



## THE EFFECT OF PROGRESSIVE MUSCLE RELAXATION VIA VIDEO CALL GUIDANCE AND LISTENING TO BEKATAK KURAK KARIK MUSIC ON REDUCING ANXIETY LEVELS IN ISOLATED ASYMPTOMATIC INDIVIDUALS

Nehru Nugroho<sup>\*</sup>, Sariman Pardosi

*Department of Nursing, Poltekkes Kemenkes Bengkulu, Bengkulu, Indonesia*

*\*84nehru.nugroho@gmail.com*

### Abstract

The current Covid-19 pandemic in various regions of the world has had many impacts on human life. The spread of this case has an impact on the order of people's lives. Confirmed patients must be isolated in quarantine facilities, either in hospitals for severe symptoms or designated quarantine facilities such as Bapelkes for mild and moderate symptoms. Isolation measures protect against the spread of the corona virus, they require isolation and loneliness which creates major psychosocial stress and may trigger or worsen mental illness resulting in psychological disorders in the form of excessive anxiety. The design of this study was a quasi-experimental with pre-test and post-test with control group. Data processing was carried out using the Paired Sample T Test, because the data were normally distributed. The results of the analysis show the value of  $p = 0.000$ . Based on the results of the study, it can be concluded that there is an effect of Progressive Muscle Relaxation Techniques and listening to Kurak Karik's music on Anxiety Levels in Isolation Patients during the Covid 19 pandemic in Bengkulu. Nurses can carry out nursing care by using progressive muscle relaxation technique therapy and listening to music of bekatak kurak karik periodically in isolated patients.

**Keywords:** Covid-19, Progressive Muscle Relaxation, Music, Anxiety, Isolation

Presented at The 4<sup>th</sup>  
Bengkulu International  
Conference on Health (B-  
ICON),  
Bengkulu-Indonesia,  
September 24-26<sup>th</sup>, 2024

Published: December 31<sup>st</sup>,  
2024

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ISSN : 2986-027X

## INTRODUCTION

The Covid-19 pandemic has had a significant impact in Indonesia, including an increase in death rates, economic losses, and concerning psychological disturbances. To address the complexity of these issues, the Indonesian government has taken serious steps by declaring this pandemic a non-natural national disaster through Presidential Decree Number 12 of 2020. This measure aims to provide a strong legal foundation for coordination between the government and various related institutions in efforts to prevent, manage, and recover from the impacts caused by this pandemic. Through strengthened collaboration between the government, private sector, civil society

organizations, and the general public, it is hoped that this joint effort can reduce the burden felt by the public and minimize the long-term effects of the Covid-19 pandemic.(Kemenkes RI, 2020).

The quarantine program for Covid-19 patients can exacerbate pre-existing conditions such as depression, anxiety, and post-traumatic stress disorder. Additionally, the risk of disease transmission can heighten concerns about contamination in individuals with obsessive-compulsive disorder and hypochondria, or those with a history of paranoid ideation. While quarantine plays a role in protecting against the spread of the coronavirus, it also brings negative effects such as isolation and loneliness, which can cause significant psychosocial stress and may even trigger or worsen existing mental health issues (Ratnaningsih et al., 2022).

Stress is an adaptive response influenced by individual variability and psychological processes, resulting from interactions with external factors such as the environment, situations, or events that cause both psychological and physical tension in a person. These external factors, such as specific events or situations, are the primary sources of stress experienced by an individual (Ivancevich et al., 2006).

Stress is one of the factors that can cause the narrowing of blood vessels and muscle stiffness, which can ultimately increase blood pressure and potentially trigger hypertension. Amid the Covid-19 pandemic, stress has become more common due to uncertainty, isolation, and sudden lifestyle changes. Therefore, the importance of providing effective therapy to manage stress becomes highly significant. Simple yet effective therapies that address stress issues can help individuals maintain their mental and physical health during these challenging times. Moreover, efforts to reduce stress can also have a positive impact on the immune system, aiding in the body's resistance to infections, including Covid-19.(Arisjulyanto, 2018).

