The effectiveness of spiritual deep breathing techniques on adolescent distress in orphanages in Rembang Central Java

Fitrio Deviantony*, Erti Ikhtiarini Dewi, Yeni Fitria, Enggal Hadi, Fitriani Fitriani

Department of Community and mental Health, Faculty of Nursing, Universitas Jember
Jalan Kalimantan 37, Jember, Jawa Timur

*Corresponding author: fitrio.psik@unej.ac.id

ABSTRACT

**Background:** Adolescents who live in orphanages have various kinds of stressors such as adjustment to new environments, different backgrounds, academic stress, peer conflicts, financial problems, lack of affection, parental divorce, parents leaving family, and self-adjustment. The condition of adolescents who are unable to manage the stressors they face can make adolescents experience distress.

**Objectives:** The study aims to analyze the effect of spiritual deep breathing therapy on adolescents distress who lived in orphanages.

**Methods:** This research used quasy experimental design method with pre-post test and control group design. The sample included 18 control groups and 18 treatment groups. Data was analyzed using univariate and bivariate analysis with significance level 95% (α = 0.05).

**Hasil:** Hasil penelitian menunjukkan sebagian besar responden yang mengalami distress berat (38,9%) dan distress sedang (33,33%) adalah siswa SMA. Hasil uji T-Independen antara kelompok pasca perlakuan dan kelompok pasca kontrol menunjukkan p=0,007 (p < 0,05), artinya ada perbedaan diantara dua kelompok tersebut.

**Kesimpulan:** Terapi pernapasan dalam spiritual salah satu cara untuk mengatasi kondisi tekanan secara pribadi. Manfaat terapi kombinasi nafas dalam dapat mengoptimalkan kebutuhan oksigen untuk sel-sel yang tertekan, menurunkan aliran darah ke otot dan meningkatkan aliran darah ke otak dan kulit sehingga menimbulkan ketenangan dan relaksasi.

**KATA KUNCI:** remaja; distress; napas dalam spiritual

**ABSTRACT**

**Background:** Remaja yang tinggal di panti asuhan memiliki berbagai macam stressor seperti penyesuaian diri dengan lingkungan baru, perbedaan latar belakang, stres akademik, konflik teman sebaya, masalah keuangan, kurangnya kasih sayang, perceraian orang tua, orang tua meninggalkan keluarga, dan penyesuaian diri. Kondisi remaja yang tidak mampu mengelola stresor yang dihadapinya dapat membuat remaja mengalami distress.

**Objectives:** The study aims to analyze the effect of spiritual deep breathing therapy on adolescents distress who lived in orphanages.

**Methods:** This research used quasy experimental design method with pre-post test and control group design. The sample included 18 control groups and 18 treatment groups. Data was analyzed using univariate and bivariate analysis with significance level 95% (α = 0.05).

**Hasil:** Hasil penelitian menunjukkan sebagian besar responden yang mengalami distress berat (38,9%) dan distress sedang (33,33%) adalah siswa SMA. Hasil uji T-Independen antara kelompok pasca perlakuan dan kelompok pasca kontrol menunjukkan p=0,007 (p < 0,05), artinya ada perbedaan diantara dua kelompok tersebut.

**Kesimpulan:** Terapi pernapasan dalam spiritual salah satu cara untuk mengatasi kondisi tekanan secara pribadi. Manfaat terapi kombinasi nafas dalam dapat mengoptimalkan kebutuhan oksigen untuk sel-sel yang tertekan, menurunkan aliran darah ke otot dan meningkatkan aliran darah ke otak dan kulit sehingga menimbulkan ketenangan dan relaksasi.

**KATA KUNCI:** remaja; distress; napas dalam spiritual
group. The sampling technique use simple random sampling with mild, moderate, and severe distress and aged 13-18 years. Distress was measured using GHQ-12 (General Health Questionnaire-12) questionnaire and interventions which were given for 3 days with a duration of 10 minutes for each therapy. Data were analyzed by using both univariate and bivariate analysis with 95% (α = 0.05) significance level.

**Results:** The result showed majority of the respondent who experienced severe distress (38.9%) and moderate distress (33.33%) were senior high school student. Result of T-Independen Test between post treatment group and post control group showed p=0.007 (p < 0.05), it means that there was a difference two groups.

