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The Effect Of Laughter Therapy On Blood Pressure Of Elderly People With Hypertension In The Working Area Of Taba Lubuk Linggau Health Center

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ABSTRACT

Increased blood pressure in the elderly generally occurs due to decreased organ function in the cardiovascular system. Hypertensive disease is still the highest non-communicable disease suffered by the elderly. Laughter Therapy is laughter that starts step by step. Laughing for 5-10 minutes can stimulate the release of endorphin and serotonin, which is a kind of natural morphine of the body and also melatonin. Laughter will increase blood flow and oxygen in the blood. Laughter therapy can help the healing process and reduce complaints experienced by clients. This study aims to determine the effect of laughter therapy on blood pressure in the elderly with hypertension in the Taba Lubuklinggau Health Center Working Area. The research method used a pre-experimental design with a one group pre-post test design type. Data were collected using observation sheets on 18 elderly respondents who experienced hypertension in the Taba Lubuk Linggau Health Center Working Area. The results of the univariate test analysis that most of the respondents 10 people (55.6%) were aged 50-60 years, Half of the respondents 9 people 50.0%) were male, Half of the respondents 9 people (50.0%) before laughing therapy had blood pressure in Stage II, Most of the respondents 11 people (61.1%) after laughing therapy in the elderly before and after giving laughing therapy obtained a significant change with a value of p = 0.000 (p <0.05). there is an effect of laughing therapy on blood pressure in the elderly with hypertension in the working area of Puskesmas Taba Lubuk Linggau. Researchers suggest to the Taba Lubuklinggau Health Center to be able to provide services and provide laughter therapy for hypertensive patients at the Taba Lubuklinggau Health Center to reduce the incidence of hypertension in the elderly.

INTRODUCTION

According to *World Health Organization (WHO)* elderly is somebody. Which has enter age 60 year to the top. Elderly is groupage on man Which has enter stage end phase his life. This group which is categorized as elderly will experience a process that called *aging process* or aging process. Disease cardiovascular Which often happen on elderly. One of the consequences of changes in old age is hypertension (Padila, 2013). Increased blood pressure in the elderly generally occurs due to decline function organ on system cardiovascular. Valve heart thicken And become rigid, as well as happen decline elasticity from aorta And arteries big others (Smeltzer & Bare, 2002 in debby, 2017). According to Riskesdas (2018) in Indonesia the incidence of hypertension is at 63,309,620 people with a mortality rate of 427,218 deaths.

Cases of hypertension in the 31-44 age group are 31.6%, 45-54 years old are 45.3% and 55-64 years old cases of hypertension are 55.2% (Triandini, 2021). According to Data Service Health Lubuk Linggau City in the year 2021 Prevalence pattern disease take care road most in The health center is hypertension, based on all age groups, hypertension is a disease most Which suffered by public with total 25,600 people. In 2022, the number of people suffering from hypertension was 23,493 people. And in 2023, the number of people suffering from hypertension increased by 34,882 people. (Lubuk Linggau City Health Service, 2023). *The American Heart Association (AHA) (2016)* stated that hypertension Which No controlled or No detected will cause attack heart disease, stroke, heart failure, kidney disease, or kidney failure, impaired vision, angina and peripheral artery disease. If left untreated this become problem for sufferer And Also for government Because will result in problem on improvement cost service health And improvement disability (Ministry of Health of the Republic of Indonesia, 2017).

Management pharmacological There is various type type drug anti hypertension among them Diuretics, Adrenergic blockers (β -blockers), Vasodilators, Enzyme inhibitors conversion angiotensin (Inhibitor ACE), Antagonist Calcium (Manurung, 2018). Non-pharmacological management can be done by: healthy diet, lifestyle good, exercise but there is also therapy alternative which can be used is by carrying out complementary therapy or therapynursing modalities, nursing modality therapy that can be done for the elderly with hypertension, including aromatherapy and healing touch, meditation, therapy music, progressive muscle relaxation, tai chi, And therapy laugh (Kushariyadi Setyoadi,

2011). Therapy Laugh is laugh Which started with stage for the sake of stage. So that effect Which felt for Which laugh truly useful. Laughter therapy to reduce stress has been widely used person. Laugh 5-10 minute Can stimulate expenditure endorphin And serotonin, which is the body's natural morphine, and also melatonin. Laugh Also can help control pressure blood with reduces the release of stress-related hormones and give relaxation. In experiment has proven that happen a 10-20 mm decrease in blood pressure after a patient follows 10 minute session laughter. But Which important laughter will control And stop disease. Thus Also when somebody at risk tall being a heart disease sufferer, laughter can be a preventive medicine that most Good, Because angry And Afraid Which is emotion The cause of heart attacks can be overcome by laughing.

