

## **Benefits of Progressive Muscle Relaxation Therapy in Reducing Anxiety Levels of Health Workers During the Covid-19 Pandemic**

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### **Abstract**

The number of Covid-19 cases has increased. Facing this situation, front-liner medical staffs are at risk of experiencing psychological stress. The main causes of their anxiety are their own health and the spread of their families. Progressive muscle relaxation is a stress management technique to reduce stress. Progressive muscle relaxation can relieve anxiety, stress, or tension. This activity aims to provide online counseling and group activity therapy about progressive muscle relaxation techniques for health care providers of Covid-19 patients. It is expected to reduce their level of anxiety of them. The counseling method uses PowerPoint presentations and demonstrations of progressive muscle relaxation through the Zoom Meeting application. After conducting counseling and group activity therapy, the anxiety level of medical staff decreased to 30.3 from the previous 33.7 after following counseling and progressive muscle relaxation therapy.

**Keywords:** Anxiety, Covid-19, Progressive muscle relaxation

### **INTRODUCTION**

The incidence of Covid-19 cases continues to increase day by day, so health workers on the front line are increasingly under pressure due to the increasing workload, worrying about their health and that of their families. The psychological response experienced by health workers to infectious disease pandemics is increasing because it is caused by feelings of anxiety about their health and the spread to their families (Chen et al., 2020). Facing a Crisis like this, front-line health workers who are directly involved in handling and caring for COVID-19 patients are at risk of experiencing psychological stress and other psychological disorders. This is coupled with an increasing workload, the unavailability of specific drugs for this disease, the increasing number of patients, the lack of personal protective equipment, the lack of support from related parties, as well as the stigma that appears in the environment where they live (Lai et al., 2020).

The prevalence of anxiety levels in health workers who handle Covid-19 varies. Based on a study from Haryanto & Septimar (2020) of 336 nurses who treat Covid-19 patients in Indonesia, there are 51.2% experience anxiety with a percentage of 27% experiencing mild anxiety, 20.8% moderate anxiety, 2.7% severe anxiety. and 48.8% did not experience anxiety. Meanwhile, a literature study related to the level of anxiety in health workers found as many as 23.2% of health workers who treated Covid-19 patients experienced anxiety disorders (Pappa et al., 2020).

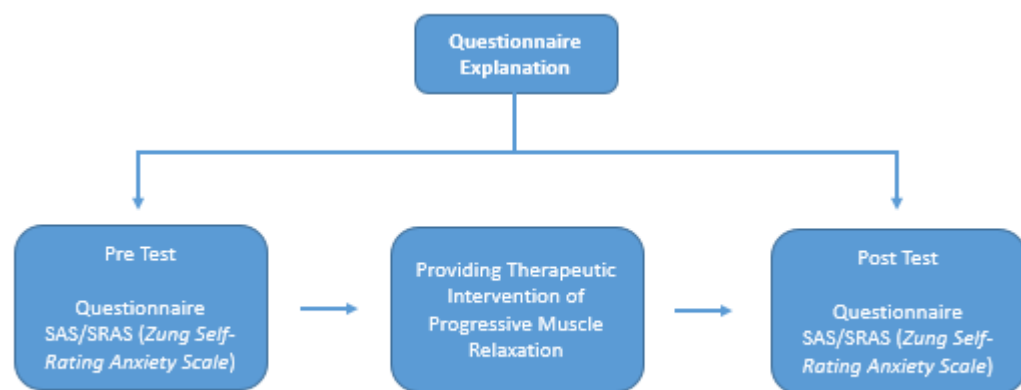
Progressive muscle relaxation is a stress management technique used quite often to reduce stress. Progressive muscle relaxation can be used to combat anxiety, stress, or tension. By tensing and relaxing several muscle groups and distinguishing the sensations of tension and relaxation, a person can eliminate muscle contractions and experience a sense of relaxation. Progressive muscle relaxation is the cheapest type of relaxation, easy to do independently (Soewondo, 2017). Progressive muscle relaxation therapy can stimulate the release of endorphins and encephalon chemicals and stimulate brain signals that cause muscles to relax and increase blood flow to the brain (Stuart, 2013). By providing counseling and group activity therapy online about progressive muscle relaxation techniques to health workers who are exposed to the handling of Covid-19

patients to experience anxiety disorders, it is hoped that this can be an alternative therapy in reducing/controlling anxiety levels.

