

BOOK OF ABSTRACTS

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The 3rd Asian Congress in Nursing Education
Optimizing Interprofessional Education to Improve Health Care Quality

Abstract

P1.020

RELATIONSHIP BETWEEN EMOTIONAL DISTRESS WITH ACADEMIC ACHIEVEMENT IN NURSING STUDENTS

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The freshmen frequently experience distresses related to many self-adaptations with their circumstances academically and non-academically that may influence to academic achievement. Previous studies investigated the relationship of distress and academic achievement emphasizing on the individual's perspective on stress. However, limited studies deeply investigate regarding neurochemistry (hormone) indicating an individual distress which is associated with academic achievement. The study was conducted to know the relationship between emotional distress measured by β -endorphin hormone level and academic achievement measured by GPA. The study used a descriptive correlation. The samples were 38 students purposively selected based on the criteria of nursing students in the first semester, do not have any chronic diseases, complaining anxieties since beginning their study in the school. The researchers taken the β -endorphin hormone data gathered from the blood and the academic achievement of students. The correlation was measured using Kendall Tau test. The finding showed that emotional distress is not related to academic achievement of students in the first semester. Emotional distress in the short period might improve problem solving adaptation skills that results in the academic achievement improvement.

Keywords: academic achievement; emotional distress; nursing student

Abstract

P1.021

KNOWLEDGE AND ATTITUDE DISSIMILARITIES OF FEMALE STUDENTS' PERSONAL HYGIENE BEFORE AND AFTER SCABIES HEALTHY EDUCATION AT SALAFI AL-FALAH ISLAMIC BOARDING SCHOOL JATILAWANG

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Background: Scabies is commonly called as kudis or gudik in Indonesian. One factor that stimulate this disease to spread is the inadequateness of personal hygiene knowledge and attitude. Scabies healthy education is an activity to convey a knowledge for a better scabies disease understanding. Hopefully, it will lead to a better healthy life and a better prevention of the disease.

Research Methods: The researcher used Pre Experimental Design with "one group pre and post-test without control group" method. The sample was 62 female students; its sampling method was simple random sampling technique. T-test dependent was used to analyzed the data.

Result: Using dependent t-test, the research obtained an average pre-test result 6.55 of personal hygiene knowledge, and on post-test, t rate was 8.77. On personal hygiene attitude, it obtained the average pre-test result 23.08 and 25.76 in the post-test. The significant score 0.001 less than 0.05 ($p < 0,05$). The research showed the average differences of pre and post treatment; it was 2.22 point on personal hygiene knowledge and 2.68 on personal hygiene attitude.

Discussion: Increased knowledge of scabies and an increase in personal hygiene behavior of santriwati can prevent and reduce the occurrence of transmission of scabies.

Conclusion: There is a dissimilarity of personal knowledge and personal hygiene attitude among the students before and after scabies disease education. The expected female students of Islamic Boarding School have to be more active in improving understanding on personal hygiene and have to implement it to prevent transmittable skin scratchy disease, especially scabies disease.

Key words: Health Education, Knowledge, Personal Hygiene, Islamic Boarding School, Scabies.

Relationship between Emotional Distress with Academic Achievement in Nursing Students

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Abstract—The freshmen frequently experience distresses related to many self-adaptations with their circumstances academically and non-academically that may influence to academic achievement. Previous studies investigated the relationship of distress and academic achievement emphasizing on the individual's perspective on stress. However, limited studies deeply investigate regarding neurochemistry (hormone) indicating an individual distress which is associated with academic achievement. The study was conducted to know the relationship between emotional distress measured by β -endorphin hormone level and academic achievement measured by GPA. The study used a descriptive correlation. The samples were 38 students purposively selected based on the criteria of nursing students in the first semester, do not have any chronic diseases, complaining anxieties since beginning their study in the school. The researchers taken the β -endorphin hormone data gathered from the blood and the academic achievement of students. The correlation was measured using Kendall Tau test. The finding showed that emotional distress is not related to academic achievement of students in the first semester. Emotional distress in the short period might improve problem solving adaptation skills that results in the academic achievement improvement.

Keywords—academic achievement; emotional distress; nursing student

I. INTRODUCTION

Youth is a transitional period to adulthood emphasizing on the improvement of a greater responsibility towards personal consequences that influence their future. In this period, a lot of human experience aspects that are exciting, challenging, and troublesome. This phase is also an important point in which there are commonalities or conflicts between parents'

expectations and the decision and behaviors of the adolescent towards their future. One of concerns in this period is academic achievements and distresses [1].

