

The Influence of Laugh Therapy on Blood Pressure Reduction in Primary Hypertension in Integrated Development Post Jember

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Abstract

The aging process is susceptible to the occurrence of hypertension. Based on Central Bureau Of Statistics in 2005 in Indonesia it is estimated that there are 33 million elderly people by 2020. The ECA program from the National Institute of Mental Health found that the prevalence of one-month hypertension disorders in people aged 65 years and over 5.5%. The impact of hypertension can cause physiological, behavioral, cognitive and affective responses. Handling of Hypertension in the elderly can be done in various ways, either pharmacologically or non-pharmacologically. Laughing humor therapy is one of the non-pharmacological therapies that can reduce the level of primary hypertension. This study aims to identify the effect of laughing therapy on decreasing blood pressure in the elderly. The design of this study used Quasy experimental research with a one-group pre-post test design using cross sectional approach. The population in this study is 15 respondents, so the sampling used is total sampling. Hypertension score analysis results in 15 respondents in this study there was a decrease in the average hypertension score from before being given humor laugh therapy 31.26 to 21.86. After doing bivariate analysis with paired t-test test, the t count was 11,174 > t table 2.145 and p value 0.000 (<0.05), so Ho is rejected which means that there is a change in elderly hypertension after being given laughing humor therapy at the Jember Integrated Development Post.

Keywords: Elderly, Hypertension, Humor Therapy Laugh

I. INTRODUCTION

The aging process is a progressive change in organisms that have reached maturity and shows a decline. In the elderly showed a physical decline greater than the previous age periods and susceptible to certain diseases associated with physical decline that began to weaken and sickly (Santrock, John W, 2002: 198), although there are also healthy and productive elderly (Bondan P, 2007). In addition to experiencing physical decline and susceptibility to certain diseases, the elderly are also vulnerable to anxiety. The problem that most often causes stress in the elderly is post power syndrome. Someone entering the elderly (elderly) and suffering from hypertension will experience a decline in physical function so that it will disturb the elderly in meeting their daily needs (Activity Daily Living).

Integrated coaching post Hypertension PTM is a community in which there are elderly who continue to learn to stay healthy in their old age with the help of a nurse and health cadre. Handling of Hypertension in the elderly can be done in various ways, either pharmacologically or non-pharmacologically. Humor therapy is one of the non-pharmacological therapies that can reduce elderly hypertension. The Association for Applied and Therapeutic Humor (AATH) states that humor can be used as a therapeutic intervention using stimuli that stimulate happy expressions.

This intervention can improve health or be used as a complementary disease treatment to facilitate healing or overcome both physical, emotional, cognitive, social and spiritual. Humor therapy can be used in health services, counseling, social work, education, and business relations (Martin, 2010). The preliminary study was conducted at the Nusa Indah Integrated Development Post located in Ambulu Health Center Jember Regency. Interview results from 11 elderly people who suffered from hypertension 8 of them showed difficulties when carrying out their daily needs. Elderly people with hypertension explain that they do not know the cause of hypertension and how to prevent hypertension from recurring. The cadres of the Integrated Development Post and the elderly said that the elderly did not know about dietary foods that could cause hypertension. Another factor is the lack of experience and knowledge about hypertension.

Humor simulation can stimulate the release of serotonin and endorphine substances in the body, especially the brain that is needed to make our body more calm and comfortable. This sense of calm and comfort is expected to reduce hypertension experienced by the elderly. This simulation is effective and efficient, suitable for elderly in nursing homes, based on the phenomenon that researchers apply humor simulation as a new approach in nursing to reduce hypertension in the elderly.

II. METHODS

Based on the results of bivariate analysis with paired sample t-test test obtained t count $11,174 > t$ table value $2,145$, p value $0,000 (<0,05)$ so that it can be concluded that there is significant change in hypertension after laughing humor therapy. Thus H_0 is rejected and H_a is accepted. The results of the data normality test using the Kolmogrov Smirnov test obtained the value of p value before and after the intervention with the overall score p value > 0.05 means that the research data is normally distributed.

III. RESULT

1. General Data

Table 4.1 Distribution of frequency of respondents by age.