Alternative therapies such as progressive muscle relaxation techniques are simple and effective methods for reducing stress. This technique involves structured steps to gradually relax different muscle groups throughout the body. By practicing this exercise regularly, individuals can become more aware of the physical tension they experience and learn how to release it. This can help lower overall stress levels and improve both mental and physical well-being. Moreover, progressive muscle relaxation techniques can be used as a self-help tool that is easily accessible to anyone, without the need for special equipment or additional costs. (Arisjulyanto, 2017). Through the application of relaxation techniques, patients can experience a reduction in perceived stress, while simultaneously alleviating the physiological and emotional components of that stress. By using these relaxation techniques, the tension felt can significantly decrease, and physiological parameters such as blood pressure and heart rate may show more positive changes. This demonstrates that relaxation techniques not only work on the mental aspect but also have a tangible impact on the body's physical response to stress. Therefore, the use of relaxation techniques can be an effective strategy for managing stress and improving overall well-being (Ilmi et al., 2017).

Bekatak Kurak Karik music describes traditional music from Bengkulu that encourages enthusiasm. The power of music in healing illness and enhancing individual mental clarity is immense. By applying music as a form of therapy, we can observe significant improvements in various aspects of health, including physical, mental, emotional, social, and spiritual well-being. Music has the ability to elevate mood, relieve stress, reduce pain, and even improve sleep quality. Furthermore, music can evoke memories that bring happiness and provide social support through shared experiences of listening to or creating music together. Thus, the use of music as a form of therapy holds great potential in maintaining and enhancing the holistic well-being of individuals. (Angriani, Mato, & Rahman, 2023).

## MATERIALS AND METHODS

The research method applied in this study is quantitative research, specifically using an experimental approach with a quasi-experimental design. The research design employed is a pretest and posttest with a control group design. The aim of this study is to investigate the effect of Progressive Muscle Relaxation and listening to Bekatak Kurak Karik music on the reduction of anxiety levels in patients undergoing self-isolation during the Covid-19 pandemic in Bengkulu. This study involves a total of 30 respondents in the intervention group and 30 respondents in the control group. The collected data will be processed using the Paired Sample T-Test to analyze the differences before and after the intervention.

## RESULTS AND DISCUSSION

*Tabel 1. Respondent Characteristics*

Variable		Intervention Group		control	
		f	%	f	%
Age	1 <20-35 Tahun	9	30	11	36,6
	2 >35 Tahun	21	70	19	63,3
Gender	1 Male	19	63,3	21	70
	2 Female	11	36,6	9	30
Job	1 Working	22	73,3	18	60
	2 Not working	8	26,6	12	40
Education	1 SD	1	3	2	6
	2 SMP	3	10	4	13
	3 SMA	10	33,3	11	36
	4 PT	16	53,3	13	43,3
	Total	30	100	20	100

Based on the data in Table 1, the majority of respondents in the treatment group are under 35 years old, with 21 (70%), while in the control group, there are 19 (63.3%). The majority of respondents are also male, with 19 (63.3%) in the treatment group and 21 (70%) in the control group. Additionally, most respondents are employed, with 22 (73.3%) in the treatment group and 18 (60%) in the control group. Lastly, the majority of respondents have higher education, with 16 (53.3%) in the treatment group and 13 (43.3%) in the control group.

*Tabel 2. Anxiety Levels*

Anxiety Levels	Pre-test		Post-test	
	f	%	f	%
No anxiety	0	0	10	33,3
Low	9	30	20	66,6
Middle	21	70	0	0
Total	30	100	30	100

*Tabel 3. The Paired Sample T-Test results*

Variabel	X	n	t	Df	p
<i>Pre-test Intervensi</i>	21,44	30	5,081	24	0,000
<i>Post-test Intervensi</i>	15,92				
<i>Pre-test Kontrol</i>	20,84	30	-	24	0,000
<i>Post-test Kontrol</i>	21,64		1,503		

From the data presented in Table 2, it can be seen that the majority of respondents in the treatment group who received Progressive Muscle Relaxation therapy and listened to Bekatak Kurak Karik music experienced a moderate level of anxiety, with 21 people (70%) at the pretest stage. After undergoing the intervention, at the posttest stage, the majority of respondents experienced a reduction in anxiety levels to mild, with 20 people (66.6%). Therefore, there was a decrease in the number of respondents experiencing moderate anxiety, with 20 people after undergoing Progressive Muscle Relaxation and listening to Bekatak Kurak Karik music.

The Paired Sample T-Test results for anxiety levels before (pretest) and after (posttest) the intervention in the intervention group (N=30) showed a statistically significant improvement in anxiety levels in the intervention group respondents ( $t=-5.08$ ,  $df=24$ ,  $p<0.05$ ). Meanwhile, in the control group, there was also a statistically significant improvement in anxiety levels ( $t=-1.503$ ,  $df=24$ ,  $p<0.05$ ).