The introduction contains the urgency and background of the problem of community service which is described by the inverted pyramid method starting from the global, national, and local levels. Include references (relevant literature or research results) using the source number in each sentence after the period (.) which is adjusted to the Bibliography, for example, Strasburger et al., stated that adolescents aged 8-18 years spent an average of 7 hours per day to access media (Strasburger et al, 2010).

## METHOD

This community service activity is carried out in 2 stages, namely the first stage of providing material, Next is the implementation of progressive muscle relaxation therapy with *pre* and *post-examinations* to see the significance of changes in anxiety from the benefits of the therapy provided.



**Figure 1.** The community service activity

## RESULTS

This community service activity was attended by 50 health workers who treat Covid-19 patients. From the results of data analysis, it was found that the average difference in SAS/SRAS (*Zung Self-Rating Anxiety Scale*) scores before and after progressive muscle relaxation therapy was carried out. The results showed a decrease in the mean score of SAS/SRAS (*Zung Self-Rating Anxiety Scale*) to 30.3 from the previous 33.7 after following counseling and progressive muscle relaxation therapy.

**Table 1.** A score of SAS/SRAS (Zung Self-Rating Anxiety Scale) before counseling and progressive muscle relaxation therapy

No	Score SRAS	N	Presentase	Mean
1	20-30	18	35 %	
2	31-40	20	41 %	
3	>40	12	24 %	
	Total	N = 100	100%	33,7

**Table 2.** A score of SAS/SRAS (Zung Self-Rating Anxiety Scale) after counseling and progressive muscle relaxation therapy

No	Score SRAS	N	Presentase	Mean
1	20-30	24	48 %	
2	31-40	24	48 %	
3	>40	2	4 %	

No	Score SRAS	N	Presentase	Mean
	Total	N = 100	100%	30,3

Counseling is carried out using lecture, discussion, and question-and-answer methods. The evaluation results obtained are almost 80%, and participants can answer the questions given. This means that participants know and understand the material that has been delivered by the speaker.

## DISCUSSION

Progressive muscle relaxation can be an easy and inexpensive alternative therapy to overcome/reduce the anxiety that occurs in health workers. Progressive muscle relaxation can be used to combat anxiety, stress, or tension. By tensing and relaxing several muscle groups and distinguishing between tense and relaxed sensations, a person can eliminate muscle contractions and experience a sense of relaxation (Soewondo, 2017). This is because progressive muscle relaxation is the cheapest type of relaxation, easy to do independently.

Progressive muscle relaxation therapy is included in the category of meditation that can provide a calming effect because of the relaxation element contained in it. This sense of calm will then provide a positive emotional response that is very influential in bringing about positive perceptions. Positive perceptions are then transmitted in the limbic system and cerebral cortex with a complex degree of connectivity between the left prefrontal hypothalamic brain stem and the right amygdala hippocampus. This transmission causes a balance between the synthesis and secretion of neurotransmitters such as GABA (Gamma Amino Butyric Acid) and GABA antagonists by the hippocampus and amygdala. Positive perceptions received in the limbic system will cause the amygdala to send information to the LC (locus coeruleus) to activate autonomic nervous reactions. LC will control the performance of the autonomic nervous into the homeostasis stage. Controlled autonomic nervous stimulation causes the secretion of epinephrine and norepinephrine by the adrenal medulla to be controlled. This situation will reduce all manifestations of anxiety disorders.

