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# The Relationship of Self-Management with Quality Lives of Hypertension Patients

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© 2024 The Authors. This open access article is distributed under a (CC-BY License) Abstract: Hypertension is one of the non-communicable diseases that can cause death. This disease is categorized as a silent disease because people with hypertension do not know they have hypertension before checking their blood pressure. Nationally population prevalence of Indonesia with high blood pressure reaches 34.11% of Indonesia's total population of 270.20 million people. The purpose of the study was to determine the relationship between self-management and the quality of life of people with hypertension in the Working Area of the Pariaman Health Center in Pariaman City in 2023. Type of analytical descriptive research with a research design using a crosssectional approach. This research was conducted in the working area of the Pariaman Health Center in Pariaman City in 2023. The population in this study was 5337 people, while the sample taken was 44 people from September 20 to October 6, 2023. Sampling through Purposive Sampling. Statistical tests using univariate analysis and bivariate analysis using Chi-Square. The results of the study show Most of the people with hypertension (50.0) have poor Self Management in overcoming the problem of hypertension, and Most of the people with hypertension (50) have a poor quality of life. There is a significant relationship between Self-Management and the Quality of Life of Hypertensive Patients in the Working Area of the Pariaman Health Center in Pariaman City in 2023 (p-value = 0.000 < 0.05). Respondents should pay more attention to the food consumed, exercise, or activities that are useful to improve heart performance, reduce smoking habits that can cause decreased blood flow to various organs, and improve heart performance.

Keywords: Hypertension; Quality of life; Self management

# Introduction

Hypertension is one of the non-communicable diseases that can cause death (Kavishe et al., 2015; Ordunez & Campbell, 2015). West Sumatra itself is one of the provinces with a fairly high prevalence of hypertension, namely 22.60% (Neini & Permata, 2019). The prevalence of hypertension in West Sumatra which has hypertension sufferers in the first place is Sawah Lunto City, namely 33.11%, then Tanah Datar 31.57%, Solok 31.46%, Bukittinggi City 31.05%, Payakumbuh City 27.59%, Agam 27.07%, Sijunjung 26.77%, Fifty Cities 24.53%, West Pasaman 24.30%, Solok City 24.00%, South Coast 24.00%, Pariaman City 23.30%,

Pasaman 23.24%, Padang City 21.75%, and Mentawai Islands 16.87% (Riskesdas, 2018). Efforts that will be made to prevent and control hypertension are by improving self-management with the quality of life of community-based hypertension sufferers (Abbas et al., 2024; Kurnia et al., 2023). Self-management is an individual's ability to maintain effective behavior and disease management that can be applied in daily life to help clients reduce and maintain stable blood pressure (Igarashi, 2019; Igarashi, 2019). Family support plays a very important role in the self-management of hypertensive patients to control blood pressure (Manangkot et al., 2020; Maslakpak et al., 2018).

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Self-management programs provide opportunities to improve quality of life. Quality of life according to the World Health Organization Quality of Life or WHOQOL can be interpreted as an individual's perception of their position in life where in the context of culture and value systems they have goals, hopes, and standards in life (Bdier et al., 2023; Malibary et al., 2019). Healthy lifestyle compliance behavior is very necessary so that hypertensive patients adopt a healthy lifestyle so that blood pressure can be controlled and complications do not occur. According Abedini et al. (2023) and Rodrigues et al. (2023), to social cognitive theory, environmental factors influence a person's behavior and these environmental factors can influence personal factors and then personal factors influence lifestyle compliance. Currently, research is about relationships between environmental factors with adherence to a healthy lifestyle mediated by personal factors based on social cognitive theory (Obirikorang et al., 2022).

The results of research conducted by Delavar et al. (2020) and Lu et al. (2022), on the influence of selfmanagement on the blood pressure of elderly people with hypertension, where the results showed that there was an influence of self-management on the blood pressure of the elderly (p-value = 0.000 < 0.05). The results of research conducted by Ida Suryawati et al. (2023)also showed that there was a significant relationship between self-management and the quality of life of hypertension sufferers in the Baki Sukaharjo health center working area (p value=0.000<0.05). According to based on an initial study, researchers conducted on 6 patients suffering from hypertension, 4 of whom stated that when their head felt painful or heavy and sometimes accompanied by cramps in the arms, they measured their blood pressure, they would come to the health center or hospital accompanied by treatment directly from a doctor's prescription (Timmermans et al., 2022).

