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THE RELATIONSHIP OF ANXIETY CONDITIONS WITH TENSION-TYPE HEADACHE EVENTS IN BACHELOR OF NURSING STUDENTS

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ABSTRACT

Tension-Type Headache (TTH) is a headache caused by the contraction of the back of the neck muscle that continues to shrink. Pain from the neck to the ear also often appears over a long period. S1 nursing education students have a high academic load that can cause physical and mental stress, and a person's psychosocial condition must be disturbed, such as anxiety. The research here aims to determine whether there is a relationship between stress conditions and the incidence of Tension-Type Headaches in bachelor of nursing students of STIKes Payung Negeri Pekanbaru. This type of research is quantitative, with a correlation research design with a cross-sectional approach. The number of samples used was 200 respondents who were taken with stratified random sampling techniques using research instruments with questionnaire sheets. This study's results show no significant relationship between anxiety conditions and Tension-Type Headaches with $P = 0.076$ and significant values greater than 5% ($p = 0.076 > 0.05$). It can be concluded that there is no Relationship between Psychosocial Conditions With The Incidence of Tension-Type Headaches. Suggestions for subsequent researchers are expected to be used as examples and references for future researchers, and we hope to continue this research.

Keywords: Tension-Type Headache, Anxiety, nursing students

INTRODUCTION

Tension-Type Headache is the most common form of Headache in two-thirds of the population. The highest incidence of Tension-Type Headaches is in adulthood; around 30-78% of adults must have experienced Tension-Type Headache at least once. The prevalence on various continents varies greatly. The highest incidence is on the European continent, while in Asia Pacific, it is 16.2% lower. The prevalence of Tension Type Headache increases with educational level in both sexes (1).

A study in New York found headaches in 22% of men and 78% of women. According to ethnicity, the results are as follows: Caucasian ethnicity 44%, Hispanic 31% Afro American 12% and Asian 6%. A population-based study in Singapore found that 47% of men suffered from headaches and 53% of women with differences in ethnicity Chinese 79%, Malays 14%, Indians 6%, and others 1% (2).

Based on the results of a hospital-based multi-center study in five hospitals in Indonesia, the prevalence of headache sufferers was as follows: migraine without aura 10%, migraine with aura 1.8%, episodic Tension Type Headache 24%, Cluster Headache 0.5% and Mixed Headaches 14% (3). From a study in Singapore, the prevalence of headaches was 82.7% and those who suffered from Tension Type Headaches were 39.9%. Meanwhile, in Indonesia, the

prevalence of headaches is very high, around 90% of patients who come to the hospital to check themselves complain of headaches (4).

In general, 90% of headache complaints are caused by pain (Tension Type Headache), and 3% of this population is a chronic Tension Type Headache (Mujianto 2013). The ratio of women and men is 5:4 Tension Type Headache can strike any age. The most age is 25-30 years, but the peak prevalence increases at 30-39 years. About 40% of people with Tension Type Headache have a family history (4). Trigger factors such as stress, depression and anxiety. Adults with Tension Type Headache report less poor vitality or social functioning and worse physical and emotional health in everyday roles than individuals without headaches (5).

Tension Type Headache is also one of the primary headaches, which is a headache without an organic structural cause. This primary Headache is also basically in general, the pathophysiology is almost similar to one another, accompanied by a few specific differences, each of which is not properly understood. Primary headaches are usually caused by physical and psychological stress and are not the same as ordinary headaches. because there are no triggers for ordinary headaches, unlike Tension Type Headaches which are caused by stress, anxiety and depression (6).

