

The Effect Of Peer Support Group On The Quality Of Life Of Adults With Hypertension

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Abstract

Hypertension can reduce the quality of life of sufferers due to various complications that affect organs and side effects of antihypertensive drugs . One effort to improve the quality of life of hypertension sufferers is through peer support groups . The purpose of this study was to determine the effect of peer support groups on the quality of life of adults with hypertension at the Wanaraja Health Center, Garut Regency. The study was a quasi-experimental study with a static group comparison design . The population in this study were adults with hypertension at the Wanareja Health Center. The sample in this study was taken by purposive sampling of 40 respondents for each group. Data collection was carried out using the EuroQol 5-dimensional questionnaire (EQ-5D-5L). The data analysis technique used Mann Whitney. The results of the study showed that there was an effect of peer support groups on the quality of life of adults with hypertension. Respondents who received peer support groups had a better quality of life than respondents who did not receive peer support groups.

Keywords: Hypertension, Quality of Life, Peer Support Group

INTRODUCTION

Hypertension is a condition in which blood pressure is above 140/90 mmHg (Suirvi, Herlina and Dewi, 2022) . Hypertension is a major contributor to global morbidity and mortality, affecting approximately one billion people worldwide. Its prevalence, combined with its role as a risk factor major risk factor for cardiovascular disease, making it of great public health importance (Satapathy *et al.* , 2024) .

Researchers estimate that hypertension affects 1 billion people worldwide and currently kills 9 million people each year. WHO calls on governments, academic communities, health workers, civil society, the private sector, families and individuals to unite in reducing hypertension and its impacts (Zhao, Zhang and Ma, 2020) . By 2030, it is estimated that hypertension will be the cause of death for more than a quarter of the population in developed and developing countries,

including Indonesia (Nurarifah and Damayanti, 2022) .

According to Riskesdas 2018, the prevalence of hypertension in Indonesia increased from 25.8% in 2013 to 32.2% in 2018 (Khoirunnisa and Akhmad, 2019) . The prevalence of hypertension in the elderly shows a higher figure. The prevalence of hypertension in Indonesia continues to show an increase, namely 63.2% at the age of 65-74 years and 69.5% at the age of over 75 years (Prastika and Siyam, 2021) .

The results of the 2018 Riskesdas in West Java Province showed that the prevalence of hypertension based on measurement results in the population aged > 18 years was 39.6, an increase compared to the results of the 2013 Riskesdas, which was 29.4 (West Java Provincial Health Office, 2022) . Data from the Garut Regency Health Office in 2018, cases of hypertension spread across 67 Health Centers were obtained as many as 82,638 cases. Data from the Wanareja Health Center showed that there were 256 hypertension sufferers of productive age in its area.

Hypertension can reduce the quality of life of sufferers due to various complications that affect organs and side effects of antihypertensive drugs. (Parra, Romero and Cala, 2021) . Quality of life is a person's perception of how good or bad their life is (Von Visger *et al.* , 2018) . Low health-related quality of life in patients has the

potential to increase hospitalizations, reduce patient income, social relationships, increase psychological problems, and physical disability (Adamu *et al.* , 2022) .

One of the efforts to improve the quality of life of hypertension sufferers is through *peer support groups* . *Peer support Group* therapy is a method of group therapy and support carried out in groups by fellow victims who have the same problems or experiences. (Suyasa *et al.* , 2023) . Providing peer group support has been shown to have an impact on quality of life. (Suyasa *et al.* , 2023) .

The purpose of this study was to determine the effect of *peer support groups* on the quality of life of adults with hypertension at the Wanaraja Health Center, Garut Regency..

RESEARCH METHOD

The research is a quasi-experiment with a static group comparison design , where one group receives treatment (X), namely by being given a *peer support group* compared to another group that is not given treatment to obtain the effect of treatment (X) (Sinambela and Sinambela, 2022) .

The experimental design in this study can be described as follows:

$$\frac{X \ O_1}{O_2}$$

Figure 1. *Static Group Comparison Design*

The population in this study were adults suffering from hypertension at the Wanareja Health Center. The sample in this study was taken by *purposive sampling* of 40 respondents for each group.

Data collection was conducted using the EuroQol 5-dimensional questionnaire

(EQ-5D-5L) with the Indonesian version of the value set (Purba *et al.* , 2017) . The data analysis technique in this study used the independent sample t-test if the research data was normally distributed and Mann Whitney if the research data was not normally distributed.

