

## **MUROTAL THERAPY AFFECTS ON STRESS ASPECTS IN THE ELDERLY AT BPSTW YOGYAKARTA BUDI LUHUR UNIT KASONGAN BANTUL**

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### **Abstract.**

Stress is a problem which often experienced by elderly. Stress in the elderly occurs because of the changes in daily activities, family meetings, partner deaths, family member deaths, and changes in work. Stress causes physiological, psychological and behavioral effects both in the short and long term. The prevalence of stress in nursing homes is 56.5% of severe stress. One of the non-pharmacological techniques used to treat stress is murottal therapy. The aim of this study was determine the effect of murottal therapy on stress includes physical, psychological and behavior in the elderly at BPSTW Yogyakarta Budi Luhur Unit Kasongan Bantul. This research is a quasi-experiment using pre-and posttest without control research design. The research samples is elderly at BPSTW Budi Luhur obtained by 29 respondents and data were analyzed using Wilcoxon test. The questionnaire uses Stress DASS 42. Murottal therapy affects overall stress. Of the 3 aspects of stress, only physical and behavioral aspects can be influenced by murottal therapy, whereas for the psychological aspects it does not have an effect. Murottal therapy has been shown to influence physical and behavioral aspects of elderly stress.

**Keywords : Physical, Behavior, Stress, Murottal, Elderly**

### **1. INTRODUCTION**

Aging is a condition that occurs in human life, starting from the beginning of the life of a natural process which means someone has gone through the stages of his life. The number of elderly population in 2015 was more than 65 years reaching 617.1 million people or around 8.5% of the total world population and it is estimated that in 2030 it will reach 998.7 million or around 12.0% and 2050 around 1.565 billion people or around 16.7% [1]. From the estimation results of the Indonesian Ministry of Health's Data and Information Center in 2015, the population of the elderly over 60 years in Indonesia reached 21,685,326 consisting of 10,234,499 men and 11,450,827 women. The province with the highest percentage of elderly is Yogyakarta, which is 13.4% and the lowest is Papua with 2.8%<sup>2</sup>. Based on data from Indonesia Population Projection 2010-2035 the population of elderly at Yogyakarta in 2015 was 492, 200 out of the total population of Yogyakarta City. The aging process is a normal and natural event experienced by each individual. Changes occur from various physical, mental and social aspects. Mental changes experienced due to feelings of loss, especially spouse and relatives or bereavement, often alone, feeling of being alone to being forgotten.

The cause of stress in elderly are change in daily activities, changes in family gatherings, partner deaths, family member deaths, and changes in the choice and quantity of sports and recreation, and changes in work. Stress is a mediator between life events and adaptation to these events. They define life events as separate changes and can be identified in a lifestyle that creates stress and can cause negative health outcomes. Therefore, stress that occurs in the elderly have a negative impact on the health of the elderly and can increase the risk of death in the elderly so that treatment is needed. To deal with stress according to Pargament, namely spirituality and religion become important

sources for all people, religious involvement creates a sense of relationship, understanding and hope to be greater so that can help individuals overcome increased stress, anxiety and depression related to old age<sup>3</sup>. Spirituality and religion is something different. In this study researchers used spiritual therapy, because during this time spiritual therapy is very rarely studied. The spiritual therapy used in this study is murottal therapy. After the researchers observed and interviewed at BPSTW Yogyakarta Budi Luhur Unit, it was found that 12 elderly felt unhappy or disliked with a friend who was not clean, often felt annoyed with friends who polluted the floor that had been cleaned, often felt homesick for their most extended family. Their children. If they miss their family they often keep quiet in the room and sometimes there are sad and crying

## 2. MATERIALS AND METHODS

This research is quantitative using Quasy Experiment with pre and posttest without control. In this study respondents were given interventions in the form of murottal therapy once a day for 15 minutes in a span of 10 days. This research was conducted at Yogyakarta BPSTW Budi Luhur Unit, Kasongan Bantul. The sample of this study amounted to 21 people. The instrument used in data collecting was the Stress DASS (Depression Anxiety and Stress Scale) with 42 questionnaire which consisted of three aspects, namely physical, psychological and behavioral aspects. The data were analyzed by Wilcoxon test . The intervention was murottal therapy by using SOP murottal therapy by listening to murottal Al-Qur'an surah Ar-Rahman with sound system media, Mp3 recording in a laptop containing murottal within 15 minutes once a day for 10 days.