Conditions of stress, anxiety and depression are also referred to as psychosocial conditions, which show a dynamic relationship between psychological and social factors, which interact and influence each other. Psychosocial stress is an event in life that causes acute stress to the individual. In America according to the American Psychological Association (APA) reached 57%. Whereas in 2015 it was reported that there was an increase in prevalence to 68%, consisting of 31% of stressful conditions occurring in men and 37% occurring in women. Of the 68% prevalence of stress in America in 2015, it was 42%. Stress is a non-specific response of the body to every need and stimulation of concepts that are more biologically nuanced due to changes in mechanical temperature. Patients with Tension-Type Headache sometimes feel pain, discomfort, and limited movement. The result of these symptoms can cause headaches because of the burden of the mind. Changes in psychosocial conditions in patients who experience primary headaches or tension-type headaches can cause anxiety, depression and stress (7).

One of the psychosocial conditions above is anxiety. Anxiety disorders are a group of conditions that share important features of excessive anxiety, accompanied by behavioral, emotional and physiological responses. Individuals who experience anxiety disorders can show unusual behavior such as excessive panic. Anxiety disorders that are very severe can disrupt individual activities. The prevalence rate is 17.7% in 1 year experiencing anxiety disorders, the general prevalence in 1 year is 3-8% and around 3.6% of the world's population or 264 million people are affected by anxiety. Anxiety disorders also make individuals feel headaches due to excessive panic and cannot handle them (Diferiansyah and Lisiswanti, 2016).

Stress, and anxiety generally act as a triggering factor for Tension Type Headache (87%), when a person experiences one of these 3 factors it results in a Tension Type Headache or primary Headache. Depressive disorders can occur together with Tension Type Headache as the course of Headache worsens and becomes chronic through biological and psychological processes (9).

A person's psychosocial is indicated by psychosocial who do not experience problems and psychosocial who experience problems. In contrast, psychosocial causes Tension Type Headache has a negative impact and cannot perform their duties like normal people in general such as difficulty concentrating, sleeping and carrying out daily activities (Nurvitasari & Nurhidayah, 2017). Psychosocial problems are psychological and social problems that have a

common effect due to social change or social upheaval, which can lead to mental disorders. According to WHO, (2007) in Varcarolis & Halter, (2010) mental health is a condition of well-being when a person can realize his potential and has good coping with stressors, is productive in contributing to society. Psychosocial conditions are psychological and social changes that affect unstable interpersonal relationships, poor work ability, and cause interpersonal violence. Psychosocial problems in Tension-Type Headache will affect the decline in the quality of health, so that someone who is in these conditions will feel a stressful situation. (11).

From the results of observations and preliminary study surveys on March 9 2019 at STIKes Payung Negeri Pekanbaru with the interview method with several students, as many as 15 people asked whether they had ever felt a headache with a headache or Tension-Type Headache and the results obtained from the 15 these students had experienced headaches, then the researchers asked how long they had felt the pain and the researchers also asked students whether their headaches were throbbing and pressing/tightening as well as whether there was nausea and vomiting like symptoms of a Tension Type Headache. The results that the researchers got were that some students said the pain lasted for 10 minutes and the pain scale was moderate and sometimes they also felt like they were throbbing. At that time a preliminary study was also carried out at STIKes Payung Negeri Pekanbaru with the same students asking whether the factors causing their headaches included anxiety, depression and stress. feeling overly panicked. The results obtained from some of the students said that when they were angry because of trivial things or fighting with their friends and also when they felt panicked, that's when they felt the Headache, it was also caused by something unpleasant that they experienced, such as being impatient when experiencing exam schedule delays, also experienced traffic jams on the road.

Based on this phenomenon, the authors are interested in conducting a research entitled "The Relationship of Psychosocial Conditions with the Incidence of Tension-Type Headache in S1 Nursing Students at Stikes Payung Pekanbaru".

RESEARCH METHODS

This research is a quantitative study with a correlation research design using a cross-sectional study. The measurement tool used is the DASS 42 questionnaire to measure psychosocial conditions and a questionnaire for Tension Type Headache. The sample in this study was 200 people using a stratified random sampling technique.

