

## QUALITY OF LIFE FOR HYPERTENSION PATIENTS RECEIVING MEDICATION THERAPY WITH AMLODIPINE AT THE BARA-BARAYA HEALTH CENTER

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### Abstract

**Background:** In order to evaluate the effects of a therapy administered to patients with chronic diseases, quality of life is an individual assessment related to the health conditions that are being experienced. The sorts of hypertension medications that hypertensive patients take are examined as part of the quality of life assessment process for these patients. Being a non-communicable illness, hypertension can lower quality of life because it takes a long time and requires frequent treatment. Amlodipine is the medication used for hypertension the most frequently. **Purpose:** the quality of life of hypertension patients receiving medication therapy for amlodipine at the Bara-Baraya Health Center in Makassar City. **Method:** Total sampling was the sample strategy employed, and 14 respondents were found based on the quality of life criteria. The SF-30 questionnaire was utilized to collect data. **Result:** physical function thrived with 85.7% in the "good" category, while physical limitations and body pain struggled with 85.7% and 57.2% in the "bad" category, respectively. General health and social function presented a mixed picture, with 64.3% and 71.4% falling into the "bad" range. On a brighter note, vitality, emotional limitations, and mental health showcased positive performances, with 71.4% and 64.3% in the "good" category for each. **Conclusion:** The study's findings demonstrated that 50% of hypertension patients receiving amlodipine medication therapy at the Bara-Baraya Health Center in Makassar City had a low quality of life.



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### Introduction

A person's lifestyle has a big impact in the current era of globalization. Lifestyle is an important factor in a person's survival. There are unhealthy lifestyles that we often adopt, such as consuming fast food, consuming too much salt, consuming too much fatty food, smoking, drinking alcoholic beverages and not doing enough physical activity. This lifestyle can have an impact on health, causing hypertension and other diseases (1).

The World Health Organization (WHO) estimates that the global prevalence of hypertension currently reaches 22% of the world's total population. The highest prevalence of hypertension is in Africa, namely 27%. Southeast Asia is ranked 3rd highest with a prevalence of 25% of the total population. According to Riskesdas data from 2018, the population aged 15 and over exhibits risk factor data such as the percentage of people who do not eat enough fruit and vegetables (95.5%), the percentage who do not exercise (35.5%), the percentage who smoke (29.5%), the percentage of people who are centrally obese (31%), and the percentage of people who are generally obese (21.8%) (2).

Quality of life can be defined as a conceptual measure to assess the impact of a therapy carried out on patients with chronic diseases. The measurements include well-being, survival, and a person's ability to independently carry out daily activities and activities. The quality of life in hypertensive patients is accompanied by complications that can reduce several psychological, social and physical aspects. Quality of life measurements carried out on hypertensive patients include examining the type of hypertension medication consumed by hypertensive patients (3).

Combinations of genetic, environmental, and societal factors lead to hypertension, the primary risk factor for cardiovascular disease. Environmental variables include being overweight or obese, eating an unhealthy diet, not getting enough potassium or sodium in the diet, not exercising enough, and drinking alcohol (4).

The pharmacological therapy that is usually given or prescribed is the drug Amlodipine. Amlodipine is an antihypertensive drug that is most widely used as monotherapy or combination therapy for hypertensive patients. Amlodipine acts as a calcium channel blocker (CCB) to produce pharmacological effects as an antihypertensive medication. Calcium channel blockers (CCBs) relax smooth muscle, which lowers blood pressure by preventing calcium from entering cardiac cells and blood vessel walls (5).

According to the background information provided above, researchers were encouraged to conduct a study titled "Image of the Quality of Life of Hypertension Patients with Amlodipine Drug Therapy at the Bara-Baraya Community Health Center, Makassar City" because of the large number of people who suffer from hypertension and the lack of knowledge about the condition's quality of life, particularly in Makassar City.

## Materials and Methods

Using a questionnaire given to respondents, the study design is cross-sectional descriptive research with the goal of gaining a general understanding of the quality of life of hypertensive patients with regard to the medication amlodipine in the working area of the Bara-Baraya Health Center, Makassar City. In June 2023, this study was carried out at Makassar City's Bara-Baraya Community Health Center. Patients with hypertension made up



the study's sample, and they were chosen by a total sampling technique combined with probability sampling.

Data collection was carried out using a generic quality of life questionnaire instrument, namely the 36-item Short Form (SF-36). The data management technique used in this research was carried out by calculating the score for each subvariable produced by the respondent. In the SF-36 questionnaire there are 8 subvariables which are health criteria, namely physical function, pain, general health, vitality, social function, emotional limitations and mental health. The following are the determination scores from the SF-36 questionnaire.

## Results

Table 1 demonstrates that, on average, patients with hypertension who are above 65 years of age comprise 6 individuals (42.8%). Nine out of 14 patients (64.3%) who are on amlodipine medication for hypertension are female. In the Bara-Baraya Community Health Center, 50% of hypertension patients receiving amlodipine therapy report having a low quality of life.