RESEARCH RESULT AND DISCUSSION

Respondent Characteristics

Respondent characteristics include gender, age, education and occupation. The results can be described in table 1.

Table 1. Respondent Characteristics

Characteristics	Category	Experimental Group		Control Group		p
		N = 40	%	N = 40	%	
Gender	Man	16	40.0	15	37.5	1,000
	Woman	24	60.0	25	62.5	
Age	≤ 50 years	14	35.0	16	40.0	0.817
	> 50 years	26	65.0	24	60.0	
Education	SD	2	5.0	0	0.00	0.549
	JUNIOR HIGH SCHOOL	5	12.5	3	7.5	
	High School/Vocational School	17	42.5	21	52.5	
	D3	7	17.5	6	15.0	
	S1/S2	9	22.5	10	25.0	
Work	civil servant	6	15.0	8	20.0	0.237
	Private sector employee	8	20.0	5	12.5	
	Indonesian National Armed Forces/Indonesian National Police	4	10.0	0	0.0	
		6	15.0	8	20.0	
		12	30.0	17	42.5	
		4	10.0	2	5.0	
	Self-employed					
	Laborer Farmer					

Table 1 shows that based on gender, most of the respondents in the experimental group were female, namely 24 respondents (60.0%) and the control group were female,

namely 25 respondents (62.5%). The p-value of 1,000 indicates that there is no difference in respondent characteristics based on

gender in the experimental group and the control group.

Based on age, most of the respondents in the experimental group were > 50 years old, namely 26 respondents (65.0%), and the control group was > 50 years old, namely 24 respondents (60.5%). The p-value of 0.817 indicates that there is no difference in the characteristics of respondents based on age in the experimental group and the control group.

Based on education, most of the respondents in the experimental group had a high school/vocational high school education, namely 17 respondents (42.5%), and the least elementary school education, namely 2 respondents (5.0%). In the control group, most of the respondents had a high school/vocational high school education, namely 21 respondents (52.5%), and the least junior high school education, namely 3 respondents (7.5%). The p-value of 0.549 indicates that there is no difference in the characteristics of respondents based on

education in the experimental and control groups.

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Quality of Life of Adults with Hypertension

The quality of life of hypertension is described in Table 2.

Table 2. Quality of Life of Adults with Hypertension

Quality of Life	Experimental Group		Control Group	
	N = 40	%	N = 40	%
Walking Ability				
No difficulty in walking	27	67.5	20	50.0
Slight difficulty in walking	12	30.0	17	42.5
Quite a bit of difficulty walking	1	2.5	3	7.5
Very difficult to walk	0	0.0	0	0.0
Can't walk	0	0.0	0	0.0
Self Care				
No difficulty in performing self-care	34	85.0	29	72.5
Some difficulty in performing self-care	6	15.0	11	27.5

It's quite difficult to do self-care	0	0.0	0	0.0
Very difficult to perform self-care	0	0.0	0	0.0
Unable to perform self-care	0	0.0	0	0.0
Common Activities				
No difficulty in doing activities	31	77.5	27	67.5
Slight difficulty in performing activities	9	22.5	13	32.5
Quite difficult to do activities	0	0.0	0	0.0
Very difficult to do activities	0	0.0	0	0.0
Can't do activities	0	0.0	0	0.0
Pain/Discomfort				
No pain/discomfort	2	5.0	1	2.5
Feeling a little sore/uncomfortable	27	67.5	18	45.0
Just feel pain/discomfort	11	27.5	20	50.0
Feeling very sore / uncomfortable	0	0.0	1	2.5
Feeling extremely painful / uncomfortable	0	0.0	0	0.0
Anxiety / Depression (Sadness)				
Not feeling anxious/depressed	10	25.0	8	20.0
Feeling a little anxious/depressed	26	65.0	23	57.5
Just feeling anxious/depressed	2	5.0	8	20.0
Feeling very anxious/depressed	2	5.0	1	2.5
Feeling extremely anxious/depressed	0	0.0	0	0.0
Average Utility Value	0.771 $\pm$ 0.145		0.709 $\pm$ 0.170	

Table 2 shows that in the dimension of walking ability, there were 37.5% of respondents who experienced problems in the experimental group, and 50.0% in the control group. In the self-care dimension, there were 15.0% of respondents who experienced problems in the experimental group, and 27.5% in the control group. In the usual activities dimension, there were 22.5% of respondents who experienced problems in the experimental group, and 32.5% in the control group. In the pain/discomfort dimension, there were 95.0% of respondents who experienced problems in the experimental group, and 97.5% in the control group. In the anxiety/depression (sad) dimension, there were 75.0% of

respondents who experienced problems in the experimental group, and 80.0% in the control group. The average utility value in the control group was 0.771 $\pm$ 0.145 and in the control group was 0.709 $\pm$ 0.170 .

