YOGA EXERCISE REDUCING DISMENORRHEA PAIN LEVEL OF TEENAGER

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ABSTRACT

Introduction: When women have menstruation, there will be contractions that cause pain or discomfort on the part of the body, especially the abdomen, called dismenorhea. However, some women experience it until affects the discomfort in doing activities, which can disturb the productivity. The aim of this research is to find the princess dismnearhea pain in the exercise before and after doing yoga in teenage girls at RT. 09 RW. 04 the village of Bligo district of Candi Sidoarjo. Methods: The research design was pre-experimental design with one group pre-post test design. Population of this research were all teenager at RT. 09 RW. 04 the village of Bligo district of Candi Sidoarjo. Samples were teenagers who experience dysmenorrhea. The amount of sample were 9 respondents using purposive sampling technique. The dependent was dysmenorrhea and the independent variable was yoga exercise. The research instruments using SOP, the data were analyzed by T-Test paired samples. Result: Results showed pain before doing yoga exercises gained an average pain level was 6.44 (severe pain), and after doing yoga exercises average pain level was 4.11 (moderate pain). T-Test samples obtained p= 0.000 < a =0.05, H0 is rejected means there is dysmenorrhea difference on teenage girls before and after doing yoga exercise at RT. 09 RW. 04 the village of Bligo district of Candi Sidoarjo. Discussion: The conclusions of this research is yoga exercise regularly will help in doing activities and daily routines without interruption of menstrual pain. Midwives are expected to make yoga exercise as one of non-pharmacologic treatment to teenagers who experience dysmenorrhea.

Key words : Teenagers, Yoga Exercise, Dysmenorhea

INTRODUCTION

Painful menstruation gynecological complaints or Dismenorrhea is most common in women. Who complained of symptoms such as cramping in the lower abdomen, dizziness, nausea, shaking and unconscious. This pain occurs due to various physical and psychological factors (Andrews, 2009). Of weakness, lack of exercise and stress. However, there are some women in the reproductive age who are experiencing pain Dismenorrhea, and most women experience discomfort to affect the activity academic, social and sport-related absenteeism in the school or in the workplace, so that it can interfere with productivity.

Menstrual pain is divided into 2 primary menstrual pain and menstrual pain secondary. Primary dysmenorrhea is defined as recurrent cramping pain that occurs during menstruation without any pathological abnormalities in the pelvis. Secondary menstrual pain is pain during menstruation that is based on pathologic abnormalities in the pelvis, eg endometriosis (Bobak, 2010). In Indonesia the incidence Dismenorrhea consists of 54.86% and 9.36% of primary Dismenorrhea Dismenorrhea secondary primary Dismenorrhea symptoms usually occur in women of childbearing age 3-5 years after experiencing first menstruation and women who had never been pregnant. There are no exact figures regarding menstrual pain sufferers in Indonesia, but in Surabaya gained 1.07% to 1.31% of the number of patients at the health center came gets obstetrics area (Ningsih, 2011).

Results of a preliminary study conducted by researchers at the date of October 10, 2014 through interviews at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo, found the number of young women who experience menstrual pain is as much as 8 people, with a prevalence of 2 (25%) complained of pain occurs only for a moment and to recover. The pain can disappear by itself without the need for
Dismenorhea pain is influenced by several factors including: psychological factors, risk factors, obtruksi cervical canal and endocrine factors. Dismenorhea arise due to contraction of the myometrium disritmik which displays one or more symptoms of pain ranging from mild to severe pain in the lower abdomen, buttocks and spasmodic pain on the medial side of the thigh. Thus forcing the patient to take a break and leave work or a way of daily life, for a few hours or a few days (Prawirohardjo, 2009). Dismenorhea make a woman can not be normal activity and requires a prescription, to relieve pain Dismenorhea can be done by means of pharmacological and nonpharmacological. Controlling pain with pharmacological among others with analgesic inhalation, analgesic apioid, and regional anesthesia, whereas pain control nonfarmakologi among others: physical exercise, brisk walking, jogging, swimming, running, gymnastics, yoga, bike distance, taking care of home, warm compresses Massase, adequate rest and diet changes to reduce salt and gymnastics, yoga is one method that can nonfarmakologi deterapkan to reduce the intensity of Dismenorhea (Andrews, 2009).

