ANXIETY FIRST AID EFFECTIVE TO REDUCE ADOLESCENT’ ANXIETY

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ABSTRACT
Adolescents go through a transitional period with many changes both physiological and psychological. The changes that occur in adolescents cause anxiety in adolescents. Prolonged anxiety can lead to panic attacks and anxiety disorder. One of the attempts to reduce anxiety is giving Anxiety First Aid (AFA), which is a series of help to deal with anxiety. The study aimed to identify the effect of Anxiety First Aid to anxiety score. Method: The study used quasi-experimental design which involved pre-posttest with control group. The study was conducted in Senior High School Al Islam 1 Surakarta on July-September 2020. The population was senior high school students in Senior High School Al Islam 1 Surakarta. Samples were selected with purposive sampling technique that met the inclusion criteria. Subjects were 60 respondents consisting of 30 in each group obtained by a simple random sampling technique. The measurement of anxiety in the adolescents was by using Taylor Manifest Anxiety Scale. An independent t-test performed the analysis. The result of the research showed that anxiety score decreased significantly in those two groups. In contrast, the treatment group’s decrease in anxiety indicates a higher decrease than the control group. Anxiety First Aid (AFA) is recommended to decrease anxiety in adolescent especially in senior high school students.

Keywords: adolescents; anxiety; anxiety first aid (AFA)

INTRODUCTION
Adolescents go through a transitional period with many changes both physiological and psychological. Physiological changes, especially hormonal changes that are not stable, cause adolescents to experience mental emotional problems. Emotional changes in adolescence can be seen from emotional tension and pressure. Gradually, adolescents will experience emotional stability if the coping mechanisms are positive, as a consequence of trying to adjust to new behavior patterns and new social expectations. However, if the coping mechanism is negative, mental emotional problems such as anxiety often occur in adolescents.

Anxiety is a sense of worry that arises because something unpleasant will happen, but the source is largely unknown (Stuart, 2016). It is normal for everyone to experience anxiety. Anxiety disorders are the most common disorders experienced by adolescents.
The other study explained that anxiety disorders affect 6% to 20% of children and adolescents (Ruano et al., 2016).

The prevalence of anxiety disorders increased to 284 million in 2017 (Ritchie & Roser, 2018). In Asia, the lifetime rate of anxiety disorders is between 9 - 16% and the annual rate is between 4 - 7% (Thinagar & Westa, 2017). Based on the age distribution globally, anxiety mostly occurs at the age of 10-19 years old, with anxiety at the age of 10-14 years old being ranked sixth and anxiety at the age 15-19 years old being ranked ninth in the world (WHO, 2019). In Indonesia, anxiety disorders are categorized as mental emotional disorders. The prevalence of mental emotional disorders in 2018 was 9.8% of the population in Indonesia (Riskesdas, 2018). WHO explained that anxiety is the main cause of individual disability worldwide and accounts for around 16% of global morbidity (WHO, 2019).

Anxiety that occurs continuously and is not resolved immediately can lead to panic attacks. A panic attack is a rapid, intense, and escalating episode of anxiety lasting for 15 to 30 minutes. The individual experiences great emotional fear and physiological discomfort. During a panic attack, an individual experiences 4 symptoms of several symptoms such as palpitations, sweating, tremors, shortness of breath, abdominal distress, dizziness, paresthesia, chills, or hot flashes. Panic attacks harm the individual both physically and psychologically (Hapter et al., 2008).

Quick handling of anxiety can be done by providing first aid for anxiety (Anxiety First Aid). Anxiety First Aid is the first aid given to someone who is experiencing anxiety. First aid is provided until professional help is obtained or until the crisis is resolved. Anxiety First Aid is one of the earliest treatments to help people with anxiety problems. It is the main gateway in providing resources and professional help information, as well as providing social support for people experiencing problems related to anxiety (Hadlaczky et al, 2014).

Anxiety First Aid or first aid to anxiety is a series of several nursing interventions to deal with anxiety in the first place. According to the National Safety Council, there are various relaxation techniques for anxiety, including deep breathing, 5 finger relaxation and distraction techniques, those are imagination and music therapy (Noor & Junaidi, 2010). According to Keliat et al (2019), nursing interventions that can reduce anxiety include deep breathing relaxation, distraction, five-finger hypnosis, and spiritual activity.

A preliminary study conducted by researchers in one of Senior High School in Surakarta, through interviews with the Counseling Guidance Teacher found that there were teachers who found students experiencing confusion and lack of confidence. The teacher stated that 5 students who were given counseling by the teacher complained of feeling worried, embarrassed, not confident, and often headaches and abdominal pain for no reason. Student complaints are some of the symptoms of anxiety. The teacher provided a counseling therapy to students who complained these symptoms, but some cases have not been resolved. Some students who have not been treated continue to experience prolonged confusion and anxiety. There was 1 case of a student who had a panic attack with symptoms of suddenly fainting. This is information from
psychologists that the students experienced panic attacks. Another case was that some students had their own fears with certain subjects so that when they attended class, they suddenly complained of shortness of breath and were taken to the school health center. The purpose of the study was to identify the effect of Anxiety First Aid (AFA) to adolescent’ anxiety.

