecting academic performance. Nursing and other college students are not always adept at recognizing stressors, may perceive it as a weakness, and frequently do not seek necessary counseling or other assistance (Dixon & Robinson Kurpius, 2008; Dyson & Renk, 2006; Friedlander, Reid, Shupak, & Cribbie, 2007; Gigliotti, 2004; Robotham & Julian, 2006).

Clinical setting environment, unexpected events and uncertainties associated with patient care can cause stress among student nurses. Clinical practice is the larger part of education among nursing student, given that the time spent in clinical versus in the classroom is generally three times greater (Locken & Norberg, 2005). Stress is not something strange in our daily life nowadays and has become one part in our life. Everybody may feel stress when they are facing bad and emergency situation. Generally word of stress has been use in science research since well-known medical expert. The stress associated with the delivery of health care services can have adverse effects on nurses (Muldary, 1983). Stress in nurses, studied extensively in recent decades, is an international phenomenon (Chang et al. 2005). Fimian et al. (1988) observed that 60% of nurses had seriously considered leaving the profession because of stress. Elfert (1976) reported that nursing students found clinical experiences satisfying, but also a source of increasing stress throughout their nursing program.

Stress is a normal reaction to a range of circumstances (Smith & Fawcett, 2006) but can have negative consequences, one of which is emotional exhaustion; it has been demonstrate that factors leading to stress, such as increasing patient load, also lead to emotional exhaustion (Maslach & Jackson, 1986). Stress among nursing student includes some of the above aspects, as student experiences clinical practice but also includes stress from sources such as separation from home, financial worries, regular clinical and educational assessment and frequently changing clinical environments (Deary et al., 2005). Deary et al (2003) showed that nursing students do experience increasing level of stress and psychological distress throughout their nursing programme. Eventually while still undergoing the

training for three years, many students faced with specific stress. Ahmad (1998) in her study identified the major sources of faced by student nurses were on issue related to academic, clinical and issue of interpersonal.

1.1 Statement of Problem

In College University Islam Melaka, nursing students were shifted from hospital to hospital around Melaka area, Johor and Pahang in order for them to gain their clinical experiences throughout three years of the nursing programme. Rotation is a must so that each student will gain their clinical experience in clinical area equally. This is because certain hospital that they are being posted had a low level of occupancy in the wards and this will causes lack of student experience in clinical area. Comparing among all clinical area that student will being posted, Melaka Hospital were claims to be the busiest and a very suitable place for student nurses to gain knowledge and experiences in clinical setting. When shifting happen student will need time to adjust to a new clinical area. These will cause stress among student nurses. And, at the end of clinical posting, report received from by the Clinical Instructor commented that student was:-

1. Not able to perform practical procedure well.
2. Lack of self-confident
3. Lack of initiative to learn new knowledge.
4. Not able to communicate with other medical personnel.
5. Frequent sick leave taken.
6. Increase in absentees.

Based on these comment and own experiences, author assumed that student are having stress in clinical area that affects their performance in clinical area which affect the public relation between nursing student and other healthcare personnel. So, an attempt to study this condition, starting with, is the purpose of this study.

1.2 Research Objectives

The objectives of the study were:

1. To identify stress different between male and female nursing student.
2. To examine the relationship between level of stress in nursing student with number of posting.

1.3 Research Questions

This study was to seek answer the following research question:

1. Is there any different in level of stress between male and female student?
2. Is there any relationship between levels of stress level compare to number of posting?

1.4 Research Hypotheses

The hypotheses of this study were:

- H₁ Differences between stress level and gender
H₀ There is no difference in stress level between male and female student nurses.
H_a There is a difference in stress level between both genders.
- H₂ Relationship between stress level and number of posting.
H₀ There is no relationship between stress level and number of posting.
H_a There is a relationship between stress level and number of posting.

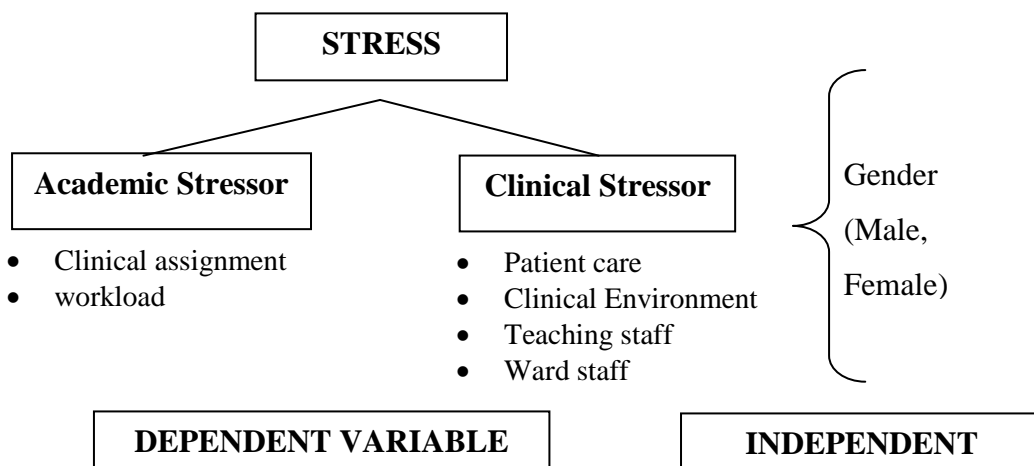
1.5 Theoretical Framework

These theoretical frameworks adapt from Lazarus' theoretical framework which most nursing conducted in nursing used. Lazarus and Folkman (1984) defined stress a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being.