RESULTS AND DISCUSSIONS

Table 1 Distribution of Respondents Based on the Age of the Pekanbaru State Umbrella STIKes Students

| Variabel | Mean | Median | Minimal-Maksimal | Standar Deviasi |
|----------|-------|--------|------------------|-----------------|
| Umur | 20,34 | 20,00 | 18-23 | 1,300 |

Based on table 1, the data shows that the majority of students are in the age range of 18-23 years, the median is 20 years and the standard deviation is 1,300 years. The youngest is 12 years old and the oldest is 16 years old.

Table 2 Distribution of Respondents Based on Gender of Umbrella Public Schools Students in Pekanbaru

| No | Gender | f | % |
|-------|--------|-----|------|
| 1 | Man | 39 | 19,5 |
| 2 | Male | 161 | 80,5 |
| Total | | 200 | 100 |

Based on table 4.2, it was found that out of 200 teenagers, 39 people (19.5%) were male and 161 people (80.5%) were female..

Table 3 Distribution of Respondents based on Psychosocial Conditions (anxiety) in state umbrella STIKes students

| Psychosocial Conditions Worry | f | % |
|-------------------------------|-----|-------|
| Normal | 65 | 32, 5 |
| mild | 22 | 11,0 |
| currently | 63 | 31,5 |
| Heavy | 24 | 12,0 |
| Very heavy | 26 | 13,0 |
| Total | 200 | 100 |

Based on table 3 it was found that as many as 65 people (32.5%) students were in the normal anxiety category *Tension-Type Headache*

Tabel 4 Distribution of Respondents Based on Tension Type Headache Events in Umbrella State Public School Students in Pekanbaru

| Tension Type Headache | f | % |
|-----------------------|-----|--------|
| TTH | 135 | 67,5 % |
| Not TTH | 65 | 32,5 % |
| Total | 200 | 100 |

Based on table 4, it was found that the majority of Tension Type Headache respondents who experienced TTh were as many as 135 respondents with a percentage (67.5%).

Tabel 5 Distribution of Respondents Based on Psychosocial Conditions (Anxiety) with Tension Type Headache Events in S1 Nursing Students at STIKes Payung Pekanbaru

| Psychosocial Conditions (anxiety) | <i>Tension Type Headache</i> | | | | Total | | <i>P value</i> |
|-----------------------------------|------------------------------|-------|---------|-------|-------|------|----------------|
| | TTH | | Not TTH | | N | % | |
| | N | % | N | % | | | |
| Normal | 52 | 80,0% | 13 | 20,0% | 65 | 100% | 0,076 |
| mild | 12 | 54,5% | 10 | 45,5% | 22 | 100% | |
| currently | 41 | 65,1% | 22 | 34,9% | 63 | 100% | |
| Heavy | 13 | 54,2% | 11 | 45,8% | 24 | 100% | |
| Very heavy | 17 | 65,4% | 9 | 34,6% | 26 | 100% | |
| Total | 135 | 67,5% | 65 | 32,5% | 200 | 100% | |

The results of the analysis in table 5 can be seen that respondents who had normal psychosocial (anxiety) conditions with TTH incidents were 52 people (80.0%), and with no TTH incidents were 13 people (20.0%), while psychosocial conditions (anxiety) mild with TTH incidents of 12 (54.4%) and with no TTH incidents of 10 people (45.5%), respondents who had moderate psychosocial conditions (anxiety) with TTH incidents of 41 people (65.1%) and with no TTH events as many as 22 people (34.9%), severe psychosocial (anxiety) conditions with TTH events as many as 13 people (54.2%) and with no TTH events as many as 11 people (45.8%), than respondents who had very severe psychosocial (anxiety) conditions with 17 people (65.4%) having TTH and nine people (34.5%) not having TTH. The results of the chi-square statistical test obtained a value of $P = 0.076$ and a significant value greater than 5% ($p = 0.076 > 0.05$); then H_0 failed to be rejected, so it can be concluded that there is no relationship between psychosocial conditions (anxiety) with the occurrence of Tension-Type Headache to S1 Nursing STIKes Umbrella State Pekanbaru students.

