The Relationship between Knowledge and Stress Levels Facing Premenstrual Syndrome in Class X Female Students at SMK Swasta Alwasliyah 17

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ABSTRACT

Premenstrual Syndrome (PMS) is a group of physical, behavioral, and emotional symptoms that occur cyclically and repeatedly. Around 75% of women complain of symptoms of premenstrual syndrome and 30% of them require treatment. This study aims to identify the relationship between knowledge and stress levels in dealing with premenstrual syndrome in class X female students at SMK Swasta Alwasliyah 17, Air Putih District. This type of research is correlational, namely examining the relationship between two variables in a situation or group of subjects, using a cross-sectional approach, namely looking for the relationship between the variables studied. The place of this research was carried out at SMK Swasta Alwasliyah 17, Air Putih District. The sample for this research was 30 female students in class X of SMK Swasta Alwasliyah 17. Based on statistical tests, it is known that there is a relationship between the level of knowledge and the level of stress in dealing with premenstrual syndrome, characterized by a significance value of p-value 0.000 > (0.05) where the p-value is 0.000 and the \chi^2\text{-square value} is 48.302. Suggestions in research so that teenagers can increase their knowledge about pre-menstrual syndrome and control excessive stress by learning relaxation techniques to minimize stress.

Keywords: Knowledge, Stress Level, Premenstrual Syndrome

1. INTRODUCTION

Adolescence is the stage where people reach emotional and psychosocial maturity which is characterized by the functioning of the reproductive organs. A woman is said to be of reproductive age if she experiences menstruation. The early years of menstruation are a period that is vulnerable to disorders [7]. Premenstrual Syndrome (PMS) is said to be a health problem that often occurs in women of productive age with a collection of physical, psychological and emotional symptoms that generally appear in the luteal phase around 2-14 days and then improve after the menstrual period begins. The symptoms that appear can differ between individuals, but in general the physical symptoms that arise can include headaches, breast pain, stomach pain, back pain, muscle pain, joint pain, water retention, bloating, and nausea. Psychological symptoms that appear include irritability, anger, depression, crying, anxiety, tension, restlessness, confusion, forgetfulness, and reduced level of concentration on something.

Premenstrual syndrome (PMS) has a high level of pain. Even though premenstrual syndrome is not life-threatening, it can affect a woman's productivity and mental health. Around 75% of women complain of symptoms of premenstrual syndrome and 30% of them require treatment. In the young age group, premenstrual syndrome is very common, this indicates that there is a very significant health problem. The incidence of premenstrual syndrome is reported to occur in 20-30% of premenopausal women and 30-40% of women during their reproductive period. [7].

Even though Premenstrual Syndrome is not life-threatening, it can affect a woman's productivity and mental health [7]. Symptoms that teenagers often complain about are emotional symptoms such as irritability, depression, irritability, anxiety or tension, mood swings, while physical symptoms are tense breasts, flatulence, headaches and fatigue [16].

Adolescents' knowledge about Premenstrual Syndrome and anticipation of its prevention is a necessary stimulus in order to form good adolescent behavior patterns. By recognizing the symptoms of teenage menstrual syndrome, it
is hoped that we can try to deal with it properly, not by ignoring it [1]. The lack of knowledge among teenagers about premenstrual syndrome can be caused by teenagers not knowing about reproductive health problems, especially about premenstrual syndrome [7]. According to [10], the role of parents, especially mothers, is expected to be able to provide accurate and correct information about what menstruation is. If you know the correct information about menstruation, teenage girls will feel prepared when they get their first menstruation and the various health problems that may occur. According to [2], knowledge about adolescent reproductive health is very important, so that adolescents have responsible attitudes and behavior towards their own health. Providing knowledge about changes that occur physically, psychologically and in sexual maturity will make it easier for teenagers to understand and overcome various situations that confuse them. According to [15], knowledge of the menstrual cycle experienced is very important for young women. Knowing the pattern of the menstrual cycle will help in predicting future premenstrual syndrome.

2. METHOD
The type of research used in this research is correlational or examining the relationship between two variables in a situation or group of subjects, using a cross-sectional approach, namely to look for relationships between the variables studied. The research location was carried out at SMK Swasta Alwasliyah 17, Air Putih District, Batubara Regency.

The population in this study were 30 class X female students, so in this case a total sampling technique was used. The research instrument used was a questionnaire to measure the level of knowledge and stress level using the HARS (Hamilton Anxiety Rating Scale) criteria. The elements assessed include: feelings of anxiety, tension, fear, sleep disorders, intelligence disorders, feelings of depression, somatic symptoms, respiratory symptoms, cardiovascular symptoms, respiratory symptoms, gastrointestinal symptoms, urinary symptoms, autonomic symptoms, behavioral symptoms. Data analysis for this study consisted of univariate analysis and bivariate analysis with the chi-square statistical test.

3. RESULTS AND DISCUSSION
3.1. Univariate Analysis
3.1.1. Knowledge level

Table 1 Frequency Distribution of Respondents’ Knowledge Level at SMK Swasta Alwasliyah 17 Air Putih District

<table>
<thead>
<tr>
<th>No</th>
<th>Knowledge level</th>
<th>F</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>2</td>
<td>Enough</td>
<td>17</td>
<td>56.7</td>
</tr>
<tr>
<td>3</td>
<td>Not enough</td>
<td>11</td>
<td>36.7</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on the table above, it is known that the majority of respondents studied reached a sufficient level of knowledge, namely 17 people or 56.7%.