## 3. RESULTS AND DISCUSSIONS

Based on the results of the research using the Depression Anxiety and Stress Scale (DASS) questionnaire. Stress score measurements were carried out before murottal therapy was given and stress score measurements were carried out after administration of murottal therapy. The results of the minimum, maximal, mean and standard deviation values can be seen in the following.

**Table 1 Total Stress Scores, Physical Aspects, Psychology and Behavior of Pre Test for Murottal Therapy in the Elderly at BPSTW Yogyakarta Budi Luhur Unit Kasongan Bantul**

Stress Score	Mean	Median	Min	Max	Standard Deviation
<b>Total</b>	6,51	6,00	1,00	17,00	4,47
<b>Physical</b>	0,72	1,00	0,00	2,00	0,75
<b>Psychology</b>	1,41	1,00	0,00	5,00	1,40
<b>Behavior</b>	4,38	4,00	0,00	15,00	3,35

The average stress score of the elderly in the normal range in BPSTW Yogyakarta Budi Luhur Unit is an activity carried out at BPSTW, among others, elderly gymnastics, skills, singing fun, recitation, spiritual refreshment and checking health and psychological guidance. Based on table 1 it can also be seen that the highest total stress score in the elderly is 17 which means it is mild stress. To examine stress levels in homes and what events experienced and caused stress in the past year in the elderly, the causes of stress in the elderly at the institution were changes in daily activities, changes in family gatherings, partner deaths, family member deaths & changes in the choice and quantity of sports and recreation, and changes in work. Changes in daily activities are one of the stress of the elderly. Psychosocial challenges that can cause stress are retirement,

relocation, chronic illness and functional disorders, partner loss, family death, and attitudes to ageism. Viewed from three aspects in stress, behavior has the highest mean value of 4.00.

This is because stress can influence a person's behavior<sup>4</sup>. Studies show that aging stereotypes positively or negatively affect the decisions and behavior of the elderly in an uncertain or detrimental manner, respectively<sup>5</sup>. The results of the respondent's answers to the Pre Test questionnaire indicate that most respondents answered the questionnaire "I feel I've spent a lot of energy worrying" which means it is included in physical indicators.

**Table 2 Total Stress Scores, Physical Aspects, Psychology and Post Test Behavior Giving Murottal Therapy to the Elderly at BPSTW Yogyakarta Budi Luhur Unit Kasongan Bantul**

Stress Score	Mean	Median	Min	Max	Standard Deviation
<b>Total</b>	2,68	2,00	0,00	9,00	2,60
<b>Physical</b>	0,10	0,00	0,00	1,00	0,75
<b>Psychology</b>	0,93	1,00	0,00	4,00	1,03
<b>Behavior</b>	1,66	1,00	0,00	7,00	1,98

Based on Table 2, it was found that the middle value of the total stress score of the elderly changed from 6.00 to 2.00 on the Post Test. There are several factors that can affect stress, namely age and sex, besides that there are other factors that can affect stress, namely how the elderly to deal with their old age. The results of the study on the questionnaire that showed most of answered in the Post Test questionnaire is "I find it difficult to be patient in the face of interference with things I am doing" which means it is included in psychological indicators. Stress can affect psychologically which can adversely affect one's mental and physical health. The impact of stress on psychology is emotional fatigue, saturation, the personal achievements concerned decrease, resulting in a decrease in the sense of competency and sense of success, irritability and irritability and reactive in responding to the problems it faces [6] [7] [8].

