

# The Effectiveness of Mind-Body Therapy for Managing Elderly Depression in Surabaya

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## ABSTRACT

**Background:** Decreased physical function in the elderly can affect psychological conditions and become a stressor for the elderly. The elderly has experience of feelings of helplessness, hopelessness, frustration, hopelessness, gloomy and isolated, then it will lead to depression. This study aims to determine the effect of mind-body therapy on reducing depression levels in elderly. **Methods:** The design of this study was Pre-Experimental with one group pre-post test design, with a sample of 32 Muslim elderly living in the nursing home Griya Wherda Surabaya. Geriatric Depression Scale (GDS-15), questionnaire was used to measure depression level of elderly before and after mind-body therapy, then the data were analyzed by Wilcoxon sign rank test. **Results:** The results showed that mind-body therapy can reduce the level of depression in the elderly ( $p=0.000$ , CI 95%). **Conclusion:** Depression levels are influenced by sex, age, physical illness. The implication of this research suggests that there is a need for more support from related institutions or Nursing home Surabaya in developing elderly programs to decrease depression level in elderly.

**Keywords:** *Mind Body Therapy; Depression; Elderly*

## INTRODUCTION

The ageing process is the final stage of development in the human life cycle. Elderly person is someone who experiences the aging process, with age limit, namely mature to old (45-54 years), elderly (55-64 years), elderly with a high risk (> 65 years) (Kusumawati & Hartono, 2012). The aging process is the final stage of development of the human life cycle. Elderly people experiencing the aging process biologically, psychologically, socially and spiritually Arianti, & Novera, 2019 M. (2019)). As the ageing process occurs, biological or physical decline slowly begins to develop which can have an impact on the abilities of sensation, perception, and psychomotor performance that are important in ADL (Activity Daily Living) (Marlina, & Pujiastuti, 2021)

The physical decline in the elderly causes them to experience unwanted physical activity and appearance changes, so the elderly is no longer productive, both socially and economically. Situations like this of course will also affect the psychological condition of the elders

and can be a stressor that can cause negative feelings, namely feelings of helplessness, uselessness, frustration, hopelessness, sadness, and feelings of isolation (Syarniah, 2010). Besides that, in old age they experience job loss, loss of purpose in life, loss of friends, risk of disease, isolation from the environment, and loneliness. This can trigger mental disorders, especially depression. Depression is a mental disorder that is often found in the elderly due to the aging process (Irawan, 2013). Research conducted by Marta (2012) at the Banjarbaru City orphanage obtained 56 elderlies of whom 48 (85.7%) were depressed, while in Martapura City from 31, 29 elderly (93.5%) were depressed.

Depression, according to Katona, Cooper, & Robertson (2012) is a mood disorder characterized by a prolonged pervasive decrease in mood accompanied by psychosocial and biological symptoms. Depression is a form of mental disorder in the realm of feelings (affective, mood) which is characterized by mood swings, sadness, loss of passion for life, lack of enthusiasm, feeling helplessness, uselessness, and

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hopelessness which can be seen in several descriptions of psychosis and symptoms of depressive episodes. Depression can be classified into several levels of range from mild, moderate, and severe (Iyus & Sutini, 2014). Njoto (2014) also argues that depression is a mental disorder that is often found in the elderly and is the most common disease with non-specific symptoms in the elderly population.

The incidence of depression in the elderly showed that depression in them is a psychosocial problem that needs to be recovered. Mind-body therapy is an effort that can be used to treat depression for the elderly. Mind-body therapy is one type of complementary modality therapy that uses behavioral, psychological, social, and spiritual approaches to health and one form of mind-body therapy is breathing exercises and spiritual therapy (Setyoadi & Kushariyadi, 2011).

The number of elderly people in the world in 2025 is estimated to be 1.2 billion (22%) and 2 billion in 2050, and the prevalence of depression in the elderly undergoing treatment in hospitals and nursing homes is 30-45% (Syarniah, 2010). BPS (Central Statistics Agency) data in 2014 showed that the total population in Indonesia reaches 252,164,800, and about 20,763,698 individuals are elderly population, in East Java Province there are 7,028,237 elderlies, and in Indonesia, about 74% of elderly people aged 60 years and over and experience depression because they suffer from chronic diseases. Results of preliminary studies at Nursing home Surabaya, which were conducted by researchers using the GDS-15 questionnaire, were obtained from 10 independent elderly people, 7 of whom experienced mild to moderate depression.