The freshmen frequently experience distresses related to many self-adaptations with their circumstances academically and non-academically. The self-adaptation commonly being a precipitation of emotional distress among them. The distress crucially contributes to their motivation, interpersonal skills, memory and learning [2]. Liew claims that students with a low emotional distress are associated with positive academic achievements. This conclusion is supported by Owen, Shippee, and Hansel concluded that emotions play important roles in academic setting, in which negative and positives emotions contribute to academic achievements [1].

Normatively, academic achievements in the higher education level can be shown through Grade Point Average (GPA) as manifestation of academic succeeds and commitments of the adolescents towards learnings in schools [3]. The academic achievement may influence their future education and carrier determination [4], [5]. The low GPA causes pessimisms and sadness of the youth about their future.

Previous studies investigated the relationship of distress and academic achievement emphasizing on the individual's perspective on stress [6]–[9]. However, limited studies deeply investigate regarding neurochemistry (hormone) indicating an individual distress which is associated with academic achievement. Theoretically, the increase of certain hormone may indicate a stress situation experienced by a person. Endorphin (hormone produced in the brain and neural system) is one of hormones related with individual distress. Endorphin effects memory, cognition, rewards, immune, and respiration whereas this hormone is associated with mood shift, positive

mood and euphoria, physical change in the brain such as the cerebral blood stream improvement, the neuron cell development and the brain memory, the improvement of neuron cells and the improvement of the brain tissue volume [1]. The β -endorphin is related to various behavior forms or symptoms such as emotional control [10] and aggression [11], depression [12], addiction [13].

Based on the situation, this study was conducted to know the relationship between emotional distress measured by endorphin level and academic achievement measured by GPA in nursing students.

II. LITERATURE REVIEW

According to psycho-physiological point of view, emotion is a center of stress experience [14]. Stress is an emotion which is activate when responding stimulus perceived as a threat. While feeling anxious, disturbed, frustrated, loss of self-control, or powerless, an individual is experiencing distress that may occur when a person feels uncomfortable or a great life change. Lyon states that basically, stress can be explained by three theories including stimulus-stress, response-stress, and transactional-stress models. Firstly, stimulus-stress model explains that stress is an independent variable or a cause of human stress and the focus is stressor or stress sources. Secondly, Selye describes stress-response emphasizing on stress as a specific reaction towards stressors that influences individual. When a person experiences a critical situation, his/her body will spontaneously react on the threat. Thus, stress response can be concluded as a physical body reaction on stressors. Thirdly, stress-transactional model focusses on emotional responses and cognitive processes based on human interaction with environment. Stress-transactional model of Lazarus and Folkman explains that stress is related to interaction between individuals with environment perceived as requirement or unwillingness to deal with situations that threaten health [15].

Distress can be experienced by everyone in everywhere. In the academic circumstance, students have a risk to face distress, both in schools or universities. A study indicates 20-25% adolescents suffer the emotional distress). Overall, the students' mental problems are related to developmental levels and academic achievements. The findings also showed that emotional distress, interaction in the school, and academic achievement are associated each other. Although in this study, students' distress is not clinically significant [16].

A study about nursing students' distress focusing on the cause factors including sociodemographic and academic vulnerabilities. The sociodemographic factors consist of gender, age, marital status, child number, working status, institutional fee, and duration of education. The finding showed that determinants of the students' stress were female, single, and long period of study. The gender was related to the history of nursing in which nursing is viewed as feminism. Besides accomplishing academic targets, women have responsibilities to take care of their family or homes. The over burden causes cortisol hormone release and increase adrenaline then results in emotional distress, restlessness,

panic, and depression. Mostly respondents lived alone and single, therefore mostly their time is focused on their education. However, they have a risk for emotional distress since marital status or having child are associated with lower chronic distress. Regarding the length of the study in universities, the result indicated that 26.1% students in the first year experiencing the distress. Although in the low level, adaptation process to be more mature, independent and responsible might happen. On the other hand, emotional distress experienced by student in the last year of the student due to fatigue, distrust during the study, and high professional effectiveness [17].

III. METHOD

The study applied a non-experimental quantitative design using descriptive correlation. The design was cross-sectional in which a study is conducted in one period of time. Every respondent was measured once at the time of data collection. The study was conducted in a nursing school in Indonesia in August 2016. The population were 116 students and the samples were 38 students purposively selected based on the criteria of nursing students in the first semester, do not have any chronic diseases, complaining anxieties since beginning their study in the school.

