

# The Effect of Classical Music Therapy on Reducing Anxiety in Elderly Stroke Sufferers

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## ABSTRACT

After heart disease, stroke is currently the second most lethal illness. Behavioral and emotional changes, including shock, worry, rage, rejection, stress, and even sadness, are common in stroke victims. These are all examples of abnormal psychological responses. The purpose of this study is to ascertain and examine how classical music therapy can help older stroke victims feel less anxious. The pre-experimental "One Group Pretest-Posttest Design" is the study design. Anxiety is the dependent variable, and classical music treatment is the independent variable. Twelve senior adults were selected using complete sampling procedures from the population, which consisted entirely of elderly people who had suffered a stroke. A questionnaire is used for data collecting, and the Wilcoxon test is used for statistical analysis.

**Keywords:** Anxiety, Classical Music, Elderly Stroke Sufferers

## BACKGROUND

Stroke is a condition that can strike, immobilize, and cause death in people. A person who has had a stroke is likely to have functional brain abnormalities, such as nerve paralysis, often known as a neurological deficiency. After heart disease, stroke is currently the second most fatal illness (Suprayitno, E., 2020). Behavioral and emotional changes, including shock, worry, rage, rejection, stress, and even melancholy, are frequently experienced by stroke victims. These are all aberrant psychological reactions (Potter 2016).

According to Stuart and Laraia (2005), cited in Donsu (2017), anxiety is a stressor or trigger of stress as a stimulus that will be perceived by humans as a threat of challenges that require extra energy to overcome. This opinion is consistent with the anxiety experienced by elderly people who have had a stroke. defending oneself against a variety of stresses, one of which is psychological (physical), where illness frequently manifests as a disruption of the physical state and can have a significant impact as a precursor to anxiety. Numerous research have demonstrated that patients with physical illnesses would inevitably experience anxiety (Donsu, 2017). In the event that this anxiety is not resolved quickly, the person may exhibit distinctive behaviors, such as withdrawal, quiet, hyperactivity and cursing.

According to data from the Ministry of Health regarding the number of stroke victims in Indonesia in 2013, Indonesia is presently ranked #1 in the world. According to Ministry of Health data RI (2014), around 500,000 stroke victims and 125,000 deaths, or 2.5% of the population, occur in Indonesia each year. The other individuals are either severely or moderately impaired. In the meantime, the prevalence of stroke increased by 7% in 2013 and by 10.9 in 2018 according to Riskesdas data (Riskesdas, 2018). There were 1166 victims in 2013. Five to ten stroke patients were admitted to Soetomo Surabaya Hospital each day (Firdaus, 2017 in Arif, 2020).

Using data from an initial investigation carried out on May 21, 2022.

Individuals who have had a stroke may experience psychological effects such as disruption in their memory, learning skills, focus, and other cognitive capacities. Although they differ from strokes without anxiety, functional impairment and a decline in ADLs (activities of daily living) are more likely in strokes associated with anxiety. Anxiety after a stroke gradually reduces movement, which increases reliance and ruins social relationships. As stated in Ariska (2019), Pedro et al. (2015).

Anxiety is a condition of unhappiness that combines anxiety and unpleasant emotions. Fear and anxiety are not the same emotions. Fear is a reaction to a threat that has an obvious, external, known source and may or may not involve conflict. Some experts believe that fear is one of the fundamental human emotions, whereas anxiety.

Anxious people will have psychological, social, and bodily effects. Anxious people experience psychological effects such as increased concern or fear of unpleasant things that might not actually occur. According to medical experts, anxiety can raise heart rate, blood pressure, and breathing rate (Wahyuningsih, Nugoroho & Mu'ah, 2018).

Pharmacological therapy, such as antidepressants or anxiety medications, can be used to alleviate anxiety (Kaplan & Sadock, 2010). In addition to medication therapy, a variety of non-pharmacological anxiety-reduction techniques have been developed, including classical music therapy, which nurses can apply. The practice of classical music therapy links the physical, emotional, mental, and spiritual well-being of an individual with the restorative properties of classical music.

