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Terapi Relaksasi Otot Progresif Terhadap Penurunan Tingkat Kecemasan pada Praktik Klinis Tingkat Dua

# Terapi Relaksasi Otot Progresif Terhadap Penurunan Tingkat Kecemasan pada Praktik Klinis Tingkat Dua

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#### ARTICLE INFO

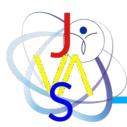
#### ABSTRACT

Article history: Received date : 18 April 2023 Received in revised form : 30 April 2023 Accepted date : 30 May 2023 Available online date : 1 July 2024 **Background**: Severe Acute Respiratory Syndrome Coronavirus (Covid-19) is one of the disorders of the respiratory system. Based on data on the number of Covid- 19 exposures in Indonesia that were confirmed positive as many as 6,512,913 cases, patients recovered as many as 6,319,990 cases, and died 158,768 people (Ministry of Health RI, 2022). Therapy progressive muscle relaxation is an exercise in muscle activity, tense muscles then lower tension by performing relaxation techniques to get a feeling of relaxation. **Purpose**: the purpose of this progressive muscle relaxation therapy, which is to lower tension so that it is more relaxed. This study is to measure the effectiveness of progressive muscle reflexes against decreasing anxiety levels in Second degree students who are currently practicing clinically and have confirmed Covid-19. The population used was Second degree students who were confirmed with Covid-19 at STIKes Ahmad Dahlan Cirebon, the sample or respondents in this study were second degree students who were confirmed with Covid- 19 who were self-isolating after being confirmed with Covid-19. Methods: In this study, quantitative research methods, using purposive sampling with quasi- experimental study pretest-post-test one group design research design. This study took from 22 students who practiced clinics and confirmed Covid-19 students who were exposed to Covid-19. At the value of the level of anxiety after being administered a progressive muscle relaxation therapy is 2.17 with a standard deviation of 0.381. The results of the statistical test obtained a p value of 0.000, then p  $< \alpha$  where H 0 was rejected, meaning that there was a significant influence



on the level of student anxiety before and after progressive relaxation. It is hoped that this research can be used as one of the implementations of nonpharmacologic therapy to patients who have been confirmed with Covid-19 to reduce anxiety levels through the administration of his progressive muscle relaxation therapy

Keywords: Progressive muscle relaxation; Anxiety levels; Covid-19



# **1. INTRODUCTION**

Coronavirus is a virus that causes respiratory infections known as Severe Acute Respiratory Syndrome Coronavirus 2 (Covid-19). At the end of January 2020, which coincided with January 31, 2020, the World Health Organization (WHO) declared Covid-19 to be a *global health emergency* status and in April 1,278,523 people were found infected with covid-19. Meanwhile, in Indonesia, especially DKI Jakarta, the highest number of Covid-19 patients with 1,232 positives.

Based on data from the Indonesian Ministry of Health, as of November 04, 2022, the number of covid-19 exposures in Indonesia that have been confirmed positive is 6,512,913 cases, patients recovered as many as 6,319,990 cases, and died 158,768 people. Globally shows the prevalence of sleep quality disorders in the world varies. Data from a 2015 *National Sleep Foundation* (NSF) survey in America showed 48% of respondents reported having poor sleep quality, and very bad (Yovita, 2019).

In Indonesia alone, the prevalence of sleep disorders is estimated to reach 10%, which means that out of a total of 238 million Indonesians, around 23 million of them experience sleep disorders (*Cable News Network* Indonesia 2017) Quoted from Nindhy Olii et al (2018). From the results of research conducted by Fenny and Supriatmo at the University of North Sumatra, it was stated that the distribution of the frequency of poor sleep quality was highest in USU medical students with a sequential number of 185 people each (61.7%).

The impact of this pandemic certainly causes several disorders that occur in nurses and prospective health workers, including nursing students, including physical health, economic inequality, social inequality and mental disorders. One of the psychological responses experienced by health workers in dealing with covid-19 patients is anxiety. The experiences of nurses who treat Covid-19 patients include anxiety, nurse loyalty, nurse feelings and efforts to reduce the risk of contracting (Dwi & Santoso, 2021).

## 2. METHODS

#### 2.1 Study Design

In this study, researchers used a quantifiable approach with a pre-experimental method with a *quasi-experimental study pretest-post-test one group design*.

#### 2.2 Setting

This research was carried out from March 15 to December 25, 2022, in second degree nursing students who are nurse practicing clinics and have confirmed Covid- 19.

#### 2.3 Research Subject

This study used an *experimental study pretest-posttest one group design*, which aimed to determine the effect of progressive muscle relaxation on reducing the level of anxiety of students who were confirmed by Civid-19 at STIkes Ahmad Dahlan Cirebon. According to Sugiyono 2018 experimental research has the aim of examining possible causalities due to the influence of certain treatments on others under controlled conditions. In this study, researchers used a quantifiable approach with a pre-experimental method with a *quasi- experimental study pretest-posttest one group design*, because in this study treatment / treatment was only given to one group and there was no comparison group. Then the group given the treatment was immediately measured to find out the results.