**Conclusions:** The result showed majority of the respondent who experienced severe distress (38.9%) and moderate distress (33.33%) were senior high school student

**KEYWORD:** adolescent; distress; spiritual deep breathing

**Article Info :**
Article submitted on May 29, 2023
Article revised on July 06, 2023
Article received on September 01, 2023

**INTRODUCTION**
Adolescence is a transitional period between childhood and adulthood, there are changes that include biological, cognitive and hormonal as well as social emotional (1). At this time, the task of development experienced is to find an appropriate identity and lifestyle (2). Support from parents and those around them is needed by teenagers to achieve developmental tasks. According to the regulation of the Minister of Health of the Republic of Indonesia Number 25 of 2014, it is said that adolescents are the age group of 10-18 years and according to the Population and Family Planning Agency (BKKBN) a teenager is someone who is not married and aged 10-24 years (3). Adolescents are the largest population of the world's population around 1.2 billion adolescents and 350 million adolescents (22%) are in the

Southeast Asia region aged 10-19 years. In Indonesia, many adolescents are forced to live in orphanages for various reasons such as orphans, children who are victims of divorce by their parents which have an impact on the child's future, the inability of parents to provide affection and economic hardship (4). The need for teenagers to get their rights such as going to school, having a family, and feeling love and affection makes them have to live in an orphanage so that their hopes and needs can be met. Developmental tasks that must be achieved in adolescence will affect the success of further development.

Orphanages or Child Social Welfare Institutions aim to create foster children who are able to live independently in the community and have good social relationships within the
The existence of a nanny in an orphanage is a substitute for their parents. Parents play a role in providing positive and negative effects on adolescent emotions. Family is a comfortable place to grow up and develop for adolescent apart scholl and peer group (5). The opposite condition is if adolescents do not live with their parents, for example their parents die, economic problems that result in their inability to pay for their lives cause them to live in orphanages (6).

Adolescents in orphanages lose the biggest source of support from their parents. It causes feelings of abandonment, rejection, neglect, and even depression (7). Distress can be defined as a multifactorial response such as physiological, psychological, emotional, intellectual, social, and/or spiritual to a threat and hurts individuals (8). The distress experienced by a person will make them indifferent, less friendly, and less adaptable to the environment. The results of research by Dugre & West (9), distress can create auditory hallucinations because it disrupts the limbic system so that it stimulates negative sounds that endanger yourself and others. According to Mohammad Zaded et al (10), showed that adolescents living in the Klang Valley Malaysia orphanage experienced severe stress levels of 5.7% (men) and 1.3% (women) and 84.1% mild stress levels (male) and 94% (female). This shows that some respondents experience stress due to the congestion of the orphanage environment causes adolescents to feel anxious, easily offended, and facilities are limited so that people who use some are impatient to take turns, including outside parties. The causes of stress and problems that arise with caregivers and fellow orphanage friends.

Every adolescent faces a lot of stressor such us from family, school environment, peers, teachers, and lessons, but not all of them have good coping with adapting (7). Good stress management must be carried out by adolescents living in orphanages, such as knowing how to relax to relieve perceived stress. Mason (2018) states that most adolescents do not have stress management and training even though they have several stress management strategies, but they are relatively suboptimal. Methods of overcoming distress can be through pharmacological, non-pharmacological, behavioral, cognitive, hypnosis, relaxation, meditation, and music approaches (11).