Author generally agrees that stress experienced in a givens situation is largely a function of the individual's perception of the circumstances (Lazarus & Folkman, 1984). Subjectively perceived stress has played a central role in stress research and has been found to be highly correlated with most other measures of stress (Murphy, Nadelson, & Notman, 1984). There are three major determinants of perceived stress in clinical practice. These are:

- Academic stressor such as: assignment and workload, exams, pressure of grades or fear of failing and relation with academic staff.
- Clinical stressor such as: patient suffering or death, lack of professional knowledge and skills, handling clinical emergencies and relation with clinical staff.

Based on these major determinants, questionnaires were developed to identify stress level in the nursing student.



1.6 Limitation of the study

There are limitations to the present study that should be acknowledged. The most important limitation of this study used a small sample of students conducted only for the nursing students in this particular nursing college and the findings are not meant for considerations to all nursing students' population. Findings are also cannot be generalized for students in other undergraduate programs such as radiographers and physiotherapist students. This study is only looking at stress level of student nurses in College University Islam Melaka only and among student nurses as general. The self-report questionnaire used for data collection might not be properly answered by the participant due to influence by others or answer in a socially desirable manner. Repeat of this study with a larger, randomized sample would expand knowledge of stress among nursing students.

2.0 LITERATURE REVIEW

High level of work stress continue to be reported in most healthcare organization, the same work stress was also reported in nursing students while undergoing the training. It was obvious published works that students in professional nursing programs felt some stress as they embark on the road to professional competent. The purpose of nursing education is to provide the necessary theoretical knowledge and clinical experience to facilitate and prepare undergraduate students to develop into professional nurse role. During preparatory process of clinical learning experiences, student at all education levels within all kinds of undergraduate nursing programs (i.e., diploma, associate, and baccalaureate) report

high levels of stress and anxiety in clinical learning environment (Carlson, Kotze, & van Rooyen, 2003). A local study by Ahmad (1996) identified that 128 respondents, rated that they were facing a lot of stress, which range from moderately stressful to highly stressful in intensity. On the frequency of stress, the respondents rated the range from sometimes too often. The major sources of stress identified were issue related to academic, followed by issue related to clinical and interpersonal.

In an early study, Pagana (1988) examined the stresses, challenges, and threats reported by baccalaureate student ($n = 262$) in their first initial clinical experience in medical surgical nursing. The degrees of stress, challenge, and threat were measured by the Clinical Stress Questionnaires (CSQ). Factor analysis supported the construct validity of the CSQ. The mean score for these students was 2.7 on a scale of 0 (none at all) to 4 (a great deal). Students were significantly more challenged than threatened in the initial clinical experience particularly by opportunity to apply knowledge and skill in clinical practice.

Kleehammer, Hart, & Keck (1990) reported that student were most anxious during the initial clinical experience on the unit and had the greatest fear of making a mistake. Intervention such as talking to patients, providing morning care, and patient teaching did not produce anxiety for students. The sample consisted of 39 junior and 53 senior baccalaureate nursing student. Similarly, Reider and Riley-Giomariso (1993) found that students experienced anxiety in the initial clinical experience associated with a nursing leadership courses. This anticipatory anxiety included stress related to non-specific concerns such as fear of unknown; communication with nursing staff, physician, and others; and carrying out and managing nursing function.

3.0 RESEARCH METHODOLOGY

3.1 Research Design

The study used quantitative design analyses to examine relationship between independent variable (number of posting, gender) and dependent variable (stress level) throughout practical posting where the dependent variable are student scores measuring stress. Two data collection tools were used. To describe the sample, we used demographic data sheet which consisted of: (1) demographic characteristics, (2) academic characteristic which is stress due to lack of knowledge and skill, and clinical assign and workload, (3) clinical characteristic which is stress due to patient care and staff relationship. Information relating to measurement variables was modified from Perceived Stress Scale used by Jimenez, Navia-Osorio & Diaz (2010). Stress tool consists of 37 items. Each item is assessed using 5 – point Likert scale. All respondent were asked to rate 37 items of stressors to their frequency of occurrence during clinical experiences ranging from ‘1’ (Not Stressful at all) to ‘5’ (Extremely Stressful). Mean from academic stressor and

clinical stressor were calculated and the result were used to determine student stress level based on stress scale adopted from Azizi, Diana Hartika (2008).