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Samples are taken by *means of total sampling* which is carried out by taking the entire population according to the specified characteristics. The inclusion criteria were Students who are willing to be respondents, Students who have been confirmed with Covid-19. The exclusion criteria were Students who are not willing to be respondents, students who are shat and have not been confirmed with Covid-19. The sample in this study was 22 students, second degree nursing students who are practicing clinics and confirmed Covid-19 and are self-isolating at STIkes Ahmad Dahlan Cirebon

# 2.4 Instruments

To obtain information that has been obtained from respondents. Researchers used information media in the form of *leaflets*, SOP containing what progressive muscle relaxation is, benefits and progressive muscle relaxation measures, questionnaires. Students do progressive muscle relaxation in a chair or bed, as a comfortable place to do progressive muscle relaxation.

# 2.5 Intervention (applies to experimental studies)

The instrument used in this study for *independent* variables, namely progressive muscle relaxation using a list of progressive muscle relaxation techniques. form variable dependent and anxious levels using a questionnaire sheet. Questionnaire is a data collection technique that is carried out by giving a set of questions / written statements to respondents for them to answer. In this study, researchers distributed questionnaires to parties related to the study, namely STIkes student Ahmad Dahlan Cirebon who was confirmed with Covid-19, according to the criteria previously described. According to Sugiyono (2018) The instrument used by researchers is a closed questionnaire, which is a questionnaire provided by the researcher, so respondents only need to choose one of the available answers. The research variables were measured using measuring instruments in the form of ordinal-scale questionnaires

2.6 Data Analysis

This analysis is used to be able to analyze the relationship between several variables of the research report. In general, this analysis describes the results of the analysis of student anxiety levels describing that the average value of students' anxious levels before progressive muscle exercise is 3.1 0 with a standard deviation of 0.565. The average value of students' anxiety levels after progressive muscle reflexional exercise is 2.1 0 with a standard deviation of 0.38 0. The results of the statistical test obtained a p value of 0.000, then  $p < \alpha$  where H0 was rejected, meaning that there was a significant influence between the level of anxiety of students before and after progressive relaxation. To find out the influence between the 2 variables, whether significant or not with a meaningfulness of 0.05 with the T-Test if the data distributed is normal and using the Wilcoxon difference test if it is known that the distributed data is abnormal. Using SPSS Version 28 software. If from the calculations it is found that the significance value (p) is less than the error rate of 5% (0.05) then the hypothesis (H1) is accepted and H0 is rejected, which means that there is an influence of the free variable on the bound variable. If the significance value (p) is greater than the error rate of 5% (0.05) then the hypothesis (H1) is rejected and H0 is accepted, which means that there is no influence of the free



variable on the iron variable t (Sugiyono, 2018). 2.7 Ethical Consideration

The respondent will fill in the inform consent first, Informed Consent is the consent given to the respondent to perform progressive muscle relaxation. Anonymous, i.e. One of the ethics in the research report is not to list the name of the subject to be studied. In the measuring instrument used, the researcher only lists the code on the data collection sheet or the results of the research report to be attached. Ethics The next research report is a guarantee of confidentiality given by the researcher to the subject of the research report. Whether in the form of information, research results or other problems. All information collected confidentiality is guaranteed by the researcher only certain information reported as a result of the study

# 3. RESULT

The univariate analysis in the study included age, and anxiety levels.

- 1.1 Respondent Demographic Data
  - 1.1.1 Distribution of respondents based on anxiety levels before and after

progressive muscle elaxation in second degree students who were confirmed with

		(11-22)	
No	Variable	N	%
	Before		
1	Light	1	8.3
2	Keep	15	66.7
3	Heavy	6	25.0
	After		
1	Light	20	83.3
2	Keep	2	16.7
3	BagWeightus	0	0
	Sum	22	100,0

(n=22)

Based on Table 3.1.1 above illustrates that before progressive muscle relaxation, most respondents had a moderate anxiety level of 15 people (66.7%). After progressive muscle relaxation, most respondents had a mild anxiety level of 20 people (83.3%).

1.1.1 Effect of progressive muscle relaxation on anxiety levels of second-degree students who have been confirmed with Covid-19

(n=22)



Variable	Mean	Std deviati on	Std Error	P-value	n
Sleep Quality					22
Pre	3.17	0.565	0.115	0,000	22
Post	2.17	0.381	0.078		

Based on Table 3.1.2 above illustrates that the average score of the seconddegree student's anxiety level before progressive relaxation is 3.17 with a standard deviation of 0.565. The average value of the anxious level after progressive muscle relaxation is 2.1 7 with a standard deviation of 0.381 with a standard deviation of 0.078. The results of the statistical test obtained a p *value* of 0.000, then  $p < \alpha$  where H0 was rejected, meaning that there was a significant influence between the anxious level of students who were confirmed with Covid-19 before and after progressive relaxation.

