
Original Articles: Case Study**APPLICATION OF PROGRESSIVE MUSCLE RELAXATION TO REDUCING THE ANXIETY OF HYPERTENSION CLIENTS**Erny Isrianawati¹, Rusdianingseh Rusdianingseh^{1*}, Nety Mawarda Hatmanti¹, M. Khafid¹¹ Nursing Science Study Program, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya**Article history:**

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Page Number: 21-25**Abstract**

Background: Families with hypertension will cause anxiety or anxiety which can affect the stability of blood pressure. One of the managements of anxiety with psychotherapy methods is by doing progressive muscle relaxation therapy. Progressive Muscle Relaxation to get a feeling of relaxation, so as to reduce anxiety and stress.

Objective: The aim of the study was to determine the application of progressive muscle relaxation therapy to reduce anxiety in hypertensive clients.

Methods: This research method uses a descriptive method with a case study approach. The instruments used were HARS questionnaire sheets and Progressive Muscle Relaxation SOP sheets. The number of respondents was 1 person with hypertension with an anxiety nursing diagnosis.

Result: The results of applying progressive muscle relaxation given 2 times per day for 7 days with a duration of 30-45 minutes each meeting showed a decrease in anxiety level from moderate anxiety to mild anxiety, followed by a decrease in blood pressure.

Conclusion: The application of progressive muscle relaxation has proven effective in reducing anxiety in hypertensive clients. This therapy can be used as an adjunct to overcome anxiety which is useful for reducing blood pressure of hypertensive clients.

INTRODUCTION

Hypertension is a chronic disease that requires self-care management, namely the client's ability to detect and manage symptoms, self-medication and care. This situation is a trigger factor for the emergence of anxiety or anxiety in hypertensive clients, which in turn will affect the stability of blood pressure.

Data from the World Health Organization (WHO), the prevalence of high blood pressure in 2014 in adults aged 18 years and over was around 22%. Based on Basic Health Research (2018) the most common disease in the elderly for non-communicable diseases which ranks first is hypertension. Globally, hypertension is also one of the most common non-communicable diseases in Indonesia (57.6%), in (Jumriani et al, 2019).

Various factors such as anxiety and fear can affect the response of blood vessels to vasoconstrictive stimuli. Individuals with hypertension are very sensitive to norepinephrine, although it is not clear if this occurs. The sympathetic nervous system stimulates the blood vessels in response to emotional stimuli and the adrenal glands are also stimulated, resulting in additional vasoconstrictive activity. The adrenal medulla secretes epinephrine which causes concomitant vasoconstriction. The adrenal cortex secretes cortisol and other steroids that can strengthen blood vessel vasoconstrictors (Brunner & Suddarth, 2017).

Therefore, the approach to nursing care for people with hypertension needs to be done holistically and directed. Non-pharmacological therapy that can be used to treat anxiety with relaxation. Relaxation techniques have the advantage of focusing on one's own thoughts, making it easier for sufferers to do so. One of the relaxation techniques that can be used to reduce anxiety is the application of progressive muscle relaxation.

METHODS

Study Design

This research is a descriptive research with a case study approach through the process of nursing care.

Settings

The case study was conducted in Wonokromo Sub-District, Surabaya City, East Java Province, Indonesia.

Research subject

Case studies were conducted on 1 (one) family member suffering from hypertension.

Instruments

The level of anxiety was measured by the HARS questionnaire.

Data collection

The data collected is data from the results of direct interviews with clients, client families, observations and physical examinations. After the data is collected, the researcher concludes the problem and determines the priority of the problem then makes an action plan that will be carried out by implementing progressive muscle relaxation to reduce anxiety in hypertensive families. Case studies were conducted on 1 (one) family member suffering from hypertension who was given education and anxiety management by applying progressive muscle relaxation therapy 2 times/day for 7 days with a duration of exercise of 30-45 minutes per meeting.

Data Analysis

The data analysis used in this study is descriptive analysis based on data in the format of nursing care.

Ethical Consideration

The implementation of this case study activity has received approval and supervision from the Nursing Science Study Program, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya.