About 54% of adolescents were identified that Spiritual Deep Breathing as the most helpful technique for relaxation reducing distress (12). Therefore, adolescents in orphanages also need
therapy that can reduce pressure, one of which is deep breathing spiritual therapy. This therapy combines deep breathing therapy and spiritual healing at the same time. The combination of deep breathing spiritual therapy can reduce the level of pain, anxiety, feelings of peace, calm, serenity, and motivation as well as optimism that appears and is relatively increasing (13). A similar therapy has also been carried out by Kushariyadi et al (2019) deep breathing spiritual therapy can overcome distress in nursing students. The focus of therapy will be given to the early adolescent, middle and late adolescence age groups, because the stressors faced by adolescents are different, such as academic demands, adjustments to the orphanage environment, and demands given after leaving the orphanage and facing the outside world. So that the combination of these two therapies needs to be given to adolescents in orphanages to reduce the distress they experience. So, the study aims to analyze the effect of spiritual deep breathing teraphy on adolescents distress who lived in orphanages. This research was conducted for one month (July 2020 – August 2020) using a variabel distress and provide spiritual respiration therapy for adolescents in social homes and Islamic boarding schools RN. ASA (Roudlotun Nasyi'in Ash-Shiddiqiyah) Rembang regency. The population in this study is adolescent with distress, there were 223 population while the number of samples used in the study was 36 respondents which total sample each treatment group and control group as many as 18 respondent. This study used probability sampling, which is a sampling technique by giving equal opportunities to each population to be selected as a sample (14). The technique in sampling used simple random sampling by randomization. The instrument used in this study was GHQ-12 (General Health Questionnaire). The GHQ-12 questionnaire has a sensitivity value of 0.81 and a specificity of 0.62 and the reliability of the GHQ-12 questionnaire is assessed with Cronbach's alpha, and it is obtained a value of 0.670-0.776, it is proven that GHQ-12 is valid and reliable. Likert scale GHQ-12 questionnaire with a range of 0-36, with a rating: 1) 0-12 (low distress); 2) 13-24 (medium distress); 3) 25-36 (severe distress). Inclusion criteria include respondents with distress rendah, severe distress dan distress berat. This research

MATERIALS AND METHODS

Quasi experimental design using two group pre-posttest design was used in this study. The study aims to analyze the effect of spiritual deep breathing teraphy on adolescents distress who lived in orphanages.
was conducted online using social media which has video conference facilities. The GHQ-12 questionnaire was filled in through a google form which was given through the board of the RN ASA social institution and Islamic boarding school. The control group and the treatment group were carried out a pretest by filling out the GHQ-12 questionnaire and continued with the intervention of giving deep breathing spiritual therapy to the treatment group. The intervention was carried out 6-15 breaths for 10 minutes given for 3 consecutive days. Post tests were also given to the control and treatment groups. The T-dependent and T-independent test test was used in this study. Before it researchers using saphiro-wilk test to normality data (p>0.05) and also using homogeneity test saw data variation. The research ethics werw approved on July 10, 2020, by ethics committee of the Faculty of Nursing, University of Jember based on a certificate of ethical qualification number 3560/UN25.1.14/SP/2020.

RESULTS AND DISCUSSION

RESULTS

Characteristics of Respondents

Table 1 shows that the characteristic of respondents’ gender, age, and education. It was revealed that almost 50% of the adolescents who took part in the study were female (66.67%) with education is senior high school (72.22%). The majority adolescent belong as late adolescent between the ages of 15 and 19 years old.

Table 1. Characteristics respondent based on gender, age, and education

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Treatment</th>
<th>Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Female</td>
<td>14</td>
<td>10</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early Adolescent</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Middle Adolescent</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Late adolescent</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Middle School</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Senior High School</td>
<td>13</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 2 shows that, according to measurement of distress in treatment group have severe distress with the mean distress before treatment 26.72 and after
treatment have moderate distress with the mean distress 21.00. The mean distress decline by 5.72. Result of the T-Dependent Test showed p=0.000 (p<0.05) means that there is a significant difference between prior to giving spiritual deep breathing therapy and after being given spiritual deep breathing therapy in adolescent who lived in orphanaged.

Table 2. Result of T-Dependent test in treatment group

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distress before the intervention</td>
<td>18</td>
<td>26.72</td>
<td>3.675</td>
<td>0.000</td>
</tr>
<tr>
<td>Distress after the intervention</td>
<td>18</td>
<td>21.00</td>
<td>2.849</td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the mean of distress as a pre-test of 24.56 and the current post-test of 24.06. the mean distress decline by 0.5, it mean there were no significant changes. Result of the T-Dependent Test in control group showed p=0.461 (p>0.05) means that there is no significant different between the current pre-test to post-test time.

Table 3. Result of T-Dependent test in control group

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distress as a pre-test</td>
<td>18</td>
<td>24.56</td>
<td>3.792</td>
<td>0.461</td>
</tr>
<tr>
<td>Distress as a post-test</td>
<td>18</td>
<td>24.06</td>
<td>3.506</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 shows result of T-Independen Test between post treatment group and post control group showed p=0.007 (p < 0.05), it means that there was a difference in the.