The incidence of depression in the elderly is mostly caused by functional decline, the level of dependence on others, memory decline, decreased activity, and social roles in retirement, and besides that, it can also be caused by accompanying diseases such as osteoporosis, rheumatism, heart disease, diabetes, hypertension (Syarniah 2010). This overall decline is certainly very influential on the lives of the elderly, resulting in the elderly having negative feelings due to their inability to adapt to changes and the surrounding environment. This causes social relationships to be disrupted, especially for the elderly living in orphanages. As a result, elderly individuals are prone to depression. Management of depression in the elderly can be done using complementary mind-body (mind-body) modality

therapy using breathing exercises and other exercises. Both of these techniques have good and considerable benefits for the body. Sari (2015) revealed that breathing exercises are carried out for healing exercises with breathing patterns, motion exercises, and mental exercises to enrich oxygen in cells and stimulate metabolism in the body. The benefits of dzikr according to Fajar (2011) are an introduction to prayer, relaxation, effort in religious healing, and therapy on decreasing depression levels in the elderly at Nursing home Surabaya.

## METHODOLOGY

The design of this research is Pre-Experimental with One group design pre-post test design without using a control group. This type of research emphasizes the measurement or observation of variable data dependent before being given therapy and after being given therapy. The population of this study is the Muslim elderly aged 60-85 who have mild to moderate depression in Nursing home Griya Wherdha Surabaya numbered 42 elderly with a sample of 32 elderly. The sampling technique used for this research is Simple Random Sampling.

This therapy is carried out or applied to the elderly by using dhikr (a form of devotion, associated chiefly with Sufism, in which the worshipper is absorbed in the rhythmic repetition of the name of God or his attributes), breathing exercises containing prayer sentences in Islam religion and Qur'an. The therapy was carried out 9 times with a frequency of 3 exercises in one week with a duration of 15 minutes which was observed through the attitude of practicing the movement of breathing rhythms, inspiration, holding breath, exhalation, spiritual concentration and dhikr. Data retrieval was carried out using a questionnaire Geriatric Depression Scale-15 (GDS-15) before and after therapy. Data analysis was done using Wilcoxon test Sign Rank Test.

## RESULTS

### General data

**Table 1: Characteristics of Respondents by Gender in Depressed Elderly at Nursing home Surabaya (n=32)**

Gender	Frequency (f)	Percentage (%)
Man	14	43.8
Woman	18	56.2
Total	32	100

**Table 2: Characteristics of Respondents Based on Depressed Elderly Age at Nursing home Surabaya, (n=32)**

Age(years)	Frequency (f)	Percentage (%)
60-70	20	62.5
71-80	10	31.2
>80	2	6.2
<b>Total</b>	<b>32</b>	<b>100</b>

**Table 3: Characteristics of Respondents Based on Physical Illness of Depressed Elderly at Nursing home Surabaya, March - April 2017 (n=32)**

History of Disease	Frequency (f)	Percentage (%)
Painless	10	31.2
Hypertension	18	56.2
Joint Disease	4	12.5
<b>Total</b>	<b>32</b>	<b>100</b>

**Special Data**

**Table 4: Levels of Depression in the Elderly Before Mind-Body Therapy (n=32)**

Pretest	Frequency (f)	Percentage (%)
Mild Depression (5-10)	24	75
Moderate Depression (11-15)	8	25
<b>Total</b>	<b>32</b>	<b>100</b>

Based on the data above, it was found that the level of depression in the elderly who experienced mild depression before mind-body therapy was 24 (75%), and the elderly who experienced moderate depression were 8 (25%).

**Table 5: Levels of Depression in the Elderly After Being Given Mind-Body Therapy (n=32)**

Posttest	Frequency (f)	Percentage (%)
No Depression (0-4)	11	34.4
Mild Depression (5-10)	19	59.4
Moderate Depression (11-15)	2	6.2
<b>Total</b>	<b>32</b>	<b>100</b>

Based on the data above, there were 11 elderly (34.4%). moderate as many as 2 elderly (6.2%).