A stimulation is sent from the axons of the ascending sensory fibers to the neurons of the Reticular Activating System (RAS) when music is played. Subsequently, the input is transferred to particular thalamic nuclei via pathways including the autonomic nervous system, neuroendrokin system, cerebral cortex, limbic system, and corpus collosum. The parasympathetic and sympathetic nervous systems can be activated by music to provide a calming reaction. Muscle relaxation, sleep, and a drop in pulse frequency are the features of the relaxation response that manifest. It will ease stress and anxiety in these situations (Rizaldi, 2018).

Given the significance of the aforementioned issue, experts are eager to investigate: "The Impact of Classical Music Therapy on Reducing Anxiety.

## METHODS

In July 2022, an experimental approach using a single group pre- and post-test design was used to conduct analytical study. In this study, an experimental design is employed. Primary data are used in this study. The answers to a questionnaire on anxiety levels provide primary data. There were 12 responses out of all the elderly who had suffered a stroke. In this study, complete sampling was used as the sampling method. The null hypothesis (Ho) is rejected based on the Wilcoxon test results showing anxiety levels with significance  $< 0.05$ , indicating that classical music treatment can effectively reduce anxiety in older stroke patients.

## RESULTS

**Table 1.** Data on Anxiety Levels before and after classical music therapy treatment

No	Anxiety	Research result			
		Before		After	
		f	%	f	%
1	No anxiety	0	0,0	0	0,0
2	Mild anxiety	0	0,0	0	0,0
3	Moderate anxiety	0	0,0	8	66,7
4	Severe anxiety	10	83,3	4	33,3
5	Anxiety is very heavy	2	16,7	0	0,0
	Amount	12	100%	12	100%

Prior to receiving treatment, nearly all 12 respondents experienced significant anxiety, with 10 (83.3%) and 2 (16.7%) reporting extremely severe anxiety. In contrast, the majority of respondents experienced moderate anxiety following treatment from 12 respondents, with 8 (66.7%) and 4 (33.3%) experiencing severe anxiety.

**Table 2.** Analysis of the Effect of Classical Music Therapy on Reducing Anxiety in Elderly Stroke Sufferers

Test Statistics <sup>b</sup>	Post Test Anxiety - Pre Test Anxiety
Z	-2.887 <sup>a</sup>
Asymp. Sig. (2-tailed)	.004

a. Based on positive ranks.

b. Wilcoxon Signed Ranks Test

There is an effect of classical music therapy on lowering anxiety in elderly stroke victims, according to data analysis using the Wilcoxon test. The sig (2-tailed) value, or pvalue, is equal to 0.004, and the error level is equal to 0.05, so  $p < 0.006 < 0.05$ , indicating that H1 is accepted.

## DISCUSSION

There is an effect of classical music therapy on lowering anxiety in elderly stroke victims, according to data analysis using the Wilcoxon test. The sig (2-tailed) value, or pvalue, is equal to 0.004, and the error level is equal to 0.05, so  $p < 0.006 < 0.05$ , indicating that H1 is accepted.

The findings of this study are consistent with research by Eddyanto (2017), who found that the treatment group listening to Mozart music experienced a significant 20% reduction in depression intensity from the initial value when compared to the comparison (control) group ( $p=0.013$ ) and a 20% decrease in depression intensity.

Making music therapy available to stroke patients is one attempt to alleviate their worry through alternative therapy. According to Suryana (2017), music therapy is a planned, preventive procedure used to help people who face challenges in their development of their physical, motoric, social, emotional, and cerebral intelligence. Music has the ability to enhance mental talents and heal ailments. Physical, mental, emotional, social, and spiritual health can all be enhanced, restored, and maintained via the use of music as therapy. This is due to music's many benefits, including its comfort, calming, relaxing, structured, and universal qualities (Eka, 2018).

According to researchers, mood can affect how one thinks, which in turn affects behavior. Among the most crucial things to improve.

## CONCLUSION

There is an influence of classical music therapy on reducing anxiety in elderly stroke sufferers.

It is hoped that the results of this research can add to the health literature, especially nursing care for stroke patients who experience anxiety. Providing information to the public, especially elderly families, to always provide support so that stroke elderly do not experience anxiety, so they have a high enthusiasm for life.

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