Table 4. Result of T-Independent Test

<table>
<thead>
<tr>
<th>Category</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Group</td>
<td>18</td>
<td>21.00</td>
<td>2.849</td>
<td>0.007</td>
</tr>
<tr>
<td>Control group</td>
<td>18</td>
<td>24.06</td>
<td>3.506</td>
<td></td>
</tr>
</tbody>
</table>

**DISCUSSION**

This study focuses on adolescent respondents, where the inclusion criteria in this study are early adolescents, middle adolescents, and late adolescents. This may be beneficial in this study because this online research has adolescent respondents who tend to readily accept the information provided. Research by Caldwell et al., (2019) compared men, women, which has advantages in verbal
memory. Besides, adolescence, which is a transitional period that experiences many new challenges, is prone to experiencing difficulties. Our study also documented that most of the adolescents who participated in the study majority were female. This may be the reason for the high level of distress in this study. Female adolescent respond faster to psychological changes and are more sensitive to self-assessment. Theoretically, women experience hormonal changes, exposure to stressors, coping abilities, and cognitive abilities that are different from men (15). Men are better able to manage stressors, although they may not obtain much social support in dealing with the problem (16).

The level of education is also an important factor in this study. Difficulties tend to occur with respondents who have burdens and responsibilities at school. Adolescent stress levels also increase throughout the school season, and they admit to being overwhelmed, sad, unhappy, and tired (17). From the research results, it can be seen that high school respondents have a high tendency to experience high academic distress and confusion over future orientation. Future orientation confusion experienced can include higher education, employment and career, and marriage and family.

Distress conditions can arise from various factors such as the demands of academic, social, personal life, environmental changes, loss of social support, financial problems, and family factors such as divorced parents, parents unable to meet children's needs, lack of love or parents have died (18). Adolescents in orphanages also experience various kinds of stressors are psychosocial and traumatic stressors such as adaptation to their new environment, parents, environment, peers, financial, and academic (19).

Table 2 shows a significant difference (p=0.000) were significant distress among adolescent who lived in orphanages after giving of spiritual deep breathing therapy. Pemberian terapi selama tiga hari berturut-turut selama sepuluh menit. There is a decrease in mean values distress difference between pre-test dan post-test of 5.72. this mean that giving spiritual deep breathing therapy effect on adolescent who lived in orphanages. This is inversely proportional to the control group who was not given a deep breath spiritual healing and did not experience a significant change in the distress score.

The combination of deep breathing spiritual healing combines deep breathing therapy with spiritual healing, namely listening to verses of the Koran, where when this therapy is played it will generate sound waves and encourage the brain to produce chemicals called neuropeptides and will affect the body's
receptors so that the body will feel comfortable (20). This therapy uses one's abilities, namely breathing and spirituality, which has an impact on calming the mind and creating a sense of comfort in the body (18). The use of deep breathing spiritual healing has a trivial effect, but it has tremendous benefits with simple techniques and costs nothing. The solution is the right solution for everyone. This therapy is easier to apply than the anti-stress therapy techniques others although the main obstacle is the inability flew children's describing health problems (19).

The process of breathing spiritual healing can reduce distress starting from the time the individual takes a deep breath in a calm and relaxed environment until the air fills the lungs and while listening to the chanting of the Qur'anic verses then exhaled through the mouth. When the incoming air fills the lungs significantly, it increases lung ventilation, blood oxygen, facilitates gas exchange, and creates a comfortable and soothing effect. A relaxed atmosphere is obtained when the hypothalamus releases ACTH which will increase endorphins and decrease cortisol production so that the contraction of the lung's striated muscles gives a calm and comfortable effect. So this therapy is right for adolescents who live in anti-care treatments to manage the stress they experience.

**CONCLUSION AND RECOMMENDATION**

There is a decrease in distress before and after giving spiritual deep breathing therapy in treatment group and there is no significant change in distress as a pre-post and post-test in the control group. Deep spiritual breathing healing combines spiritual healing and deep breathing which makes the incoming air fills the air in the lungs and is exhaled slowly making the body relaxed and comfortable. In addition, deep breathing spiritual healing is easy and cost-effective, so it is very suitable for adolescents to be applied as a stress management therapy. It takes the active participation of adolescents to use these therapies independently so that stress levels decrease.

**REFERENCES**

2. Branje S, de Moor EL, Spitzer J, Becht Al. Dynamics of Identity Development in Adolescence: A Decade in Review. Journal Research