The researchers taken the β -endorphin hormone data gathered from the blood and the academic achievement of students. The Eliza (Enzyme Linked Immunosorbent Assay) test was used to measure the β -endorphin hormone level conducted by skillful laboratory staff in Faculty of Medicine, Diponegoro University. The data of the academic achievement were the students' GPAs, secondarily obtained from the academic division of the nursing school.

The correlation was measured using Kendall Tau test because of the similarity of the data point view. The researchers conducted the data analysis phase including editing, coding, entry, processing, and cleaning. The editing process was performed to check the collected data completion. Then, the researchers provide numeric codes (numbers) in the data coding and entry the data in a table in the computer to be processed. The last phase was cleaning conducted by re-check the data from errors. The data analysis techniques including univariate (age, gender, and blood pressure) and bivariate. The bivariate analysis was used to analyze two variables predicted having relationship or correlation. In the study, the bivariate analysis was used to test relationship between distress with academic achievement.

The ethic of the study was employed by conducted informed consent. The researchers explained about the study and providing an agreement form to participate in the study. The respondents were requested to sign the form if they agreed to involve in the study. The researchers considered anonymity principle by writing the respondent initial in the measurement sheet (not real name). The researchers also keep the respondent's information (confidentiality principle).

IV. RESULT AND DISCUSSION

This section will describe respondent characteristics and the measurement result of correlation between emotional distress and academic achievement of nursing students. Moreover, the researchers will discuss the finding according to existing literatures.

TABLE I. RESPONDENT CHARACTERISTICS

Characteristic	Table Column Head				
	f	%	mean	min	max
Age					
17 years	10	26.3			
18 years	25	65.8	17.8	17	19
19 years	3	7.9			
Gender					
Male	1	2.6			
Female	37	97.4			
Marital status					
Single	38	100			
GPA			3.25	2.50	3.78
β-endorphin			273.77	86.17	

TABLE II. CORRELATION BETWEEN EMOTIONAL DISTRESS AND ACADEMIC ACHIEVEMENT OF NURSING STUDENTS

	Correlation Coefficient	Sig. (2-tailed)
β-endorphin	1.000	0.799
GPA in the first semester	0.30	0.799

Table 2 shows that there is no correlation between β-endorphin and GPA in the first semester. Thus, the study result concluded that there is no correlation between β-endorphin and GPA in the first semester. Emotional distress is characterized by the endorphin hormone level change resulting in positive mood and happiness feeling shifts. In addition, this situation influences physical change in the brain such as increase of cerebral blood stream, neuron cell development in the learning center and the brain memory, increase of neuron cell amounts and the brain volume [1], [18]. However, other study claimed that academic distress does not influence the decrease of β-endorphin hormone [19].

The study finding is relevant with previous study explaining that there is no relationship between the emotional intelligence (EI) with the academic performance of health students [20]; no significant association between the emotional competence improvement with GPA of students [21]; and no relationship between depression and GPA of students [1].

On the other hand, the emotional distress indirectly effects on problem solving, motivation, and interaction with peers and teachers [2]. Students with emotional distress are able to improve their adaptation skills towards a problem. The first semester students live in a different environment with their previous circumstances which results in emotional distress. This situation is due to living separately with parents, new colleagues, academic requirement, dissimilar education system

with the high school level. In the short period, emotional distress can improve the adaptation skill and finally support academic achievement represented by satisfied GPA in this context. It is in concordance with a study describing that negative emotions in adults improves cognitive conflict adaptations that effect on the academic improvement. Adults with low pressure experience a higher error level. However, those with high pressures have a lower error level [2].

Although the study did not measure the relationship between individual characteristics with emotional distress and academic achievement, however, the finding can be influenced by personal characteristics (gender and marital status). A study about stress in nursing students describes that distress was commonly experienced by female students [17]. Even though distress generally occurs in female students, but they are more concern on their academic achievement. This situation is relevant with a study showed that female students in the higher education level are more focus on their academic achievement [1], [18]. All respondent in this study were single who were not burdened with daily activities in the family such as taking care of his/her husband, wife, and child. They have more time to learn or do their academic activities, and finally they can concentrate on their academic duties. This is relevant with a study explaining that there is no relationship between distress and marital status. Furthermore, the study describes that the higher stress level in students in the last semester are the consequences of higher competence requirement [17].

V. CONCLUSION

Emotional distress is not related to academic achievement of students in the first semester. Emotional distress in the short period might improve problem solving adaptation skills that results in the academic achievement improvement.

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