The prevalence of hypertension is high in several countries. Another study found that 3 of 5 people in India have hypertension. In the USA, 1 of 2 people suffer from hypertension. The prevalence of hypertension was found to be higher in men, older adults, obese and overweight adults. Hypertension is a risk factor that increases the risk of cardiovascular disease and stroke, both of which are the most common causes of morbidity and mortality in the United States. Good management of hypertensive patients is a crucial strategy to prevent this increase in morbidity and mortality.

Self-care behavior is an important component in controlling blood pressure in hypertensive patients. Self-care is the process of someone doing health care through adherence to medication, health promotion efforts, monitoring behavior and managing signs, and symptoms that occurred. The results of the study showed that awareness, adherence to treatment, and the ability to control blood pressure were still low. Only 39.64% of hypertensive patients have well-controlled blood pressure. Adherence to a low-salt diet was also found to be only 22%. Meanwhile, another study found that although hypertensive patients had tried to comply with treatment, they had limitations in getting the treatment. Several studies have shown that self-care in hypertensive patients is still relatively low. The low self-care in hypertensive patients is influenced by the presence of comorbidities, education level and lack of self-care education. Health belief is also a factor that affects self-care in hypertensive patients. Efforts to improve self-care should be made through increasing awareness and overcoming the effects of treatment that are considered detrimental. There have been many quantitative studies on self-care in hypertensive patients. However, the in-depth studies that explore how to self-care in hypertensive patients are still not widely carried out. Therefore, it is very important to conduct in-depth studies related to self-care experiences in hypertensive patients. The purpose of this study was to explore the experience of self-care in hypertensive patients.

The study used a qualitative method with a phenomenological approach. Nine hypertensive patients were taken by purposive sampling technique. The data collection was using semi-structured interviews. Thematically analyzed data based on transcribed interview data. The results of the study obtained six themes related to self-care, namely perceptions of the causes of recurrence, emotional responses, social support, accessibility of health-care services, self-care behavior and barriers of self-care. Self-care in hypertensive patients is influenced by the availability of social support from both family and health workers as well as the affordability of health-care services. The implication of this study is the need to improve a good support system, especially from nurses to be able to minimize the barriers felt by patients so as to improve self-care abilities.

METHODS

The research used a qualitative method with a phenomenological approach to explore the experiences of hypertensive patients in performing self-care behavior. The participants were 9 hypertensive patients who were taken by purposive sampling technique. The criteria for the participants in this study were: 1) hypertension grades II and III; 2) not currently undergoing treatment in a hospital; 3) the level of dependence of the patient in the self-care category; and 4) aged more than 40 years. The characteristics of the participants are listed in Table 1.

Data were collected by using semi-structured interviews to explore participants’ experiences in performing self-care while suffering from hypertension. Interview activities were recorded by researchers using audio recording. The results of the interview data were then transcribed by the researchers for further data analysis to determine the theme.
RESULTS

The experience of hypertensive patients in performing self-care, consists of six themes, namely the cause of recurrence, emotional response, social support, healthcare accessibility, self-care behavior and barriers of self-care (Table 2).

Theme 1: Cause of recurrence
This theme describes several factors that were considered by the patient as the cause of recurrence of hypertension, resulting in the appearance of physical symptoms and an increase in blood pressure.

Subtheme 1.1: Emotional factors
Participants assumed that the disease relapses when they were high in emotion or because of mind burden. The following is a statement from the informant:

“I would have hypertension if I were teased by my child. The emotion was high” (Participant 3)

“What is the influence of the mind or what...” (participant 2)

Subtheme 1.2: Fatigue
Fatigue is thought to be a factor causing relapse as well. The following is the informant statement:

“I’ve been suffering from hypertension for almost 9 years. If I’m tired the blood pressure goes up” (Participant 5)

“This recurrence is going on when I am tired... If I think my child will go to school tomorrow, there will be sustenance...” (participant 6)

Subtheme 1.3: Use of contraceptive drugs
A participant said that the increase of blood pressure which occurred in him was due to the effect of using contraceptive drugs.

“.... Nowadays, my blood pressure often goes up, but I think it’s because of problems with contraceptive use...” (Participant 9).

Theme 2: Emotional response
Several participants explained the psychological effects that occurred due to their hypertension. A total of four participants felt fear and as many as two people felt normal with their hypertension.

“.... I am afraid that if there is a quaint disease in my body” (Participant 5)

“.... I feel normal...” (Participants 8 & 9)

Theme 3: Social support
Participants explained that while suffering from hypertension, they received social support from their families and health workers. The support provided includes informational support, emotional support and instrumental support.

Subtheme 3.1: Family support
A total of six participants explained that the family provided support in the form of emotional support by reminding them to do physical activity, take medication, manage food and conduct health checks.

“.... That doctor at Hasta Hospital, told me that I can’t eat some foods and I must avoid it...” (Participant 9)

“.... I was given medicine too... I was told to rest...” (Participant 2)

Theme 4: Healthcare accessibility
Accessibility of health services was a factor that influenced self-care behavior in hypertensive patients, including the distance between home and health services and health insurance ownership.