Progressive muscle relaxation therapy stimulates the release of endorphins and encephalon chemicals and stimulates brain signals that cause muscles to relax and increase blood flow to the brain (Stuart, 2013). Progressive muscle relaxation can also be used as an additional method to reduce anxiety and improve sleep quality in COVID-19 patients (Liu et al., 2020). Progressive muscle relaxation exercises combined with meditation can even help reduce fatigue levels and help improve coping mechanisms in dealing with stress (Gok Metin, Karadas, Izgu, Ozdemir, & Demirci, 2019). The benefits of progressive muscle relaxation in reducing anxiety and stress are also supported by a study conducted by Rajeswari & SanjeevaReddy (2020) on post-partum mothers.

## CONCLUSIONS AND RECOMMENDATIONS

The conclusion from the description of the community service activities, among others, by conducting counseling and therapy for progressive muscle relaxation group activities, there is a decrease in the level of anxiety in health workers who treat Covid-19 patients. So that health workers can provide education related to the use of progressive muscle relaxation therapy and progressive muscle relaxation training as therapy to reduce stress to 30.3 from the previous 33.7 after following counseling and progressive muscle relaxation therapy.

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## APPENDIX

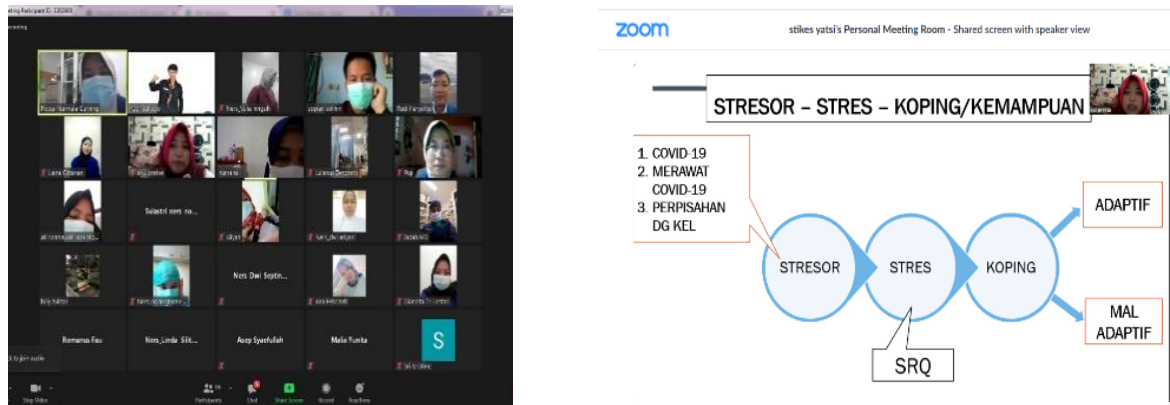


Figure 1. Counseling Progressive Muscle Relaxation

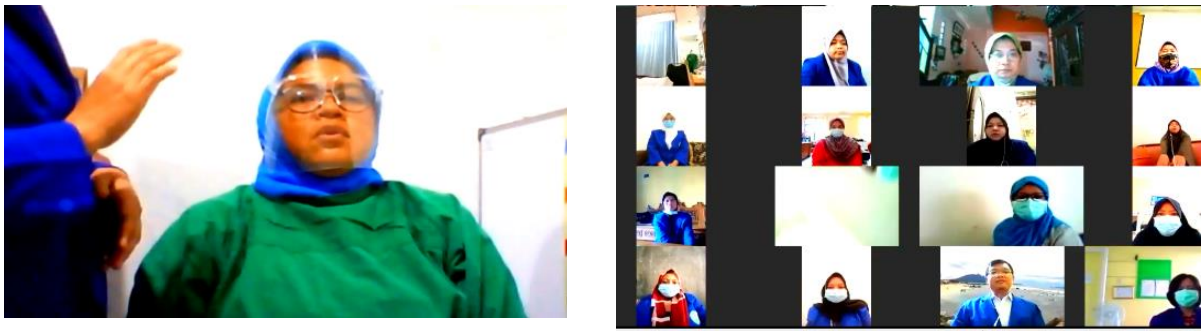


Figure 2. Exercise Progressive Muscle Relaxation