**Table 3 Effect of Murottal Therapy on Total Stress, Physical Aspects, Psychology and Elderly Behavior in BPSTW Yogyakarta Budi Luhur Unit Kasongan Bantul**

Stress Score	Pre		Post		Difference		P Value*
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	
<b>Total</b>	6,51	4,47	2,68	2,60	3,82	3,28	0,000
<b>Physical</b>	0,72	0,75	0,10	0,75	0,62	0,77	0,000
<b>Psychology</b>	1,41	1,40	0,93	1,03	0,48	1,57	0,109
<b>Behavior</b>	4,38	3,35	1,66	1,98	2,72	2,67	0,000

Information\* : Wilcoxon Test

Based on table 3 shows that the average value of the total stress score has decreased by 3.82. The average score of stress on physical aspects has decreased by 0.62. The stress score average of the psychological aspects has decreased by 0.48. The average score of stress in the behavioral aspects has decreased by 2.72. Stress is a negative emotional experience accompanied by predictable biochemical, physiological, cognitive and behavioral changes that are directed at either overcoming

stressful events or accommodating their effects. In three aspects, the behavior has the most score difference. Behavior is one symptom can change when a person experience stress such as talking very fast, biting his nails, shaking his legs, ticks, shaking, changing appetite (increasing or decreasing) [9]. Thyrotropin-Releasing Factor (TRF) stimulates the pituitary gland to affect the thyroid gland to release thyroxine hormone. Thyroxine is a long-term stress hoemone which results in increased mental activity, individuals feel more anxious and uneasy, always feel tired and other effects are increasing the secretion of grastic juice causing diarrhea and bleeding ulcer [10].

The results of the statistical test using the Wilcoxon test obtained a p-value of 0,000 for total stress, physical aspects and behavior, because the p-value of less than 0.05 means that there is a significant decrease in stress scores on respondents who have been given therapy. So this study showed that it was proven significantly in the stress score after murottal therapy in the elderly at BPSTW Yogyakarta, Budi Luhur Unit, Kasongan Bantul. For the psychological aspect p-value is 0.109, because the p-value of more than 0.05 means that there is no significant decrease in the psychological aspects that have been given murottal therapy. The size of the alpha wave during listening to the Quran is higher than the condition of resting and listening to loud music, this proves that humans can feel relaxed and calm when listening to the Quran compared to conditions of rest and listening to loud music. The hypothalamus is widely associated with the limbic system. Stimulation of the right lateral amygdala shows stimulation of the ventromedial part of the hypothalamus, which in turn stimulates the peripheral parasympathetic system. Increasing parasympathetic activity should be related to the subject matter in the form of more relaxation and calmness [11].

Humans consist of physical, emotional, social and spiritual dimensions where each dimension must be fulfilled. When an individual experiences illness, loss and stress, spiritual strength can help the individual towards healing and fulfillment of goals with or through fulfilling spiritual needs [12].

The Quranic chants physically contain elements of the human voice, while the human voice is an amazing healing instrument and the most accessible instrument. Sound can reduce stress hormones, activate natural endorphin hormones, increase feelings of relaxation, and divert attention from fear, anxiety and tension, improve the body's chemical system so as to reduce blood pressure and slow breathing, heart rate, pulse and brain wave activity [13].

The intensity of the sound is less than 60 decibels, giving rise to comfort and no pain. Murottal is an intensity of 50 decibels that has a positive influence on the listener. Based on the research<sup>14</sup> has more effective benefits, namely murottal therapy given with a duration of 15-25 minutes [14] [15]. In Surah Ar-Rahman there are several benefits, one of which is as a guardian guardian of all kinds of diseases and treating madness (stress, psychological illness. Listening to the verses of the Quran which are recited in tartil and correctly will bring peace of mind.

#### **4. CONCLUSION**

The results showed that Murottal therapy affects overall stress. Based on the 3 aspects of stress, only physical and behavioral aspects can be influenced by murottal therapy, whereas for the psychological aspects it does not have an effect. In this research murottal therapy has been influenced physical and behavioral aspects of elderly stress.

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