Table 1. Characteristics of participant.

<table>
<thead>
<tr>
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<th>Occupation</th>
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<tbody>
<tr>
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<tr>
<td>2</td>
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<tr>
<td>8</td>
<td>Female</td>
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<td>Unemployed</td>
</tr>
<tr>
<td>9</td>
<td>Female</td>
<td>Married</td>
<td>Housewife</td>
</tr>
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</table>

Table 2. Themes and subthemes.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
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<tbody>
<tr>
<td>Cause of recurrence</td>
<td>1. Emotional factor</td>
</tr>
<tr>
<td></td>
<td>2. Fatigue</td>
</tr>
<tr>
<td></td>
<td>3. Use of contraceptive</td>
</tr>
<tr>
<td>Emotional response</td>
<td>1. Psychological effects</td>
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<td>Social Support</td>
<td>1. Family support</td>
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<td></td>
<td>2. Health workers support</td>
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<tr>
<td>Healthcare accessibility</td>
<td>1. Distance</td>
</tr>
<tr>
<td></td>
<td>2. Health insurance ownership</td>
</tr>
<tr>
<td>Self-care behavior</td>
<td>1. Medicine consumption</td>
</tr>
<tr>
<td></td>
<td>2. Resting time</td>
</tr>
<tr>
<td></td>
<td>3. Health checkup</td>
</tr>
<tr>
<td></td>
<td>4. Physical activity</td>
</tr>
<tr>
<td></td>
<td>5. Diet settings</td>
</tr>
<tr>
<td>Self-care barriers</td>
<td>1. Suggestion of good condition</td>
</tr>
<tr>
<td></td>
<td>2. Business</td>
</tr>
<tr>
<td></td>
<td>3. Motivation</td>
</tr>
<tr>
<td></td>
<td>4. Feeling of bored</td>
</tr>
</tbody>
</table>

“.... I have had enough from my family, I have been reminded by them, if I get angry, I have been suggested to checking my condition...” (Participant 3)

Subtheme 3.2: Health worker support
Health workers provided support in the form of informational support (explaining health behaviors that the patient must do), emotional support (reminding to perform healthy living behaviors) and instrumental support (providing medicines).

“.... That doctor at Hasta Hospital, told me that I can’t eat some foods and I must avoid it...” (Participant 9)

“.... I was given medicine too... I was told to rest...” (Participant 2)
Subtheme 4.1: Distance
The distance from the patient's house to the health service was a factor that influenced the patient to carry out health checks.

“… Well, look for the closest one… If I am going to the health center, the distance is too far…” (Participant 2)

Subtheme 4.2: Health Insurance ownership
Health insurance ownership was a factor that affects participants' compliance to carry out health checks.

“I have BPJS, so when I go to the hospital, it's easy, ma'am…. I want to get well…” (Participant 6)

Theme 5: Self-care behavior
Participants explained several self-care behaviors that were carried out while suffering from hypertension.

Subtheme 5.1: Medicine consumption
Adherence to taking drugs was varied. A total of two participants said they did not take drugs. Meanwhile, the other two participants said took regular drugs and the next two participants confessed they did not take drugs.

“… If I am tired and my head hurts, I will sleep and take regular medicine…”(Participant 3)

Subtheme 5.2: Resting time
Rest was one of the behaviors performed by participants to prevent recurrence. Participants explained that if they felt tired, they took a break.

“… If I am tired and my head hurts, I will sleep…” (Participant 3)

Subtheme 5.3: Health Check
Several participants visited health care facilities to carry out health checks when they felt that they had a relapse.

“If I get dizzy, sometimes I will check it to Mr. Eko (nurse).” (Participant 7)

Subtheme 5.4: Physical activity
Physical activity was considered as an important activity to maintain the health of participants. Most of the physical activity which carried out by the participants was a morning walk.

“I go for a walk every morning, Ma'am…” (Participant 6)

Subtheme 5.5: Diet settings
Several food restriction efforts were made by participants to control their blood pressure, including limiting fatty foods and coffee.

“… I reduce to eating fried dish…” (Participant 2)

Subtheme 5.6: Feeling of bored
Participants explained that they felt bored to take medicine every day.

“I'm tired of taking medicine,” (Participant 5)

Theme 6: Barrier of self-care
Participants experienced several obstacles in carrying out self-care behavior, among others, because they felt the situation was good, time-sharing factors, motivation and boredom.

Subtheme 6.1: Suggestion of good condition
The participant said that he did not have a disease because he did not feel any significant symptoms in himself.

“… It's nothing... no disease…” (Participant 7)

Subtheme 6.2: Business
A total of three participants said that they did not have time to do sports because they were busy by their working and children.

“I find the obstacle at home is that I’m busy taking care of my children, I don’t have time to exercise.” (Participant 3)

Subtheme 6.3: Motivation
The lack of motivation became a barrier for participants to carry out self-care behavior.