**Table 6: Elderly Depression Levels Before (Pretest) and After (Posttest) Given Mind-Body Therapy at Nursing home Surabaya, March - April 2017 (n=32)**

Depression Rate	Pretest		Posttest	
	N	%	N	%
No Depression: (0-4)	0	0	11	34.4
Mild Depression: (5-10)	24	75	19	59.4
Moderate Depression: (11-15)	8	25	2	6.2
<b>Total</b>	<b>32</b>	<b>100</b>	<b>32</b>	<b>100</b>

Based on table 6 the level of depression in the elderly before and after being given Mind-Body therapy, the results obtained before therapy were 24 elderly (75%) had mild depression, and as many as 8 elderly (25%) had moderate depression. After being given mind-body therapy, 11 elderly (34.4%) showed no depression, 19 elderly (59.4%) had mild depression, and 2 elderly (6.2%) had moderate depression.

Wilcoxon test results show results value = 0.000 ( $p < 0.05$ ), which means there is an effect of mind-body therapy on the Decreased levels of depression in the elderly in Nursing home Surabaya. Of 32 respondents, there are 16 elderly who experience a decreased level of depression (10 elderly with mild depression to no depression, elderly with moderate depression resulted in no depression, and elderly with moderate depression became mild depression).

**DISCUSSION**

The prevalence of depression in the elderly is largely experienced by the elderly living at nursing home because there is no family cares and no love for the elderly, compared to the elderly who lives in home with a family who gives attention and love as the aging process progresses. Besides, elderly living with family has a high level of social activity, which reduces the risk depression. Based on previous research carried out, it was found that 5-10% of the elderly living in a community experience depression, while among those who live in the environmental institutions 30-40% are depressed and anxious (Irawan, 2013). Therefore, special attention and handling is required for the elderly who are undergoing treatment in an orphanage who experience depression, namely with implementing CAM complementary therapies (Complementary Alternative Medicine), and one of the complementary

alternative therapies that can be used in the elderly is therapy of mind-body.

Mind-body therapy is a therapy that uses a variety of techniques designed to facilitate the mind and affect bodily functions and symptoms that can be used with several methods, one example is by breathing exercise method accompanied by dhikr (Stuart, Keliat, & Pasaribu, 2016) which induce a relaxation reaction. Wahbeh, Elsas, & Oken, (2008) revealed Relaxation and breathing techniques will optimize respiratory rate, rhythm, and volume. This technique can be used to control physiological responses towards stress, by increasing parasympathetic response that can also be used concurrently with progressive muscle relaxation exercises. Besides that, breathing exercises are applied in mind-body therapy accompanied by dhikr to add peace to the mind of the elderly, by the word God Subhannallahuwata'ala in the Qur'an Surah Ar-Radu "Those who believe" and their hearts become connected with dhikr (remembering) Allah. By remembering Allah, the heart becomes peaceful (Qs. Ar-Ra'du: 28)".

Mind-body therapy is an alternative complementary therapy that can be used to lower levels of depression in the elderly because breathing exercises accompanied by dhikr from a psychological point of view can overcome emotional and mental problems. According to the statement of Prayitno (2015) that peace of the soul can normalize body organs back in balance, and positive thoughts can affect healing. Dhikr therapy and prayer with good breathing regularly can affect brain work, especially in the cerebral cortex which can affect mental condition and behavior. Dhikr with regular breathing can stabilize the cerebral cortex and impact the ability to

reduce depression (Prayitno, 2015).

## CONCLUSION

Results of research conducted at Nursing home Surabaya can be concluded that there is a therapeutic effect of mind-body to decrease the level of depression in the elderly. Although mind-body therapies are frequently used, much prospect exists to improve the use of mind-body therapies for indications with demonstrated effectiveness.

## Recommendations

Mind-body therapy can be one of the complementary therapies in caring for the elderly who are depressed in nursing homes. However, the successful implementation of therapy requires a conducive environment and good cooperation from all health workers in the nursing home.

## Ethical Approval

The study was approved by the Ethics Committee of Stikes Hang Tuah Surabaya, Indonesia with reference number PE/99/2022/KEPK/SHT dated 20 October 2020 - 20 October 2021.

## Conflict of Interests

The authors declare that they have no conflict of interests.

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