CONCLUSION

Based on the research results of 200 respondents, the age range is divided into two. The age range of 18-20 years was 117 people (58.5%) and the age range of 21-23 years was 83 people (41.5%).

In the results of the study it was found that the majority of ages experiencing Tension Type Headache were aged 18-20 years, meaning that this age was in the early adulthood period, namely at this stage early adulthood was a transitional period from adolescence to adulthood, besides that at this time individuals in expect to be the individual expected by the surrounding environment. Where this period has a period to improve performance. In this study, based on the age of the respondents 18-20 years with the highest number experiencing Tension Type Headache in Nursing students at STIKes Payung Negeri Pekanbaru. This research was also conducted in Sweden with a total of 237 samples with an age range of 12-18 years. The number of samples in the 15-16 year age group had the highest rate, around 26.6%, with more female subjects than male subjects, namely 57% (12).

Based on the research results of 200 respondents as a whole, it is known that there are more female respondents than the male gender. There were 161 female respondents (80.5%), while 39 male respondents (19.5%). Sufferers who experience Tension-Type Headaches can attack anyone, both men and women, but some of those who experience Tension-Type Headaches have differences in frequency between men and women. However, the research results obtained by the majority of respondents were female.

Gender can affect the spread of a health problem. There are health problems that are more commonly found in groups of women only and there are also health problems that are found more in men only. The difference in distribution like this is caused by several factors, namely: because there are differences in the anatomy and physiology of women and men. For example, health problems whose spread is influenced by several causes such as stress, anxiety and depression. Because women think more about something for the future than men, women experience anxiety more often than men, because women are more unable to condition their anxiety than men are more relaxed. Because there are differences in living habits between women and men. It was found that many who experienced more stress were women compared to men. There are differences in the level of a person's awareness of himself between women and men, because more women have better awareness than men (13).

Based on the results of the study of 200 respondents as a whole it was found that the majority of respondents experienced normal anxiety as many as 65 people (32.5%), mild anxiety 22 people (11.0%), moderate anxiety 63 people (31.5%), Severe anxiety 24 people (12.0%), very severe anxiety 26 people (13.0%).

According to Suryawijaya & Widhyadharma, (2017) anxiety is also found to be high among students, almost always found in most medical centers in the outside world. During anxiety, the level of one of the neurotransmitters, serotonin, is thought to decrease. Reduced serotonin is associated as a mechanism in the process of causing pain in Tension Type Headaches. Other research has also found that Tension Type Headache actually triggers or worsens pre-existing anxiety conditions.

The results of this study indicate that 52 people (80.0%) had normal psychosocial (anxiety) conditions, and 13 people (20.0%) did not have TTH, while mild psychosocial (anxiety) conditions with incidents of TTH as many as 12 (54.4%) and with events without TTH as many as 10 people (45.5%), respondents who had moderate psychosocial conditions (anxiety) with incidents of TTH were 41 people (65.1%) and with events no TTH as many as 22 people (34.9%), psychosocial conditions (anxiety) with severe TTH events as many as 13 people (54.2%) and with no TTH events as many as 11 people (45.8%), then respondents who have TTH psychosocial (anxiety) is very severe with 17 people (65.4%) having TTH and 9 people (34.5%) not having TTH. The results of the chi square statistical test obtained a value of $P = 0.076$ and a significant value greater than 5% ($p = 0.076 > 0.05$) then H_0 failed to be rejected, so it can be concluded that there is no relationship between psychosocial conditions (anxiety) with the occurrence of Tension Type Headache to S1 Nursing STIKes Umbrella State Pekanbaru students.

According to research (15) excessive anxiety can cause students to experience psychosomatic problems. These psychosomatic symptoms that can be experienced are feelings of anxiety, tension, fear, sleep disturbances, intelligence disorders, moodiness. Anxiety is also often experienced by students especially in facing exams. Exams are one of the main focuses of students and can be a problem for students, so there are those that result in these students not being able to sleep and some students experiencing Tension Type Headache.

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