Data Analysis and Hypothesis Testing

Before data analysis and hypothesis testing, a normality test was first performed. The normality test was used as a requirement for using parametric statistics. The test was performed using the Kolmogorov-Smirnov test . The results of the data normality test are described in Table 3.

Table 3. Summary of Data Normality Test Results

Variables	KS-Z	p	Information
Experimental Group Utility Value	0.274	0,000	Abnormal
Control Group Utility Value	0.195	0.001	Abnormal

Table 3 shows that the utility values for the experimental group and the control group are not normally distributed, as indicated by the p value < 0.05 . Based on this, the data analysis in this study used the Mann-Whitney test.

The results of the Mann-Whitney test can be described in table 4.

Table 4. Mann-Whitney Test Results

Statistics	Mark
Mann-Whitney U	578,000
Wilcoxon W	1398,000
Z	-2,148
p	0.032

Table 4 shows that the p value is 0.032 ($p < 0.05$), so it is concluded that there is an influence of peer support groups on the quality of life of adults with hypertension. Respondents who get peer support groups have a better quality of life than respondents who do not get peer support groups .

DISCUSSION

The average utility value in the control group was 0.771 ± 0.145 and in the control group was 0.709 ± 0.170 . The average utility value in the control group that did not receive peer support was slightly higher than the results of Hamida *et al.*'s (2019) study at the Palu City Health Center, Central Sulawesi Province, which showed an average utility of 0.767 ± 0.154 .

When looking at each dimension of quality of life, the dimension of pain/discomfort and the dimension of anxiety/depression (sadness) are the dimensions with the most respondents experiencing problems. This is in accordance with the results of research (Lolo *et al.* , 2022) ; and Khoirunnisa and Akhmad (2019) who found that the quality of life of hypertension sufferers in the mental domain was lower than the physical domain.

The results of the study showed that there was an influence of *peer support groups* on the quality of life of adults with hypertension. The quality of life of respondents who were given peer support groups was obtained at 0.771 ± 0.145 , higher than the quality of life of respondents who were not given *peer support groups* at 0.709 ± 0.170 . The results of this study support the results of the study by Suyasa *et al.* (2023) .

Support Peers are the presence of peers to provide support, encouragement, acceptance and attention, which in turn can improve a person's quality of life (Azwan, Herlina and Karim, 2015) .

Peer support has a positive impact on reducing stress levels, depression, and mental health disorders. In addition, peer

support also makes a person feel loved, appreciated, and actively involved. (Asrar and Taufani, 2022) .

The above description is in accordance with the results of research by Zhang, Li and Hu (2022) on cancer patients, which showed a positive influence of *peer support* on the quality of life of cancer patients. *Peer support* acts as a successful role model, inspires hope and facilitates recovery in cancer patients, and patients may be more willing to share their problems with peer support and listen to the advice given . In addition, peers can help patients manage physical symptoms, cope with distressing emotions, and connect patients with resources in clinics and communities . Meanwhile, research by Haidari, Moeini and Khosravi (2017) found that peer support programs have a positive impact on adherence to treatment regimens in hypertensive patients.

If we look at the theory and results of previous studies above, then the implementation of peer support groups will help improve the quality of life, not only in the mental domain, but also the physical domain. In the mental dimension, peer support is done by providing encouragement, acceptance, and attention, inspiring hope , so that it will reduce anxiety/depression (sadness).

Peer support will also facilitate recovery in cancer patients in the physical aspect. This is done by encouraging patients

to comply with the treatment they are undergoing, and providing encouragement to be regular in having health checks and living a healthy life. Xiao *et al.* (2019) stated that promoting a healthy lifestyle will improve the quality of life related to the health of hypertensive patients. This supports the research of Li *et al.* (2018) which shows the positive influence of a lifestyle that supports health on the quality of life of hypertensive patients.

CONCLUSION

The results of the study showed that there was an influence of *peer support groups* on the quality of life of adults with hypertension. Respondents who received *peer support groups* had a better quality of life than respondents who did not receive *peer support groups* . Suggestions for further research, should be able to conduct research on the quality of life of hypertension patients using the mixed method in order to dig deeper into the factors that influence the quality of life of hypertension patients.

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