METHOD
The study applied a quasi-experimental design which included pre-posttest with a control group. The study was conducted in Senior High School Al Islam 1 Surakarta on July-September 2020. The subjects were 60 respondents (the senior high school students) who were willing to participate and filled out the Taylor Manifest Anxiety Scale (TMAS). The respondents included were those who had TMAS score more than 21, and neither had a chronic disease nor consumed anxiety drugs. The score was based on the researcher's interpretation, as the number of 21 was the highest number of 60 respondents' TMAS scores. It is up to the researcher's judgment to decide what number to fit in anxiety manifestation criteria (Western University, 1953). Then, the 60 respondents were divided into two groups of control and treatment groups consisted of 30 respondents for each group obtained by a simple random sampling technique. The health education about adolescents' anxiety was applied to the control group, while the anxiety first aid (AFA) group was applied to the treatment group.

The health education about adolescent’ anxiety was given using audio visual media such as flyer and video. The health education given to the control group were to improve the knowledge about adolescent’ anxiety (Keliat et al, 2019). The anxiety first aid was a series of help to deal with anxiety. The anxiety first aid consists of 4 interventions, they are 1) deep breathing exercise; 2) five fingers hypnosis or distraction; 3) spiritual activity: dhikr therapy; 4) self-care: eating chocolate. The anxiety first aid (AFA) group was administered for three days (1x30 minutes @day), in which the researcher previously delivered the health education for anxiety in both groups. The researcher then continued administered anxiety first aid in the treatment group. A three days after a complete anxiety first aid session, the researcher conducted reassessment of the anxiety score. The analysis used univariate and bivariate analysis with a statistic test of an independent t-test. This research has ethical clearance by the Committee of Ethics of Moewardi Hospital Surakarta with number 895/VII/HREC/2020.

RESULTS

<table>
<thead>
<tr>
<th>Respondent characteristics</th>
<th>Treatment group (n = 30)</th>
<th>Control group (n = 30)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>9</td>
<td>30</td>
</tr>
<tr>
<td>Female</td>
<td>21</td>
<td>70</td>
</tr>
</tbody>
</table>
Table 2. Adolescents’ Anxiety After Health Education with Anxiety First Aid (AFA) in Treatment Group and after Health Education in Control Group (n = 60)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>n</th>
<th>Mean of Pre-test</th>
<th>Mean of Post-test</th>
<th>Mean Diff.</th>
<th>SD</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Treatment group</td>
<td>30</td>
<td>33.17</td>
<td>26.87</td>
<td>6.3</td>
<td>3.07-4.51</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Control group</td>
<td>30</td>
<td>33.07</td>
<td>28.17</td>
<td>4.9</td>
<td>3.87-9.26</td>
<td>0.003</td>
</tr>
</tbody>
</table>

Table 3. The differences of Adolescents’ Anxiety between Treatment and Control Group (n = 60)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
<th>Mean diff*</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>Treatment group</td>
<td>30</td>
<td>26.87</td>
<td>4.51</td>
<td>26.5</td>
<td>1.3</td>
<td>0.42</td>
</tr>
<tr>
<td></td>
<td>Control group</td>
<td>30</td>
<td>28.17</td>
<td>9.26</td>
<td>29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1 shows that the majority of the respondents in both treatment and control groups were female (86.7% in the control group and 70% in the treatment group).

Table 2 shows a decrease of the mean score of anxiety in both treatment and control groups, while the treatment group’s decrease in anxiety indicates a higher decrease than the control group. The result showed that in the treatment group, health education and Anxiety First Aid (AFA) reduced anxiety significantly (p value 0.001, p value < α) and in the control group, health education reduced adolescent anxiety significantly (p value 0.008, p value < α).

Table 3 shows that there was no significant difference between the treatment and control groups with p-value > 0.05 (p value 0.42).

**DISCUSSION**

The majority of respondents were female both in the control and treatment groups. Female are more at risk of experiencing anxiety than men because of female characteristics such as reproductive cycles, menopause, and decreased estrogen levels. Female are also more prone to feel guilty, anxious, increased and even decreased appetite as well as sleep disorders. Anxiety in male is more likely to have a lower risk of experiencing anxiety because male are more active and explorative than female. When estrogen levels are low, women will feel anxious (Schmitt & Segert, 2008). Besides that, women may be more likely to report their symptoms. Psychological differences also become the factor of experiencing anxiety. Men may be rise to believe more in their personal control over the situation, a variable protective against anxiety disorders. Social factors such as gender roles are also likely to play a role. Men may experience more social pressure than women to face fears (facing fears is one of the most effective...