Gymnastics yoga is a form of relaxation that is highly recommended. The purpose of yoga exercises is to reduce Dismenorhea experienced by some women each month (Guyton, 2007). It is caused when doing sports or exercise, the body will produce endorphins. Endorphins produced by the brain and spinal cord. This hormone acts as a natural sedative that is produced by the brain, causing a sense of comfort (Baziat, 2008). At an athlete who regularly exercise have Dismenorhea prevalence rate lower than that of women who are obese, and in women who have irregular menstrual cycles (Anugroho, 2011).

From the description above, the researcher is interested in conducting research on the effect of yoga exercises with the level of menstrual pain in adolescent girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo.

METHOD
The research design is quasi-experimental research with one group pre-test and post-test design.

The population is all the young women in RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo in October 2014 amounting to 10 people. Samples taken by purposive sampling studies met the inclusion criteria, namely the young women who experience menstrual pain at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo in October 2014 in the amount of 9 people.

The dependent variable in this study is the level of menstrual pain and the independent variable is the yoga exercises. The research instrument uses observation sheets and SOP, data were analyzed by T-Test paired samples.

RESULT
The research was carried out at RT. 09 RW. 04 Village Bligo Candi region that is located in the Sidoarjo. Bligo village easily accessible by the public and can be reached by foot or by vehicle. Restrictions RT. 09 RW. 04 Bligo village borders the following regions namely the north bordering the Larangan village, the east by RT. 10 and south by RT. 13 and west borders with RT. 08 Village Bligo.

Characteristics of respondents by age

Table 1 The frequency distribution of respondents according to age at RT. 09 RW. 04 Village Bligo Sidoarjo Candi region in October 2014.

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-13</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>14-16</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>17-20</td>
<td>7</td>
<td>77.8</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>

In table 1 we can see that from 9 respondents nearly all respondents (77.8%) aged 17-20 years.

Characteristics of respondents by education level
Table 2: The frequency distribution of respondents by education at RT. 09 RW. 04 Village Bligo Sidoarjo Candi region in October 2014.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>1</td>
<td>11.1</td>
</tr>
<tr>
<td>Intermediate</td>
<td>6</td>
<td>66.6</td>
</tr>
<tr>
<td>High</td>
<td>2</td>
<td>22.2</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>

In Table 2 it can be seen that from 9 respondents most respondents (66.6%) level of secondary education.

Table 3: The frequency distribution based on family history of primary Dismenorhea / descent at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo October 2014

<table>
<thead>
<tr>
<th>History Dismenorhea</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>6</td>
<td>66.6</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>33.4</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100</td>
</tr>
</tbody>
</table>

In Table 3 it can be seen that out of nine respondents most respondents (66.6%) had a family history of primary dysmenorrhea / descent.

Results showed pain before doing yoga exercises figures obtained average pain level was 6.44 (severe pain), and after doing yoga exercises was 4.11 (moderate pain). Statistical test results Paired samples t test p value = 0.000 < α = 0.05, statistical hypothesis H0 is rejected, which means there are differences dismenorrhea pain in teenage girls before and after doing yoga at RT. 09 RW. 04 Village of Bligo District of Candi Sidoarjo.

DISCUSSION

1. The level of pain before yoga exercises

   The level of pain before doing yoga exercises showed that out of nine respondents experiencing menstrual pain obtained an average value of 6.44 level of pain is severe pain, with a standard deviation of 2.12 and the lowest score was 3 (mild pain), the highest score is 9 (severe pain). Pain is a personal experience, subjective differ from one to the other person and may also differ in the same person at different times (Benson, 2008). They experience symptoms such as severe pain, dizziness, punggang pain, leg cramps, vomiting, unconscious.

   Based on the theory advanced by (Andrews, 2009) Controlling pain with pharmacological among others with analgesic inhalation, analgesic opioid, and regional anesthesia, whereas pain control nonfarmakologi among others: physical exercise, brisk walking, jogging, swimming, running, gymnastics, yoga, distance bicycle, take care of home, warm compresses Massase, adequate rest and diet changes to reduce salt and gymnastics, yoga is one method that can nonfarmakologi deterapkan to reduce the intensity Dismenorhea. The community effort or habits of young women in the village RW.04 RT.09 Bligo Candi region in nonpharmacologic pain control is that they have done so far has been appropriate, but worth noting if they underwent secondary Dismenorhea.

