INTRODUCTION

Elderly health is an increasingly urgent aspect in today's social dynamics. With the increasing number of elderly people in the population, health care challenges specific to them are increasingly important to discover. One of the main problems often faced by the elderly is high blood pressure, or hypertension. (National Institute on Aging., 2020). Hypertension is a major risk factor for heart disease, stroke, and other serious health complications in the elderly (American Heart Association, 2023)

In this context, progressive muscle relaxation therapy is emerging as an attractive option (Saleh, 2023). This therapy has been found effective in lowering blood pressure and reducing stress, which are two factors that play a role in the well-being of the elderly.
Progressive muscle relaxation therapy involves exercises that aim to gradually relax the muscles of the body, creating a feeling of relaxation and tranquility (Jernigan, A. M., & Iturbe, 2021).

However, in the context of our community, understanding of the benefits of progressive muscle relaxation therapy is still limited, and its implementation as a preventive measure against high blood pressure in the elderly is also not widespread. Therefore, the presence of progressive muscle relaxation therapy as part of community service activities becomes very relevant. By filling this research gap, we can make a significant contribution to improving the quality of life of the elderly in our communities.

In this article, we will explore the concept of progressive muscle relaxation therapy Wijaya & Nurhidayati, (2020), Highlighting the importance of contributing community service activities, and setting our main goal in carrying out service activities that focus on the application of this therapy in order to reduce high blood pressure in the elderly.

**RESEARCH METHODS**

**Location and Series of Activities**

This community service activity was carried out at the Lubuk Buaya Health Center, Koto Tangah District, Padang. A series of activities were carried out in several stages, with active participation from the elderly.

**Materials and Tools**

In the implementation of progressive muscle relaxation therapy, we use several materials and tools, including:

1. **Recording Tools**

   We use sound recording devices to record sessions of progressive muscle relaxation therapy. This is done so that participants can monitor their own progress during therapy sessions and as an evaluation tool for continuous improvement.

2. **Therapy Room**

   We provide a special therapy room that is comfortable and quiet, with furniture that promotes relaxation, such as ergonomic chairs and soft lighting.

3. **Audio Equipment**

   We use audio equipment to play progressive muscle relaxation therapy guides during sessions. This guide contains step-by-step instructions on how to tighten and release certain muscles in the body. (Green, B. L., 2019; Williams, B., 2018)

**Activity Implementation**

Community service activities begin with socialization to the community about the benefits of progressive muscle relaxation therapy. We organize training sessions for the elderly and those caring for them to understand the basic techniques of this therapy. After the training, we hold periodic group therapy sessions.
Data Collection Methods

Data is collected in several ways, among other things (Wekke, 2022):
1. Observations: We observed participants during therapy sessions to note changes in relaxation levels and blood pressure levels.
2. Interviews: We conduct interviews with participants before and after therapy sessions to gather information about the changes they feel.
3. Blood Pressure Measurement: The participants’ blood pressure was measured before and after the therapy session with an appropriate device.

Data Processing and Analysis

The collected data is analyzed with the help of statistical software. We used descriptive statistical methods to analyze changes in blood pressure levels and relaxation levels before and after therapy sessions. In addition, we also conducted a qualitative analysis of interviews and observational notes to understand the impact of progressive muscle relaxation therapy on participants (Vivi Silvia, 2020).
With this method, we hope to document the effectiveness of progressive muscle relaxation therapy in lowering high blood pressure in the elderly and provide a better understanding of its benefits in elderly health care.

RESULTS AND DISCUSSION

Results of Community Service Activities

In order to carry out community service activities with a focus on the application of progressive muscle relaxation therapy to reduce high blood pressure in the elderly, we managed to achieve significant results. These results are discussed in the following key aspects:

1. Increased Understanding of Progressive Muscle Relaxation Therapy
   After training and therapy sessions, participants showed increased understanding of progressive muscle relaxation therapy. They can identify the muscles they need to relax and understand their benefits for lowering blood pressure.

2. Blood Pressure Drop
   Hasil pengukuran tekanan darah menunjukkan penurunan yang signifikan setelah peserta mengikuti sesi terapi relaksasi otot progresif. Hal ini mengindikasikan bahwa terapi ini efektif dalam menurunkan tekanan darah tinggi pada lansia.

3. Increased Feelings of Relaxation and Well-Being
   Participants reported feeling more relaxed and comfortable after the therapy sessions. They also noted improved sleep quality and decreased stress levels.

Discussion

The implementation of progressive muscle relaxation therapy as part of community service activities has had a positive impact on the elderly in our community. The results are in line with previous research that has also shown the effectiveness of this therapy in lowering blood pressure and relieving stress in the elderly population (Hughes, J. W., 2023).

Increased understanding of progressive muscle relaxation therapy is an important first step in the management of high blood pressure. Participants who better understand these relaxation techniques can use them as aids to maintain their health in the long term (Bress et al., 2017; Karang & Rizal, 2017).

A significant drop in blood pressure is also a very positive result. In a society where heart disease and stroke are major health problems, tackling high blood pressure is an important priority (Pal, G. K., & Velkumary, 2018). This therapy opens the door to a more natural and holistic approach in maintaining the health of the elderly.

Although the results were positive, there are some limitations to note. This activity is limited by the number of participants involved, and the long-term impact of this therapy still needs to be studied. In addition, the sustainability of these activities requires ongoing resources and commitment from the community.

The recommendation for similar community service activities is to expand the scope to more elderly in the community and involve more volunteers in its implementation (Wiyasihati, Setiawan, Rejeki, & Irwadi, 2023). In addition, collecting long-term data on the effects of progressive muscle relaxation therapy on the elderly will help provide a better understanding of its long-term benefits (Rahayu, Hayati, & Asih, 2020).
CONCLUSION

Community service by applying progressive muscle relaxation therapy has proven its benefits in lowering high blood pressure in the elderly. Increased understanding of this therapy, decreased blood pressure, and increased feelings of relaxation are encouraging results. In an effort to maintain the health of the elderly, progressive muscle relaxation therapy deserves to be considered as an important part of comprehensive health care.

Through this community service activity, we can conclude that the application of progressive muscle relaxation therapy has a positive impact in reducing high blood pressure in the elderly. Participants of the activity managed to increase their understanding of this therapy and felt significant changes in their level of relaxation and well-being.

Progressive muscle relaxation therapy is a natural and effective approach to managing high blood pressure in the elderly. This has the potential to reduce the risk of heart disease, stroke, and other health complications that often pose a serious threat to the elderly.

BIBLIOGRAPHY

Hughes, J. W., Et Al. (2023). Randomized Controlled Trial Of Mindfulness-Based Stress Reduction For Prehypertension. Psychosomatic Medicine, 75(8), 721–728.
Progressive Muscle Relaxation Therapy to Lower High Blood Pressure in the Elderly Through Community Service Midwifery Lecturer Unand


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