*Tabel 4. The Effect of Progressive Muscle Relaxation Technique and Listening to Bekatak Kurak Karik Music on Anxiety Levels in Self-Isolated Patients During the Covid-19 Pandemic in Bengkulu*

Categori	N	X	Std Dev	t-tes	
				t	p
Intervention	30	21,64	11,833	24	0,000
Control	30	15,92			

The statistical analysis using the Independent Sample t-test  $p < 0.05$ , indicating that there is an effect of the Progressive Muscle Relaxation technique and listening to Bekatak Kurak Karik music on anxiety levels in self-isolated patients during the Covid-19 pandemic in Bengkulu.

## DISCUSSION

According to Destyany et al. (2023), progressive muscle relaxation is a self-management technique based on regulating the sympathetic and parasympathetic nervous systems. Additionally, progressive muscle relaxation has positive effects on organ function when muscles become relaxed, helping to normalize these functions. After a relaxation session, the body tends to become calmer, which in turn can align various aspects of physical health. This technique also helps individuals control themselves and focus, allowing them to respond appropriately in stressful situations.

The findings in this study are consistent with research by (Alvionita et al., 2022), which shows the impact of progressive muscle relaxation techniques on reducing anxiety levels. The research also supports findings from (Saluy et al., 2021) who found a significant influence of muscle relaxation techniques on reducing anxiety, with a p-value of  $0.000 < 0.05$ . Similar research conducted (Liu et al., 2020) also showed a significant impact of muscle relaxation techniques on reducing anxiety levels, with a p-value of  $0.001 < 0.05$ . Muscle relaxation techniques play a role in reducing bodily tension, addressing stress, and lowering anxiety levels through exercises, as explained by (Hikmah et al., 2021). Additionally, the benefits of muscle relaxation techniques include managing insomnia, addressing anxiety, reducing stress, and enhancing positive emotions, as stated by (Arsy & Listyarini, 2021).

In the human body, there are two main parts of the nervous system: the central nervous system and the autonomic nervous system. The central nervous system is responsible for controlling voluntary movements, such as those of the hands, feet, neck, and fingers. Meanwhile, the autonomic nervous system regulates automatic functions, such as digestion, heart function, and sexual response. The autonomic nervous system is divided into two subsystems: the sympathetic nervous system and the parasympathetic nervous system, which work in opposition. When the sympathetic nervous system stimulates or activates body organs, increasing heart rate and respiration, and causing constriction of peripheral blood vessels and dilation of central blood vessels, the parasympathetic nervous system, on the other hand, stimulates to reduce the functions activated by the sympathetic nervous system and enhances the functions suppressed by the sympathetic nervous system. (Saragih et al., 2022).

Progressive muscle relaxation is a commonly used method for managing stress. According to Jacobson, this technique is a skill that can be learned and applied to reduce or even eliminate tension and

experience comfort without relying on external factors. Progressive muscle relaxation is used as a tool to address feelings of anxiety, stress, or tension. By performing contractions and relaxations in several muscle groups and becoming aware of the difference between tense and relaxed sensations, individuals can reduce muscle tension and experience a more relaxed state (Weni Wulandari et al., 2022).

Music therapy has the ability to express feelings and provide positive impacts on a person's mood and emotions (Angriani, Mato, Keperawatan, et al., 2023). Music therapy can produce calming effects for individuals, reduce anxiety, create feelings of relaxation and tranquility, and help stabilize emotional states. When providing music therapy, it is important to choose music with a moderate tempo and not too loud. A beat around 60-80 beats per minute with consistent and steady notes, allowing patients to select music with the guidance of a therapist, a maximum volume of 60dB, balanced harmonization, and a comfortable, quiet, and distraction-free environment, enables individuals to focus on the music experience provided (Auliya, n.d.)

## CONCLUSION

From the research conducted at Bapelkes Province of Bengkulu, it can be concluded that: The majority of respondents were under 35 years old, with 21 (70%) in the treatment group. Most respondents were male, with 19 (63.3%) in the treatment group. The majority of respondents were employed, with 22 (73.3%) in the treatment group. Most respondents had higher education, with 16 (53.3%) in the treatment group. In the treatment group, most respondents experienced moderate anxiety, with 21 people (70%), and after the posttest, the majority had mild anxiety, with 20 people (66.6%). There is an effect of Progressive Muscle Relaxation and listening to calming music on reducing anxiety levels in patients undergoing self-isolation during the COVID-19 pandemic in Bengkulu.

## Declaration of Interest Statement

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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