3.2 Pilot Study

A pilot study was carried out by distribute prepared questionnaire to 10 sample populations to check for validity and reliability of the instrument. Pilot sample are free to choose questionnaire in Malay or English. All of the pilot sample choose Malay questionnaire as easy for them to understand. Participants were selected from first year student. All ethical consideration was outlined and consent was taken same as main study. All answered questionnaire were return back immediately after completed by the participant. Participant commented that there are a few spelling mistake on the questionnaire but they were able to understand. Alteration on the questionnaire were made as soon as possible and reliability of the questionnaire were test using Cronbach's Alpha (N=42) result 0.928.

3.3 Ethical Consideration

The ethics committee of the college university approved the research protocol. According to Holloway & Wheeler (1996), ethical issues have to be considered in all research. This to protect the participant in the research from harm or risk and follow professional and rules which are laid down in the code of professional conduct (UKCC,1992). The information sheet given to student emphasized that participant was entirely voluntary; that they were free to leave at any time; that being involved would have no effect on course progression and that confidentiality and anonymity would be maintained at all times.

3.4 Sample selection

Purposive convenience samples of 150 nursing student of College University Islam Melaka who had clinical experiences in Melaka Hospital were selected in this study. According to Sekaran (2003), for this study because of the total population is 460, sample of 150 is sufficient. Samples were selected among year one semester one until year three semesters five from three years Diploma in Nursing. Samples need to complete at least one time posted in Melaka Hospital in order to be selected as a candidate in sampling. Various level of student was selected in order to have various levels of clinical experiences in the study.

3.5 Data Collection

The questionnaires were distributed at the end of a lecture in the nursing program. Full and enthusiastic cooperation was given by the nurse tutors immediately responsible for the student nurse at each of venue. The students were brief on the

study by the author, who was a teaching staff and known by the student. The aims were reiterated, along with the ethical consideration. Participant informed sheets and consent forms were distributed. These were read by students and they were given the opportunity to ask question before signing and returning the consent forms. The return of the completed questionnaire was interpreted as voluntary informed consent to participate. Total sample collected were 150 with distribution of various year of study from year 1 till year three. The data were collected over a period of a month. There were a total of 46 samples from first year students, 48 second year students, and 56 of third year students with age range from 18 to 30 year old.

4.0 DISCUSSION, CONCLUSION AND RECOMMENDATION

Results shows that stress level among nursing student of College University Islam Melaka were at medium level. It is proven by the high percentage on medium category of participant in every aspect that has been included in the research. Besides that, results show that there is no difference between male and female student nurses in their stress level during clinical posting and there is no significant relationship between level of stress and gender. These result shows that there is no similarities between the results of this study with other reported studies. However, author felt that this study are not sufficient to prove that there is no relationship between stress level and student gender due to the number of male student population are too low comparing to female student. Author suggested that same study to be conducted in different colleges in order to see the similarity in the research result.

Although stress can act as motivator and performance enhancement, high level of stress can debilitate and jeopardize student success in nursing programme if performance is negatively influenced. Faculty should not take for granted on this matter, in order to avoid continuous increasing of stress level among nursing student. If this happened, ultimately nursing institutions will be harmed. In relation to this stress, the most significant concern for nursing faculty is the effects of stress on student learning and performance. Today's student nurses are the future of nursing profession, and if nursing faculty do not take the necessary actions to help student manage the demands of clinical stress, nursing profession will fail to thrive (Shipton, 2002). Faculties of nursing need to be concerned about solving student problems not only in classroom lecture but also in the clinical practice areas. The findings support the need for Faculty of Nursing to plan nursing curriculum in a way that nursing students be involved actively in their education.

Author recommended a several intervention in reducing stress in clinical area among student nurses:

1. Management of stress to be included in the curriculum course structure before student are send to clinical area so that they can learn how to cope and manage stress effectively. Stress management started by identifying stressor during their practical session, then learning how to avoid the stressor, altered the situation, adapt the situation and if they can, change the stressor, relaxation technique will help to reduce the stressful event.
2. Peer mentoring among student to be implemented in clinical practice area. Mentoring proved to reduce stress in nursing student during clinical practice week. Each junior student to be paired with one senior student throughout their clinical posting. This is to enable the junior nurses to learn and gain experience from their own mentor and at the same time guided by the clinical instructor. Peer mentor not only can guide their mentee in practical area but also in classroom setting.
3. Counseling should be made as a part of activity in clinical practice area. For example toward end of daily posting a reflective writing or group therapy to be done to help the student express their own feeling and help them to overcome their fear or stress at clinical practice area.

BIOGRAPHY

Saadiah Ridzuaniah Abu Hassan Ashaari is a Registered Nurse graduated from Lah Wah Ee College of Nursing, Penang in Nursing Diploma in 1996. Pursue education in Graduate Diploma in Critical Care Nursing from Victoria University of Technology, Melbourne, Australia in 1998. Completed Advance Diploma in Teaching Methodology form University Malaya in 2008 and Bachelor of Nursing Science with Honours from Open University Malaysia in 2012.

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