   Based on Table 1 showed that respondents who have seen the pain of age almost entirely (77.8%) aged 17-20 years. At this age is an age that usually arise painful menstruation start 2-3 years after menarche and reaches a maximum between the ages of 15-25 years (Morgan, 2009). Besides, it is also supported by the psychological factors which adolescents who are emotionally unstable, if not can be lighted on the process of menstruation easily arise Dismenorhea. According Proverawati (2009) emotional stress that can aggravate the pain, but it is also the existence of risk factors such as anemia, chronic disease that can affect the incidence Dismenorhea because it can lower the body's resistance to pain.

   Judging from the age factor percentage occurrence of menstrual pain more common in respondents aged ≤20 years, this fact in accordance with the statement of Morgan (2009) that menstrual pain often occurs at a young age, because it has not yet reached maturity biology (especially reproductive namely endometrial growth are still not perfect), psychological and social. With increasing age, the pain will decrease.

   Based on Table 2 the vast majority (66.6%) of respondents in this study secondary education, which is experiencing severe pain in menstrual pain, this is because the density of
activity that causes their pain levels were increased. However, knowledge of treatment of dysmenorrhea in both categories. In such circumstances it appears that, even high girls education, the level of knowledge will be better. With knowledge about menstrual pain, the teenage girls in at RT. 09 RW. 04 Village Bligo Sidoarjo Candi region can develop the ability to take the decision to deal with menstrual pain that is a manifestation of the integration of scientific and ethical reasoning which departed from dysmenorrhea as real problems experienced by young women. This is consistent with the theory Bobak (2010) which states that the higher the level of education can affect a person's level of knowledge.

Higher education, the resources, the experience and the attitude also will be many and varied. Experiences, attitudes affect how female behavior in dealing with events that happened Dysmenorrhea can also be used as a way to increase one's knowledge of a matter. Besides higher education will also affect the power of perception and mindset of someone. The higher the level of education is growing well as a source of information, of perception and thought patterns, so that the knowledge gained also in overcoming the better when he found painful menstruation.

Menstrual pain in adolescents is also influenced by the history of the birth mother or sister who experience menstrual pain / Descent, it is on show in table 3 of 9 respondents that most respondents (66.6%) primary Dysmenorrhea on family history. Family history can identify someone with a higher risk of experiencing a disease that often occurs. By knowing a family history of disease, a person can do to prevent and decrease the risk for experiencing a particular disease because of family history is very influential on the health condition of a family member itself and is a risk factor that is very supportive of a disease that is common in the environment of the family.

According to the theory Guyton (2007) that family history and genetic related to the occurrence of severe menstrual pain. As with endometriosis are influenced by genetic factors, women who have a mother or sister with endometriosis have a greater risk of developing the disease as well. This was caused by an abnormal gene that is passed down in the female body (Potter, 2005).

2. The level of pain after yoga exercises

Pain after doing yoga exercises showed that out of nine respondents experiencing menstrual pain obtained an average value of 4,11 level of pain (moderate pain), with a standard deviation of 2.61. In accordance with the opinion of Ningsih (2011) one of the relaxation techniques. There are three things required in relaxation that is a quiet neighborhood, the exact position of mind rest, respondents who experienced a decrease in pain level is completely in accordance with the criteria of researchers which adolescents do not consume the herbs and not taking analgesics, so do gymnastics yoga can reduce pain.

Judging from the age factor percentage of the level of severe menstrual pain occurs in respondents aged ≤ 20 years, the fact that according to the statement Morgan (2009) that menstrual pain often occurs in young women, because it has not reached biological maturity. Additionally supported by the educational factors which can influence the activity patterns, thought patterns and emotional on them. The pattern of activity in those who are highly educated tend to be more crowded, hectic schedules that can cause fatigue and decreased endurance. According to (Prasetyo, 2010) fatigue and decreased endurance one can increase the sensation of pain felt and may reduce the ability of individual coping.