Adolescent’ anxiety score decreased significantly both in the control and treatment groups (p value < 0.05). In the control group, the health education about anxiety using flyer and video was applied as basic intervention. The health education can reduce anxiety score in the control group with mean score decreased from 33.07 to 28.07. This finding is consistent with the previous study. Enriching health education about adolescent’ anxiety can be very helpful in terms of removing the mentioned concerns and preventing from anxiety, since a high percent of students in the world, particularly girls, experience medium level of anxiety in adolescence and researchers believe that anxiety starts in adolescence and is accompanied by mental damage and behavioral problems if sufficient information is not fulfilled to adolescents in this period. Fulfiling sufficient information about anxiety and how to manage it can increase the knowledge and reduce anxiety (Mokari et al., 2016). Another study explained that health education using video and brochure media is an effective strategy to increase knowledge. Previous study proved that health education using video and brochure can increase health literacy significantly because the use of colored and moving images or animations can attract the respondents so that the information obtained will be more memorable by respondents. Audio visual media can convey information in a concrete way (Prawesti et al., 2018). Audio visual media also has creative aspect that enhances interest from respondents (Barani et al., 2010).

The research showed that in the treatment group’s decrease in anxiety indicated a higher decrease than the control group after the intervention was applied. The health education and Anxiety First Aid (AFA) were applied in the treatment group. The interventions reduced anxiety score with mean score decreased from 33.17 to 26.87. Anxiety First Aid in this study was the provision of four interventions at a time in sequence, they are 1) deep breathing exercise; 2) five fingers hypnosis or distraction; 3) spiritual activity: dhikr therapy; 4) self-care: eating chocolate. The Anxiety First Aid (AFA) can reduce anxiety score significantly in the treatment group. Anxiety First Aid is first aid given to someone who is experiencing anxiety. First aid is provided until professional help is obtained or until the crisis is resolved. Anxiety First Aid is one of the earliest treatments to help people with anxiety problems. It is the main gateway in providing resources and professional help information, as well as providing social support for people who experience problems related to anxiety (Hadlaczky et al, 2014).

This finding is in line with some previous studies. National Safety Council explained that relaxation techniques are an effective treatment for managing anxiety (Noor & Junaidi, 2010). Nursing interventions such as deep breathing relaxation, distraction, and five-finger hypnosis were proven to reduce anxiety (Keliat et al, 2019). Another study explained that relaxation such as deep breath relaxation and self-care are effective treatments for individuals who experience anxiety (Harris, 2020). Slow deep breathing is the right intervention to reduce anxiety in adolescents. Slow deep breathing can physiologically cause relaxing effects involving the parasympathetic nerves in the central nervous system. The function of one of the parasympathetic nerves is to reduce the production of adrenaline hormone or epinephrine (stress hormone) and increase the secretion of non-adrenaline or non-epinephrine hormones (relax hormone) so that
anxiety and tension decrease and they become more relaxed (Sellakumar, 2015). The other study explained that spiritual activities can reduce anxiety problem. Spiritual activity are activities related to God the creator. People who draw closer to God will find comfort and can overcome the anxiety they feel. Proximity to God will provide more strength, confidence, and comfort so that it provides health benefits including reducing anxiety. Dhikr therapy can reduce anxiety significantly (Sulistyawati et al., 2019).

Dhikr therapy also improves emotional intelligence of adolescent (Ni’matuzzakiyah, 2020). Dhikr therapy is also an intervention that improve comfort and happiness. Dhikr intensity is significantly correlated with subjective well-being (Hamsyah & Subandi, 2016). Other study showed that dhikr therapy using “subhanallah” for 25 minutes can reduce anxiety (Songwathana, 2011). Other intervention such as self-care by eating chocolate also supports the decrease of anxiety. Self-care is an effort to meet the basic needs of an individual properly. Harris (2020) explained that individuals who experience anxiety need to be given self-care with various fulfillment of adequate nutritional needs. The fulfillment of adequate nutrition and a healthy menu can make the body feel comfortable. Certain foods contain serotonin, which makes the body feel more relaxed or comfortable. Although actually serotonin cannot be obtained completely from food, there are many foods that contain certain substances and can increase brain serotonin such as chocolate which can increase feelings of comfort. It can stimulate the increase of brain serotonin (Harris, 2020).

The result of this study showed that there was no significant difference between the treatment and control groups with p-value > 0.05 (p value 0.42) (See table 3). This finding showed that both health education and anxiety first aid can reduce anxiety. Health education can reduce anxiety score by increasing the knowledge and awareness of the respondents about anxiety so that the respondents can be more relax. In addition, anxiety first aid can reduce anxiety score by stimulating the respondents to be more relax physically and psychologically.

CONCLUSION
This research has identified that health education can reduce adolescent’ anxiety. The score of anxiety decrease significantly. Health education is followed by Anxiety First Aid (AFA) thus causing the decrease of adolescent’ anxiety to a significant lower score than by health education only.

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