They can control themselves with actions that will be taken to encourage the avoidance of undesirable things 2 more people could not control themselves well, they said that if they had high blood pressure they rarely had their blood pressure measured either at the nearest midwife's house or at health service posts such as community health centers or hospitals. Meanwhile, when asked about their assessment regarding the health conditions they experience, they answered that if high blood pressure occurs, they only take natural treatment from leaves or plants which can lower blood pressure, and the diet they consume does not adhere to a diet for hypertension, they eat the food is as if nothing had happened to him (Tomé-Carneiro & Visioli, 2023; Mphuthi & Husaini, 2022). Efforts to overcome unstable blood pressure control require selfmanagement with the quality of life of hypertension sufferers.

#### Method

#### **Research Participants**

This research was carried out in the work area of the Pariaman Health Center, Pariaman City in 2023. The population in this research was 5337 people, while the sample taken was 44 people on September 20 s. /d 6 October 2023.

#### Data Collection

This research uses a descriptive-analytical research type with a research design using a cross-sectional approach (Wang & Cheng, 2020).

#### Data Analysis

Sampling through purposive sampling. Statistical tests using univariate analysis and bivariate analysis using Chi-Square. The results of the study show Most of the people with hypertension (50.0) have poor Self Management in overcoming problem the of and Most of hypertension, the people with hypertension (50) have a poor quality of life. There is a significant relationship between Self-Management and the Quality of Life of Hypertensive Patients in the Working Area of the Pariaman Health Center in Pariaman City in 2023 (p-value = 0.000 < 0.05).

## **Result and Discussion**

#### Univariate Analysis

#### Self Management

Based on table 1, it can be seen that the majority of hypertension sufferers (50.00%) have poor selfmanagement in overcoming the problem of hypertension. This study shows that half of the hypertension sufferers are aged 56-65 years (25.00%) and >65 years (4.50%) have the lowest score for hypertension sufferers. Although half of the hypertension sufferers (79.60%) have junior high school education and high school. Meanwhile, half of hypertension sufferers (20.50%) have elementary or tertiary education.

**Table 1.** Frequency Distribution of Self-managementfor Hypertension Sufferers

| Self-Management |    | Frequency |
|-----------------|----|-----------|
| Good            | 2  | 4.5       |
| Enough          | 20 | 45.50     |
| Bad             | 22 | 50.00     |
| Amount          | 44 |           |

As for the relationship between work and hypertension sufferers, most of them work as private sector workers (59.10%) and traders (13.60%). Then, hypertension sufferers have at least the same percentage of work, namely civil servant work with a percentage (9.10%), and private sector with a percentage. (9.10%), and farmers with a percentage (9.10%). However, self-management is defined in different ways (Koetsenruijter et al., 2014; Gauthier-Beaupré et al., 2023), but generally, it is described as an individual's ability to manage the symptoms, treatment, physical and psychological consequences, and lifestyle changes inherent in the life of someone with a chronic illness (Barlow et al., 2002; Ngai et al., 2020; Yoo-Jeong et al., 2023).

#### Quality of Life for Hypertension Sufferers

Based on Table 2, it can be seen that the majority of hypertension sufferers (50.00%) have a very poor quality of life. This research shows that half of the hypertension sufferers are aged 56-65 years (25.00%)

and >65 years (4.50%) have the lowest score for hypertension sufferers. Although half of the hypertension sufferers (79.60%) have junior high school education and High school. Meanwhile, half of hypertension sufferers (20.50%) have elementary or tertiary education (Fandinata et al., 2022). As for the relationship between work and hypertension sufferers, most of them are housewives with presentations (59.10%) and traders (13.60%). Then, hypertension sufferers have at least one job with the same percentage, namely civil servant employment with a percentage (of 9.10%), private sector with a percentage (of 9.10%), and farmers with a percentage (of 9.10%). Quality of Life is an individual assessment regarding the health condition they are experiencing. Based on (Borg et al., 2019); (Ojelabi et al., 2017); (Cudris-Torres et al., 2023), quality of life can be defined as a conceptual measure to assess the impact of a therapy carried out on patients with chronic diseases.