Every woman should begin employment health check or come to the place of health services as soon as possible if there is excessive pain during menstruation. To avoid complications more severe menstrual pain incidence in at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo. It can be used as a reference and knowledge that from menstrual pain that is not treated immediately adversely affect the reproductive organs, one of which can cause sterility (Agustianingsih, 2010).

In the process of this study, researchers encountered resistance from interference at the time of research and time doing yoga exercises are families who disrupt the activities which could affect the study. Because in doing yoga exercises needed a calm and comfortable sleeping position correct and mind to rest or quiet.

3. The difference in the level of pain before and after yoga exercises

Results of research conducted by using SPSS 17.0 program paired sample t test showed \(\rho = 0.000\), while \(\alpha = 0.05\), which means that \(\rho\)
= (0.000) <α = (0.05) H0 is rejected or no difference in pain disminorhea young women before and after doing yoga exercises in other words yoga exercise influence to decrease the level of pain. From 9 respondent before doing yoga exercises obtained average value is 6.44 degree of pain (severe pain) with a standard deviation of 2.12 while after doing yoga exercise value of the average pain level was 4.11 (moderate pain) with values standard deviation of 2.61.

This shows the before and after doing yoga exercise control or divert influential in pain. Where at the time of treatment to yoga exercises should be supported with a quiet environment, try to keep your mind calm and relaxed, comfortable position. But there is one respondent who declined only 1 point on a pain scale categorized moderate pain and 2 respondents who experienced severe pain where 1 point decrease in fixed categories that mean the difference before and after treatment. In this case in accordance with the theory of Ningsih (2011) that yoga exercise is an effective method, especially in the respondents who experienced mild or moderate pain.

According to research institutions in the book the basics of research methodology in 2010 said that the threat to the experimental research is more influenced by the researcher's ability to maintain the condition to remain constant during the experiment is running, this might be due to several factors which influence throughout the intervention or behavior such as compliance respondents in doing yoga exercises needed a quiet environment, the mind rest, respondents who did not drink herbs and respondents who were not taking medication from a doctor.

CONCLUSIONS AND RECOMENDATION

Conclusions
Based on the results of research and discussion on the effectiveness of yoga exercises against menstrual pain level on RT.09 RW.04 girls in the village of Candi Sidoarjo Bligo can be concluded that:
1. Teenage girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo almost half the level of severe pain.
2. Teenage girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo after doing yoga exercise with pain Dismenorhea almost half the level of moderate pain.
3. There is a difference disminorhea pain level before and after doing yoga exercise in adolescent girls at RT. 09 RW. 04 Village Bligo District of Candi Sidoarjo.

Recomendation
1. For the next writer
   This study is basic research that can be developed into more specific research more about the differences in the level of pain in adolescents Dismenorhea to include confounding factors (age, psychological factors, factors obtruksi cervical canal, the risk factors and endocrine factors) that could affect the results, so that research results can be avoided. Further research can be done based on the research is about giving actions other than yoga exercises to decrease pain level Dismenorhea in adolescents.
2. Educational institutions
   With the growing knowledge about Dismenorhea events experienced by adolescents so that research results can be used as a supporting theories that already exist and only need apply
3. For health professionals
   a. Suggested for health workers are expected to apply yoga exercises as one of the non-pharmacological treatment to adolescents who experience Dismenorhea.
   b. It is suggested in order to provide counseling and information in accordance with the level of education and knowledge in order to more easily understand about the incident Dismenorhea and can give management a balanced diet in the form of counseling, psychological, gymnastics, yoga, and exercise regularly.
4. For teens themselves
   This research can be used as information that yoga exercises can reduce pain Dismenorhea. And it is also important for writers, especially women who experience Dismenorhea to immediately consult a health employment in an effort to detect the cause of primary or secondary Dismenorhea through the provision of counseling therapy and management of the underlying cause.
5. For young women with secondary Dismenorhea

This research can be used as the basis of information on Dismenorhea nonpharmacologic pain control that movement yoga exercises may be done by people with secondary Dismenorhea because yoga exercise procedures do not affect the health or worsen the situation for young women who have secondary Dismenorhea.

REFERENCES