RESULTS

Focus on assessment data through interviews, physical examination and filling out questionnaires obtained a nursing diagnosis of anxiety in a family member suffering from hypertension characterized by the results of the HARS questionnaire with a score of 22 (moderate anxiety) and blood pressure of 160/98 mmHg. The main intervention given is progressive muscle relaxation therapy. After 7 days of implementing the main therapy, the result was a decrease in anxiety levels as evidenced by the results of the HARS questionnaire score of 18 (moderate anxiety) and a decrease in blood pressure to 130/86 mmHg.

DISCUSSION

The results of the study obtained a HARS score of 22 (moderate anxiety) with an anxiety nursing diagnosis. Patients who are sentenced to suffer from hypertension are faced not only with a small possibility of life, but also with prolonged physical and psychological suffering. This is in line with the theory according to Hawari (2013) in Mastuti (2021) anxiety experienced by hypertensive clients because hypertension is considered a frightening disease because it has a negative impact on the client's survival so that the client feels threatened both physically and psychologically. the condition of the client who suffers from hypertension and lives alone at home is a factor that greatly influences the client's anxiety. He is worried about his health condition and feels that there is no family support and direct family care.

According to Smealizar and Bare (2010) followed in Mutiara (2018) diagnoses that often occur in people with hypertension include anxiety and knowledge deficits. The condition of hypertension will get worse if the patient experiences anxiety. According to SIKI (2017), clients with anxiety, the intervention given is anxiety reduction, namely identifying the ability to make decisions, monitoring signs of anxiety (verbal and non-verbal), creating a therapeutic atmosphere to foster trust, using a calm and reassuring approach, motivation to identify situations that trigger anxiety, discuss realistic planning of upcoming events and practice Progressive Muscle Relaxation therapy techniques, as well as education regarding current illness. This intervention aims to minimize complications caused by hypertension and client anxiety. Therefore, hypertensive patients who experience anxiety need special treatment in addition to reducing their level of anxiety as well as their level of hypertension. The high incidence of anxiety has a significant effect on human function and quality of life (Anggraeni, AP, & Mariyati, M., 2021).

Interventions that have been carried out on clients have been carried out according to theory. Namely by teaching progressive muscle relaxation techniques that can help clients reduce anxiety. This technique must be carried out correctly in accordance with existing standard operating procedures. And if this technique is carried out correctly, the reduction in anxiety levels and the results of reducing blood pressure / blood pressure can be in accordance with the expected outcome criteria.

Clients can experience a decrease in anxiety because the essence of progressive muscle relaxation is in the form of stretching muscles and relaxing muscles so that complaints and symptoms in the cardiovascular system (tachycardia, palpitations, chest pain, feeling lethargic/weak), in somatic symptoms (muscle pain, stiffness), facial tension, muscle tension, muscle twitching, snapping) may decrease (Pome et al., 2019). Some of the changes due to relaxation techniques are lowering blood pressure, lowering heart rate, reducing cardiac dysrhythmias, reducing oxygen demand and oxygen consumption, reducing muscle tension, decreasing metabolic rate, increasing alpha brain waves that occur when the client is conscious, not focusing attention and relaxing, increasing fitness, increasing concentration and improving the ability to deal with stressors (Utomo, S, 2022).

LIMITATION

There is no limitation.

CONCLUSION

Progressive muscle relaxation techniques given 2 times/day for 7 days with a duration of 30-45 minutes each meeting can reduce the anxiety level of hypertensive clients from moderate anxiety to mild anxiety, as well as reduce blood pressure values. The use of Progressive Muscle Relaxation therapy is highly recommended and is a non-pharmacological therapy as an independent intervention to reduce the anxiety level of hypertensive clients.

AUTHOR CONTRIBUTION

Erny Isrianawati: Literature review, conceptualization, methodology, investigation, and resources.

Rusdianingseh Rusdianingseh: Literature review, conceptualization, methodology, supervise, investigation, resources, and manuscript drafting.

Nety Mawarda Hatmanti: Literature review, conceptualization, methodology, supervise, resources, project administration, and manuscript drafting.

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Erny Isrianawati : None.

Rusdianingseh Rusdianingseh : None.

Nety Mawarda Hatmanti : None.

M. Khafid : None.

CONFLICT OF INTEREST

There is no conflict of interest in this study.

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