**Table 1. Characteristics of Respondents**

| Characteristics        | n         | %          |
|------------------------|-----------|------------|
| <b>Age</b>             |           |            |
| 35 – 44                | 2         | 14.3       |
| 45 – 54                | 2         | 14.3       |
| 55 – 64                | 4         | 28.6       |
| >65                    | 6         | 42.8       |
| <b>Gender</b>          |           |            |
| Men                    | 5         | 35.7       |
| Woman                  | 9         | 64.3       |
| <b>Quality of Life</b> |           |            |
| Good                   | 7         | 50         |
| Bad                    | 7         | 50         |
| <b>Total</b>           | <b>14</b> | <b>100</b> |

Table 2 shows that physical function domain, of the 14 respondents, 12 people (85.7%) had a good quality of life and 2 people (14.3%) had a poor quality of life. In the physical limitations domain, it can be seen that of the 14 respondents, 2 people (14.3%) had a good quality of life and 12 people (85.7%) had a poor quality of life. In the body pain domain, it is known that of the 14 respondents, 6 people (42.8%) of them have a good quality of life and 8 people (57.2%) have a poor quality of life. In general, in the health domain, it can be seen that of the 14 respondents, 5 people (35.7%) of them have a good quality of life and 9 people (64.3%) have a poor quality of life. Of the 14 respondents, 10 people (71.4%) of them had

good quality of life and 4 people (28.6%) in terms of vitality (energy) of patients with hypertension on Amlodipine therapy. Of the 14 respondents, 4 people (28.6%) had good quality of life and 10 people (71.4%) had poor quality of life in terms of the social function domain in hypertensive patients. of the 14 respondents, 9 people (64.3%) had a good quality of life and 5 people (35.7%) had a poor quality of life in terms of the emotional limitations of patients suffering from hypertension. Of the 14 respondents, 9 people (64.3%) had good quality of life and 5 people (35.7%) had poor quality of life in terms of mental health of patients with hypertension.

**Table 2. Quality of Life Domain Results for Hypertension Patients with Amlodipine Therapy at the Bara-Baraya Community Health Center, Makassar City**

| Quality of Life Domain       | Frequency | Percentage (%) |
|------------------------------|-----------|----------------|
| <b>Physical Function</b>     |           |                |
| Good                         | 12        | 85.7           |
| Bad                          | 2         | 14.3           |
| <b>Physical limitations</b>  |           |                |
| Good                         | 2         | 14.3           |
| Bad                          | 12        | 85.7           |
| <b>Body Pain</b>             |           |                |
| Good                         | 6         | 42.8           |
| Bad                          | 8         | 57.2           |
| <b>Overall Health</b>        |           |                |
| <b>General</b>               |           |                |
| Good                         | 5         | 35.7           |
| Bad                          | 9         | 64.3           |
| <b>Vitality</b>              |           |                |
| Good                         | 10        | 71.4           |
| Bad                          | 4         | 28.6           |
| <b>Social Function</b>       |           |                |
| Good                         | 4         | 28.6           |
| Bad                          | 10        | 71.4           |
| <b>Emotional Limitations</b> |           |                |
| Good                         | 9         | 64.3           |
| Bad                          | 5         | 35.7           |
| <b>Mental health</b>         |           |                |
| Good                         | 9         | 64.3           |
| Bad                          | 5         | 35.7           |
| <b>Total</b>                 | <b>14</b> | <b>100</b>     |

## DISCUSSION

According to this study, hypertension patients receiving amiodipine medication at Makassar City's Bara-Baraya Community Health Center have a high quality of life (85.7%) in the physical function category. This happens because in general the respondents in this study still have enough energy to carry out daily activities. The activities that respondents do every day will increase overall heart efficiency so that they can improve their quality of life. This is in line that of the 69 respondents, (37.68%) of them had a "good" quality of life in terms of the physical function of patients suffering from antihypertension who did not experience physical limitations in carrying children, stairs and walking 1.5 km and does not experience limitations in bathing or wearing his own clothes so that it does not affect his quality of life (6).

Most hypertensive patients experience headaches, neck pain and dizziness which interfere with daily activities (7). This is in line with research Timburas (2023), namely that there is a relationship between pain intensity and blood pressure, the higher the blood pressure, the higher the intensity of pain felt (8).

Based on the research results, it can be seen that of the 14 respondents, 4 people (28.6%) had a good quality of life and 10 people (71.4%) had a poor quality of life in terms of the social function domain in hypertensive patients. Patients who experience poor quality of life feel that their health is worse than one year ago and also feel sick more easily. This research is in line with Jufar (2017) which shows that the quality of life regarding health in hypertensive patients is still less than optimal. Increased blood pressure that lasts for a long period of time can cause damage to the kidneys, heart and brain if not detected early and received adequate treatment (9).

Based on the research results, it can be seen that of the 14 respondents, 9 people (64.3%) had a good quality of life and 5 people (35.7%) had a poor quality of life in terms of the emotional limitations of patients with hypertension. This is in contrast to research Timburas (2023), where the results obtained show that the quality of life decreases due to disturbances in psychological aspects such as having negative traits, being easily emotional, having difficulty concentrating, which causes disruption to other activities or work which causes it to take longer or not. Be careful in completing work. This is because the patient does not feel sad, depressed or anxious, so the results of this study, which are viewed from emotional limitations, have a good quality of life (8).

Based on the research results, it can be seen that the respondents have a poor quality of life in terms of the mental health of patients suffering from hypertension. This is because patients suffering from hypertension do not experience serious problems in their mental health such as feeling nervous, depressed, feeling calm and peaceful as well as feeling hopeless and sad and some of the patients are cheerful people. This is in line with research Nurhaliza (2021) and where one of the causes of increased blood pressure in hypertensive

patients is stress (10). Stress can reduce four aspects of their quality of life, namely physical health aspects including daily activities, fatigue, dependence on drugs, then psychological aspects related to an individual's mental state such as feelings of negativity, Self Esteem Depression can causes physical changes, thoughts, feelings and behavior, which can interfere with a person's physical activity, especially the elderly. So the results of this study show that hypertensive patients with Amlodipine drug therapy have a good quality of life (11)

## Conclusion

Based on the description of the research results and discussion, it can be concluded that 50% of hypertension patients receiving medication therapy with amlodipine at the Bara-Baraya Community Health Center in Makassar City fall into the low quality of life category.

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