No	Age	F	%
1.	60-65	4	26,66
2.	66-70	4	26,66
3.	71-75	6	40
Total		14	100

Based on the data obtained in this study from 15 respondents obtained 4 respondents aged 60-65 years, 4 respondents aged 66-70 years, 6 respondents aged 71-75 years

Table 4.2 Distribution of frequency of respondents by sex.

No	Gender	Total	
		(F)	(%)
1.	Male	4	25
2.	Female	12	75
Total		16	100

Based on Table 4.2 it is known that most of the respondents are female 12 (75%).

Table 4.3 Respondent Hypertension Scores Before Humor Therapy Is Laughed At Coaching Post Built With PTM

Responden	Skor Hipertensi
1	32
2	29
3	31
4	30
5	26
6	30
7	32
8	32
9	17
10	22
11	30
12	36
13	39

14	40
15	43
Total	469
Mean	31.26
Max Score	43
Min Score	17
Std.Deviasi	6.681
Std.Error	1.725

Table 5.2 above shows that as many as 15 respondents before laughing therapy a maximum score of 43 while a minimum score of 17 with a mean value (average) that is equal to 31.26

Table 4.4 Respondent Hypertension Scores after Humor Therapy is Laughed at Coaching Post Built in PTM

Responden	Hypertension score
1	26
2	21
3	23
4	20
5	20
6	16
7	21
8	22
9	15
10	12
11	19
12	27
13	26
14	31
15	29
Total	328
Mean	21,86
Max Score	31
Min Score	12
Std.Deviasi	5.290
Std.Error	1.366

Table 5.3 above shows that as many as 15 respondents after laughing therapy a maximum score of 31 while a minimum score of 12 with a mean value (average) is equal to 21.86.

IV. DISCUSSION

A. Levels of Elderly Hypertension Before Given Laughing Humor Therapy

Hypertension can vary with Hypertension level measurement. Each item that can be viewed can be seen at 5 levels (likert scale) from 0 (zero present) to 4 (weight). The minimum score obtained is 14 while the maximum score is 56. According to the theory it corresponds to this study, in table 5.2 above that as many as 15 respondents before doing therapy reached a maximum score of 43 while a minimum score of 17 with an average value (average) that is equal to 31.26 which means hypertension deserves the maximum score. Hypertension

can be influenced by various factors, namely internal and extral hypertension. Internal hypertension including time, experience and physical assets. External hypertension in the form of knowledge, education, financial, family, medicine, and social.

B. Elderly Hypertension After Given Laughing Humor Therapy

Based on table 5.3 Hypertension scores after being given laughter humor therapy experienced a significant decrease, namely a minimum value of 12 and a maximum score of 31 with a mean value (average) of 21.86. This is because the provision of non-pharmacological teapi is laughing humor therapy. The provision of laughter humor therapy is done once on Monday, May 21, 2017, for 15 minutes, carried out in the morning at 08.00 west indonesia time in a quiet and conditioned room. Endorphine hormone will come out if we laugh for 10-15 minutes will release endorphine in sufficient quantities to eliminate anxiety and feel happy (Indra Muhtadi 2014).

C. Changes in Elderly Hypertension After Given Laughing Humor Therapy

Based on univariate analysis in table 5.3 Hypertension scores before and after laughing therapy the score of respondents experienced a change. The maximum score from before laughing therapy was 43 while after laughing therapy there was a decrease of 31 and a minimum score before laughing therapy was 17 while the minimum score after laughing therapy was 12. The results of bivariate analysis using paired sample t-test were obtained p value of 0,000 which can be concluded that Ha is accepted that is there is a change in hypertension after being given laughing humor therapy. The same research results were also obtained by Ni Luh Deliyani (2015) which stated that there was a difference in the level of hypertension in the elderly before and after being given humor therapy with a p value of 0.014. In his research also known the results of the average score of hypertension level before being given therapy by 2.60 and decreased after being given therapy at 1.70 with the difference in the mean of 0.9 or 34.7% (Deliyani, 2015)

1. CONCLUSIONS

1. Average elderly hypertension before being given laugh humor therapy is 31.26 (severe hypertension)
2. Average elderly hypertension after being given laughter humor therapy is 21.86 (moderate hypertension)
3. Average elderly hypertension after being given laughter humor therapy is 21.86 (moderate hypertension)
4. There were significant changes in hypertension before & after laughing humor therapy.

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