**Table 2.** Frequency Distribution of Quality of Life for Hypertension Sufferers

|                  |      |      |        |       | Quality of Life |     |    |        |         |
|------------------|------|------|--------|-------|-----------------|-----|----|--------|---------|
| Self- Management | Good |      | Enough |       | -               | Bad |    | Amount | P value |
|                  | Ν    | %    | Ν      | %     | Ν               | %   | Ν  | %      |         |
| Good             | 3    | 6.80 | 0      | 0     | 0               | 0   | 3  | 6.80   | 0.00    |
| Enough           | 0    | 0    | 41     | 93.20 | 0               | 0   | 41 | 93.20  |         |
| Bad              | 0    | 0    | 0      | 0     | 44              | 100 | 44 | 100    |         |
| Amount           | 3    | 6.80 | 41     | 93.20 | 44              | 100 | 88 | 200    |         |

## **Bivariate** Analysis

Based on the table 3, there were 3 (6.80%) respondents who had self-management and a good quality of life for hypertension sufferers, 41 (93.20%) respondents who had self-management and a good quality of life were found, self-management and poor quality of life was obtained by 44 (100%) respondents. After carrying out statistical tests, it was found that the p-value = 0.00 < 0.05, meaning that there was there is a significant relationship between Self-Management and the Quality of Life of Hypertension Sufferers in the Working Area of Pariaman Health Center, Pariaman City in 2023. The results of this study show that more than half of hypertension sufferers are aged 46-55 years with a presentation of (38.60%) and 36 -45 years (31.80%) have a high score of hypertension sufferers. As for the relationship between work and hypertension sufferers, most of them are housewives with presentations (59.10%) and traders (13.60%) even though half of the hypertension sufferers (79.60%) have middle and high school education. After carrying out statistical tests, it was found that the p-value = 0.000 <0.05, meaning that there is a significant relationship between Self-Management and the Quality of Life of

Hypertension Sufferers in the Pariaman Health Center Working Area, Pariaman City in 2023.

**Table 3.** Relationship between Self-Management andQuality of Life of Hypertension Sufferers

| Quality of Elic of Hypertension cancelers |           |              |  |  |  |
|---|-----------|--------------|--|--|--|
| Quality of Life                           | Frequency | Percentage % |  |  |  |
| Good                                      | 1         | 2.30         |  |  |  |
| Enough                                    | 21        | 47.20        |  |  |  |
| Bad                                       | 22        | 50.00        |  |  |  |
| Amount                                    | 44        | 100          |  |  |  |

The results of this research are the same as those conducted by Chen et al. (2022) and Yulianti et al. (2023), regarding the relationship between self-management and the quality of life of hypertension sufferers in the (Qiu et al., 2019; Kordvarkane et al., 2023), Community Health Center working area, where there is a relationship between self-management and the quality of life of hypertension patients, namely (p-value = 0.000 < 0.05). Apart from that, research conducted by Gąsiorowski et al. (2017) and Ainiyah et al. (2023), on the relationship between self-management and the quality of life of hypertensive elderly people also obtained the same results, namely that there was a

significant relationship between self-management and the quality of life of hypertensive elderly people (pvalue = 0.000 < 0.05). Self-management is a psychological term used to explain the process of achieving independence (personal autonomy) (Cronly & Savage, 2019; Guay, 2022; Kahl et al., 2023). Selfmanagement is necessary for someone to be able to make themselves a quality and useful human being in carrying out their life mission (Klockar et al., 2023).

# Conclusion

From the results of research on the relationship between Self-Management and the Quality of Life of Hypertension Sufferers in the Working Area of the Pariaman Health Center, Pariaman City in 2023, it can be concluded that: The majority of hypertension sufferers (6.80%) have good self-management, (93.20) adequate self-management, (100%) have poor selfmanagement in overcoming the problem of hypertension. The majority of hypertension sufferers (6.80%) have a good Quality of Life, (93.20) have an adequate Quality of Life, and (100%) have a poor Quality of Life in dealing with the problem of hypertension.

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## Author's Contribution

Conceptualization, L. M., A, Y. M., M. S. S.; methodology, L. M.; validation, A.and.; Y. M. formal analysis, M. S. S.; investigation, L. M., and A.; resources, Y. M. and. M. S. S; data curation, L. M.: writing—original draft preparation, A and Y. M.; writing—review and editing, M. S. S.: visualization, L. M and A. All authors have read and agreed to the published version of the manuscript.

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## **Conflict of Interest**

The authors declare no conflict of interest.

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