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THE EFFECT OF LAUGHTER THERAPY ON DECLINE LEVEL OF ANXIETY AMONG THE ELDERLY IN SAMARINDA

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ABSTRACT

The prevalence of anxiety in Indonesia among elderly people in Indonesia has increased from 14.2% to 3.5%. The prevalence of anxiety in the elderly group in 2017 found that out of 30 elderly people, 63% experienced mild anxiety, 26.7% moderate anxiety, and 10% severe anxiety. Anxiety is a serious problem that must be treated because anxiety will make elderly people feel uncomfortable and frustrated, and can cause health problems such as headaches and heart disease which will affect their daily activities. One of the non-pharmacological modifications that can provide relaxation to reduce anxiety is laughter therapy. This research aimed to determine the effect of laughter therapy on reducing anxiety levels in the elderly. This research used a pre-experimental design with a one-group pre-post test approach with a sample size of 21 people who experienced anxiety taken by purposive sampling. Data were analyzed using the Wilcoxon test. The research results show that laughter therapy is effective in reducing anxiety in the elderly. Laughter therapy is good to apply as an effort to reduce anxiety.

KEYWORDS:

Laughter Therapy, Anxiety Level, Elderly



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INTRODUCTION

The aging process is an unavoidable part of human life. Aging in humans is a biological process and not a disease, and it is a process of significant change that occurs in the human body. In this process, physical health often declines with age. The ability to care for themselves is further weakened by one or more functional limitations. This can result in long-term treatment conditions. The elderly can become more dependent on the family who care for them, and this often affects the psychological conditions of the elderly such as anxiety.

Elderly people who experience anxiety will feel worried, afraid, disturbed rest and sleep patterns, impaired concentration/memory, psychosomatic complaints; heart palpitations, shortness of breath, headaches, indigestion, and urinary disorders. The prevalence of anxiety in the elderly in Indonesia increased from 14.2% to 3.5%. Pertiwi (2017) in her research on the elderly group of St Angela in Samarinda obtained data that of 30 elderly people, 63% experienced mild anxiety, 26.7% moderate anxiety, and 10% severe anxiety. Data on anxiety levels in the elderly conducted by Sari, et al in 2023 at the UPTD of the Tresna Werda Social Home "Nirwana Puri" East Kalimantan, data was obtained that out of 22 elderly people who were careful, there were 10 elderly people (45.5%) who experienced anxiety.

Society often ignores anxiety in the elderly because it is considered normal and not something that must be treated. However, in reality, anxiety is a serious problem that must be dealt with because anxiety will make the elderly feel uncomfortable, frustrated, have trouble sleeping, irritable and worried. This, if left unchecked, can cause the elderly to become afraid, and restless, feel insecure, break out in cold sweat, worry, tremors, loss of appetite, chronic diseases, irregular heartbeat, headaches, and functional disorders that will affect their daily activities. This condition is something that most elderly people do not expect.

Elderly people need encouragement from group activities to help them reduce the level of anxiety they experience to remain active in aging. Management of anxiety at the prevention stage requires a holistic approach, namely physical, psychological, and psychosocial. Based on the results of research conducted by Cornelia and Mulayningsih (2023), when a person experiences anxiety, excessive adrenaline secretion occurs in the body which causes blood pressure to increase. Relaxed conditions are needed to activate the parasympathetic nervous system which works against the sympathetic nerves, so that the body reduces the production of stress hormones.

One non-pharmacological action that can provide relaxation to someone experiencing anxiety is laughter therapy. Laughter can help control and reduce stress hormones and create a relaxed state to overcome anxiety. Laughter therapy is very good because it can improve the psychology of someone with anxiety and worry problems. When a person experiences changes in psychological conditions such as stress, anxiety, or depression, it can influence nerve cells to respond thereby stimulating hormone secretion. Laughter releases endorphins into circulation so the body becomes more comfortable and relaxed.

The results of this preliminary study became the basis for researchers to research laughter therapy to reduce anxiety in the elderly group in the Girirejo Station Area, Samarinda.

RESEARCH METHODS

The location of this research was carried out in the elderly group at Girirejo Station, Samarinda. This research used a pre-experimental design with a one-group pre-post test approach with a sample size of 21 people who experienced anxiety taken by purposive sampling. Data were analyzed using the Wilcoxon test. The instrument used in this research was the HARS questionnaire which is valid and reliable.

RESULTS AND DISCUSSION

1. RESULT

1. 1. Respondent characteristics

The results of research regarding the characteristics of respondents based on age are presented in Table 1.

Table 1. Characteristics of Respondents Based on Age

Age	Amount	Percentage (%)
55-59 Years	3	14.3
60-65 Years	9	42.9
66-74 Years	7	33.3
>75 tahun	2	9.5
Total	21	100

Source: Processed Data (2023)

Table 1 shows that the majority of respondents aged 60-65 years were 9 people (42.9%), aged 66-74 years were 7 people (33.3%), aged 55-59 years there were 3 people, while for respondents aged >75 years, there are 2 people.