Age variable	Frequency	Percent	Percentage Valid	Cumulative
rige variable	Trequency	rereem	Tercentage Valid	percent
17	2	8.3	8.3	8.3
18	2	8.3	8.3	16.7
19	11	50.0	50.0	66.7
20	6	29.2	29.2	95.8
21	1	4.2	4.2	100.0
Entire	22	100.0	100.0	

**Table 1.** Demographic Characteristics



TITLE (First Author, dkk)

1.1.2 *Effect of* progressive muscle relaxation on anxiety levels of second degree students who have been confirmed with Covid-19

(n - j')	
$(\Pi - \angle \angle D)$	

Variable	Mean	Std deviat ion on	Std Error	P-value	n
Sleep Quality Pre Post	<u>3.17</u> 2.17	<u>0.565</u> 0.381	<u>0.115</u> 0.078	0,000	22

Based on Table 3.1.2 above illustrates that the average score of the seconddegree student's anxiety level before progressive relaxation is 3.17 with a standard deviation of 0.565. The average value of the anxious level after progressive muscle relaxation is 2.1 7 with a standard deviation of 0.381 with a standard deviation of 0.078. The results of the statistical test obtained a p *value* of 0.000, then  $p < \alpha$  where H0 was rejected, meaning that there was a significant influence between the anxious level of students who were confirmed with Covid-19 before and after progressive relaxation.

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21	1	4.2	4.2	100.0
Entire	22	100.0	100.0	

Based on Table 1 above, it illustrates that respondents aged 19 years as many as 1 person (50.0%), 20 years as many as 7 people (2 9.2%) and 17 years 18 years, namely 2 people each (8.3%), and those aged 21 years as many as 1 person (4.2%). It can be concluded that the most is the age of 19.

#### **4. CONCLUSION**

Based on the characteristics of respondents' age respondents, each had its own effect on anxiety levels after progressive muscle relaxation. It is known that after progressive muscle relaxation therapy has an influence on reducing the anxiety level of clinical practice students who have been confirmed with Covid-19. The level of anxiety has a significant influence, where after muscle relaxation progressive, there is a decrease in the level of anxiety in Ahmad Dahlan Cirebon students who have been confirmed with Covid-19. The effect of progressive muscle relaxation on the anxious level of second-degree students who have been confirmed with Covid-19 in Ahmad Dahlan Cirebon in 2022, most of them experienced a decrease in anxiety levels after being given this progressive muscle relaxation therapy.



TITLE (First Author, dkk)

#### References

- Anggraeni, N. (2018). An overview of anxiety levels in D-III Nursing Level III Students in Facing the Competency Test at the Indonesian University of Education: Repository. Upi. Edu Library. Upi. Education.
- Arikunto (2010) Arikunto, S. 2010. Research Methods. Jakarta: Bumi Aksara.
- Erisa Dila Resnada (2020). The effectiveness of Progressive Muscle relaxation in anxiety reduction is characterized by excessive stress in D-III Nursing students who are completing their final project.
- Eyet Hidayat, (2017). The effect of progressive relaxation therapy on reducing anxiety levels in the face of competency tests for Akper Muhammadiyah Cirebon Level III students <u>http://jks.fikes.unsoed.ac.id/index.php/jks/article/view/740</u>

Notoatmodjo soekidjo (2010). Health Promotion theory and application. Rineka Cipta. Jakarta

- Potter PA, & Pery AG. (2010). Fundamentals of nursing: concept, process, and practice. Volume 3. Edition &. Jakarta:Salemba Medika.
- Purwanto, B. (2013). Herbal and Complementary Nursing. Yogyakarta: Nuha Medika.
- Reflin Mahmud (2021). The impact of progressive muscle relaxation with colloquial language on family stress with family members experiencing schizophrenia.
- Adinda, Yuli Pratiwi. (2022). Effect of Progressive Muscle Relaxation on Fatigue and Sleep Quality in Rubber Tapping Farmers at PTPN XII Kebun Kalisanen, Jember. e-journal of the Health Library, Vol.10 (no.2).
- Sugiyono (2013). Research methods Education qualitative quantitative approach and R&D. Bandung: Alfabeta
- Sugiyono. (2018). Quantitative Research Methods, Kualitatig, and R&D, Alfabeta publisher, Bandung
- Wahyuni, L. T. (2018). *The relationship of stress with the quality of sleep of students of the profession*. Padang: LPPM UMSB.
- Waty, Lina (2010). The relationship of migraine with the occurrence of adolescent sleep disorders. http://repositori.usu.ac.id/handle/123456789/39929
- Zulfa Inayatul Ulya, Noor Faidah (2017). The effect of progressive muscle therapy on reducing blood pressure in hypertension sufferers in Koripandriyo Village to Pati Pati district. Journal of Major Scholars.