3.1.2 Stress Level

Table 2. Frequency Distribution of Female Students’ Stress Levels at SMK Swasta Alwasliyah 17 Air Putih District

<table>
<thead>
<tr>
<th>No</th>
<th>Stress Level</th>
<th>F</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Heavy</td>
<td>12</td>
<td>40.0</td>
</tr>
<tr>
<td>2</td>
<td>Currently</td>
<td>16</td>
<td>53.3</td>
</tr>
<tr>
<td>3</td>
<td>Low</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>Amount</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on the table above, it is known that the majority of respondents had stress levels in the moderate category, 16 people or 53.3%.

3.2. Bivariate Analysis

Bivariate analysis was carried out to see the relationship between the independent and dependent variables namely between the level of knowledge and the level of stress in dealing with pre-menstrual syndrome in class X female students at SMK Swasta Alwasliyah 17 Air Putih District.
Table 3
The Relationship Between Level of Knowledge and Level of Stress in Facing Premenstrual Syndrome in Students of SMK Swasta Alwasliyah 17, Air Putih District

<table>
<thead>
<tr>
<th>No</th>
<th>Level Knowledge</th>
<th>Stress Level</th>
<th>Total</th>
<th>α</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Heavy</td>
<td>Currently</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Good</td>
<td>0</td>
<td>0</td>
<td>2 (6.7%)</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Enough</td>
<td>2 (16.7%)</td>
<td>13 (65.%)</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Not enough</td>
<td>10 (83.3%)</td>
<td>1 (6.3%)</td>
<td>0</td>
<td>11</td>
</tr>
</tbody>
</table>

Based on the table above, it can be explained that the respondents who had a sufficient level of knowledge were in the severe stress level category as many as 2 people or around 16.7% and 15 people with moderate stress levels or around 93.8%. Respondents with a low level of knowledge as many as 11 people were in the moderate stress level category as many as 1 person or 6.3% and as many as 10 people with a severe stress level or around 83.3%, while respondents with a good level of knowledge had a low stress level as many as 2 people or around 6.7%.

Based on statistical tests, a p-value of 0.000 was obtained, so it can be seen that the significance value of p-value is 0.000 > (0.05), so H0 is rejected and Ha is accepted, which means there is a significant relationship between knowledge and the level of stress facing pre-menstrual syndrome in students X, SMK Swasta Alwasliyah 17 Air Putih sub-district.

DISCUSSION
1. Knowledge level
   Based on the results of the analysis carried out, it is known that the average level of knowledge of female students in class X at SMK Swasta Alwasliyah 17 is in the sufficient category. Knowledge is the result of knowing and this is after someone has sensed a certain object. Several factors influencing a person's knowledge are: education, information/mass media, social culture and economics, environment, experience and age [12][13]. One thing that can help and increase a person's knowledge is education. Education is a process of changing the attitudes and behavior of a person or group and also an effort to mature humans through teaching and training efforts [3].

2. Stress level
   The majority of students' stress levels were in the medium category, namely 16 people or 53.3%. Several factors that influence stress levels include, the older you are, the more mature a person's level of maturity and strength will be in thinking and working. The older a person is, the more constructive they are in using coping with the problems they face according to Hurlock, quoted by [4]. The average stress level of female students is in the moderate stress level category, this is thought to be due to the level of knowledge of female students in dealing with pre-menstrual syndrome is at an average level of sufficient knowledge.

3. The Relationship Between Level of Knowledge and Level of Stress in Facing Premenstrual Syndrome in Students of SMK Swasta Alwasliyah 17, Air Putih District
   The results of the research show that the significance value of the p-value is 0.000 and the chi-square value is 48.302. Because the significance value of p-value is 0.000 > (0.05), H0 is rejected and Ha is accepted, which means there is a significant relationship between knowledge and the level of stress facing pre-menstrual syndrome in Class X female students at SMK Swasta Alwasliyah 17, Air Putih sub-district. Menstruation is a natural thing and is definitely experienced by every normal woman and actually there is no need to worry about it. In fact, based on the results of this study, it can be shown that respondents can still be said to be worried because of the ignorance or lack of knowledge of female students regarding what menstruation is, where this worry causes respondents to experience anxiety and stress when facing menstrual or pre-menstrual events. This is in line with research conducted by Anny Hanifah with the title the relationship between knowledge and attitudes of young women about menstruation and dysmenorrhoea behavior at MAN 2 Garut, West Java 2008. Where are the results of the correlation test on the relationship between knowledge and attitudes of young women about menstruation and dysmenorrhoea behavior shows that there is a significant relationship between the three variables, with a correlation coefficient (calculated r) = 0.381 and r table 0.159 with a significant value of 0.000 which means it is smaller than 0.05 (p < 0.05). Thus, the higher the knowledge of female students, it can be concluded that the lower the level of stress experienced by female students in dealing with pre-menstrual syndrome.
4. CONCLUSION

The majority of Class X female students' stress levels on average are in the medium category in class. The results of the research show that the significance value of the p-value is 0.000 and the chi-square value is 48.302. Because the significance value of p-value is 0.000 > (0.05), H0 is rejected and Ha is accepted, which means there is a significant relationship between knowledge and the level of stress in dealing with pre-menstrual syndrome in class X female students at SMK Swasta Alwasliyah 17 Air Putih District.

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