The results of research regarding the characteristics of respondents based on gender are presented in Table 2.

Table 2. Characteristics of Respondents Based on Gender

Gender	Amount	Percentage (%)
Female	11	52.4
Male	10	47.6
Total	21	100

Source: Processed Data (2023)

Based on table 2, shows that 11 elderly people are female (52.4%) and 10 elderly people are male (47.4%).

1.2 Therapeutic Effects of Laughter

The results of research on the effect of laughter therapy on the anxiety levels of the elderly are presented in Table 3.

Table 3. Effect of Laughter Therapy on Elderly Anxiety Levels

Test	Mean	SD	Min-Maks	P Value
Pre-test	25.38	9.041	13-42	0.001
Post-test	18.67	7.539	10-36	

Source: Processed Data (2023)

Based on table 3, it shows that the value is 0.001 ($p < 0.05$). There is a significant difference in the level of anxiety in the elderly between before laughter therapy is carried out and after laughter therapy is carried out.

2. DISCUSSION

The decrease in anxiety scores in the intervention group in this study shows that laughter therapy is effective in reducing anxiety levels in the elderly. The difference in anxiety scores in the intervention group before and after being given the intervention indicates that there is an influence of laughter therapy on anxiety problems in the elderly at Girirejo Station, Samarinda. Laughter therapy is a form of communication that evokes laughter, smiles, and pleasant feelings and allows interaction. Laughter has many effects involving the muscular, cardiovascular, respiratory, endocrine, immune, and central nervous systems, such as; training and relaxing muscles, improving breathing, stimulating circulation, lowering stress hormones, increasing immune system defense, and improving mental function. When a person experiences anxiety and is trained to control their face appropriately, so that they look happy instead of sad expression, then they will start to feel better. Reducing anxiety levels depends on a person's adjustment to the problems they face. If the adjustment is good, then problems can be overcome and anxiety problems will decrease. Apart from that, training to control your face properly by practicing laughing when experiencing psychological problems is one way that can be done to reduce anxiety levels.

Laughter can improve blood circulation, especially to the brain, so that the hypothalamus will release endorphin hormones which are useful for stimulating feelings of joy, and suppress the hormones epinephrine and cortisol, resulting in a decrease in anxiety levels in the elderly at Girirejo Station, Samarinda. Significantly, laughter therapy can also be related to blood pressure in the elderly, this is based on the theory that when the elderly laugh it will increase endorphins, where endorphins are compounds that can increase relaxation. The relaxation in question has an impact on the stability of the nervous system, where the sympathetic nerves which are responsible for heart function and blood flow will be more stable. This is by Pangestu, et al (2017) who showed that there was a decrease in blood pressure of 10-20 mmHg after the patient was involved in a 10-minute laughing session.

Laughter decreases the release of stress-related chemicals and increases relaxation. The body's natural melatonin, endorphin, and serotonin can be released after laughing for five to 10 minutes.

The results of this study show that laughter therapy can reduce anxiety experienced by the elderly. Laughter is an appropriate and cheap way to help reduce feelings of anxiety because when someone laughs their body will produce good substances such as endorphins and serotonin which suppress cortisol, adrenaline, and free radicals. Serotonin causes a vasodilation effect on blood vessels which ultimately increases oxygen circulation throughout the body. Serotonin normally creates an urge in the limbic system to increase a person's feelings of comfort, creating a feeling of happiness, satisfaction, good appetite, and psychomotor balance (Ruspawan & Wulandari, 2012). The results of

this study are supported by previous research conducted by Tamada, et al (2021) which explains that laughter therapy can be used for preventive and therapeutic purposes. The results of an analysis conducted on fourteen thousand two hundred and thirty-three elderly people aged 65 years found that a low frequency of laughter was proven to have a higher risk of developing functional disability.

Laughter also has an impact on mental health, it has been proven that laughter improves mood in social settings. The facial muscles can be greatly flexed through laughing, because the increase in blood flow when laughing, which hydrates and brightens the facial skin, makes the face look red when laughing. The benefits of laughter therapy not only provide the body with energy for activities but also lower blood pressure by relaxing the body and reducing the release of hormones related to anxiety.

One minute of laughter is equivalent to fifteen minutes of cycling, equivalent to ten minutes of rowing exercise. This causes blood pressure to decrease, increasing oxygen in the blood which will speed up healing. Apart from the physical, laughing also has an impact on mental health which has been proven to improve mood and is a short-term dynamic meditation or relaxation technique that can reduce a person's stress and anxiety.

CONCLUSIONS AND RECOMMENDATIONS

Laughter therapy is effective in reducing anxiety levels in the elderly. Laughter therapy can be used as a routine activity that needs to be carried out in elderly groups at Girirejo Station in Samarinda as a form of support and motivation to help reduce anxiety. This research can be used as a reference and development of psychotherapy methods for the elderly.

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