RESEARCH METHODS

Design study is a research strategy in identifying problems before final planning of data collection, used to identify the research structure to be carried out (Nursalam, 2016). The research design used in this study is a pre-experimental design with a one group pre-post test design type. The purpose of this study was to analyze the effect of laughter therapy on reducing anxiety levels in hypertension patients. This assessment used a questionnaire Population is the total number consisting of objects or subjects that have certain characteristics and qualities determined by the researcher and then conclusions are drawn. (Sujarweni, 2014). The population in this study was all elderly people in the Taba Lubuk Linggau Health Center work area, which was 2,788 people . The sampling technique used in this study was the Federer formula (1963) where this study used 1 group, so the sample size used (Sastroasmoro, 2014).

RESULTS

Table 1 Average Blood Pressure Of The Elderly Before And After Intervention In The Taba Lubuk Linggau Community Health Center Work Area

No.	Variables	N	Mean	Mean Difference	SD	Min	Max	P Value
1.	Pre blood pressure	18	154.11	36.11	9.9	52.6	62.4	0,000
2.	Blood Pressure Post	18	118		13.04	30.0	43	

Based on table 1 above, it can be concluded that the average blood pressure before laughter therapy was 154.11 with a mean difference of 36.11, a standard deviation of 9.9, with a minimum value of 52.6 and a maximum value of 62.4. While the blood pressure after laughter therapy was obtained an average value of 188, a standard deviation of 13.04 and a minimum value of 30.0 and a maximum value of 43. After conducting a significance test using the Paired T test on blood pressure before and after laughter therapy, a significant change was found with a p value = 0.000 (p < 0.05). Based on the results of the study conducted by Khurnila & Wulandari (2018) entitled The Effect of Laughter Therapy on Stress Levels in Hypertension Patients Study in the working area of the Pulo Lor Health Center UPTD, Jombang Regency, it can be concluded that there is an effect of laughter therapy on stress levels in elderly people with hypertension in the working area of the Pulo Lor Health Center UPTD, Jombang Regency. The results of the study above are in accordance with research conducted by Ratnasari et al., (2018) which states that with laughter therapy, a person can reduce the burden of thought, so that it becomes relaxed, this relaxed condition will reduce a person's anxiety, with reduced anxiety will make blood flow smooth or normal again. Laughter therapy is very good because it improves the psychology of hypertension sufferers with anxiety and worries about its complications. When a person experiences changes in psychological conditions such as stress, anxiety and depression can affect blood cells to respond so as to stimulate hormone secretion.

DISCUSSION

The Effect of Laughter Therapy on Blood Pressure in Elderly People with Hypertension in the Taba Lubuk Linggau Health Center Work Area

Based on the results of the T test, a difference in blood pressure was obtained. Blood pressure before laughter therapy was 154.11 with a mean difference of 36.11, a standard deviation of 9.9, with a minimum value of 52.6 and a maximum value of 62.4. While blood pressure after laughter therapy was obtained an average value of 188, a standard deviation of 13.04 and a minimum value of 30.0 and a maximum value of 43. After a significance test using the *Paired T test* on blood pressure before and after laughter therapy, a significant change was found with a value of p = 0.000 (p < 0.05) so it

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can be concluded that there is an effect of laughter therapy on blood pressure in the elderly with hypertension in the Taba Lubuklinggau Health Center work area.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

Based on research on the effect of laughter therapy on blood pressure in the elderly in the Taba Lubuklinggau Health Center work area, the following conclusions can be drawn:

- 1. Most of the respondents 18 people (55.6%) have an age of 50-60 years.
- 2. Half of the respondents 9 people (50.0%) have male gender
- 3. Half of the 10 respondents (55.6%) before undergoing laughter therapy had blood pressure in the Stage II Hypertension category.
- 4. Most of the respondents, 11 people (61.1%) after undergoing laughter therapy, had normal blood pressure.
- 5. There is an effect of laughter therapy on blood pressure in elderly people with hypertension in the Taba Lubuk Linggau Health Center work area.

Suggestion

This research can be used as a development of science and can be used as a source or reference for further researchers related to the Effect of Laughter Therapy on blood pressure in the elderly with hypertension in the Taba Lubuklinggau Health Center work area and can provide useful information and input for the Health Center in providing laughter therapy on blood pressure in the elderly with hypertension in the Taba Lubuklinggau Health Center work area.

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