“I want to get well, but I don't want to take medicine... I don't have enough motivation.” (Participant 3)

Subtheme 6.4: Feeling of bored
Participants explained that they felt bored to take medicine every day.

“… I don’t drink coffee... I only drink water…” (Participant 8)

DISCUSSION
Blood pressure control in hypertensive patients is something that must be done in order to minimize that patient recurrence. The results of the study illustrate the patient assumption that the cause of recurrence is due to psychological factors (high emotions and many thoughts) as well as the effects of using contraceptive drugs. Stress is a factor associated with increased blood pressure and low blood pressure control. Furthermore, hypertensive patients who experience stress have a low level of adherence to non-pharmacological treatment. Another study also explained that the use of hormonal contraception was associated with the risk of increased blood pressure.

Emotional responses in the form of fear of the disease are also found in hypertensive patients. However, some patients confessed to feel normal with the disease they have been suffered. Fear has a relation to the patient's concern about the possibility of other diseases due to hypertension. Regarding this, the emotional response that occurs in hypertensive patients is influenced by the support of health workers, perceived severity and perceived threat. Fear, furthermore, is closely related to vulnerability to clinical and functional functioning of a person with a chronic disease. The existence of a chronic disease causes profound changes in a person so that efforts are needed to maintain mental health.

During self-care, hypertensive patients received social support from both their family and health workers. The support which had obtained was in the form of informational support, instrumental support, and emotional support. The previous research showed that the provision of good social support would affect illness interpretation. In addition, social support that comes from the family can improve medication adherence and regular blood pressure checks. Family support has a positive effect on coping strategies and mental health status. Meanwhile, the social support of health workers will be able to affect the patient's emotional response.

Accessibility of health services is an important factor for patients to get health care. Based on our study, the close distance between the house and the place of health services and the ownership of health insurance were considerations for hypertensive patients in carrying out self-care, namely health checks and efforts to get treatment. Regarding this,
there is a significant relationship between accessibility, utilization of health services and a person’s health status. A person who lives far from health services is significantly associated with lower visits for health checks. In addition, ownership of health insurance is a factor for someone to make visits to health services. The results of the study show that there is a significant relationship between ownership of health insurance and one’s involvement in health-related behaviors. Subsequently, the ownership of health insurance has been proven to be a determinant of the utilization of health services.

Self-care is an activity carried out by people with hypertension in an effort to maintain their health. The results of this study showed that several self-care behaviors were carried out, including taking antihypertensive drugs, resting, doing health checks, doing physical activities, and managing diet. Treatment adherence in hypertensive patients can be improved through the provision of educational intervention. In addition to increasing compliance, the provision of this intervention can improve the patient’s health literacy. Another study also supports these results, by arguing that self-management education is able to improve medication adherence. Treatment adherence is also influenced by several factors, including anxiety, and health belief. So it is very important for health workers to examine the health beliefs possessed by patients as a basis for providing further interventions. Meanwhile, the low adherence to medication and low-salt diet restrictions are significantly associated with an increase in grade 1, 2 and 3 hypertension so that this increases uncontrolled blood pressure. Physical activity is a very important self-care behavior. This is related to how low physical activity is significantly associated with the incidence of hypertension. Furthermore, regular physical activity is beneficial in stabilizing blood pressure. Compliance with physical activity is influenced by one of them, namely the patient’s psychological status.

Hypertensive patients who do not have symptoms of depression show a good level of physical activity compliance. In addition, diet settings must also be considered. Consumption of foods high in salt and soft drinks is significantly associated with the incidence of prehypertension and hypertension. Moreover, the results of this study also showed that hypertensive patients experienced several barriers to self-care. Some of the obstacles that occurred include feeling themselves in good condition, due to busyness, lack of motivation and boredom to take drugs. This results, previously, have been proved by another study which found that there are several barriers to a person’s health behavior due to habit, lack of time, lack of will, or lack of social support. Perceived barrier is significantly related to medication adherence. A low perceived barrier can increase adherence to treatment. Another study explains that healthcare utilization barriers include service systems such as service availability, insurance; structural/physical barriers such as distance and transportation; equipment and treatment as well as staff competence.

CONCLUSION

There were six themes of hypertensive patients’ experiences in self-care, including the causes of recurrence, emotional response, social support, healthcare accessibility, self-care behavior and self-care barriers. The practical implication of the study is the need for health workers, especially nurses, to provide appropriate interventions by paying attention to the factors that cause recurrence and the availability of good social support. This will impact on patients’ effort to reduce the perceived barrier that occurs to themselves and be able to improve their self-care abilities. This in self-care ability escalation is expected to be able to control uncontrolled blood pressure in hypertensive patients.

ETHICAL APPROVAL

This research protocol had been approved by the Health Research Ethics Commission, Faculty of Nursing, Airlangga University, Surabaya, Indonesia with approval letter no. 1468-KEPK.

CONFlict OF INTEREST

None declared.

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**AUTHOR’S CONTRIBUTION**

First author: conceptualization, methodologies, writing – initial draft, writing – revising with important intellectual content. Second author: data collection, analysis, and interpretation.

**REFERENCES**


