Knowledge Regarding Management of Hypertension among Teachers at State Senior High School in Paccerakang Village

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ABSTRACT

The high rate of hypertension causes the high mortality rate. Hypertension can cause various complications, especially if the high incidence of hypertension is associated with a lack of knowledge about proper management of hypertension. This study aims to describe knowledge about management of hypertension. This was a quantitative descriptive study. The population in this study was all teachers at State Senior High School in Paccerakang Village who had hypertension with a total population of 50 people. 50 samples were selected using total sampling technique. Data were collected using a questionnaire and were analyzed using univariate analysis. The study findings were categorized into good, moderate and poor. The results of the study revealed that 52.5% of respondents had a poor level of knowledge regarding management of hypertension. Poor level of knowledge can be seen from the answers of respondents who stated the inappropriate management of hypertension. Based on the results of the study, it was found that more than half of respondents had a poor level of knowledge. Thus, there should be further efforts which involved coordination with the local Community Health Center to provide health education about hypertension management for State SHS Teachers in Paccerakang Village.

Keywords: Hypertension, Knowledge, Hypertension Management

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INTRODUCTION

Hypertension is a chronic disease with a high mortality rate. However, patient adherence to treatment is still low. Low patient adherence can be caused by several factors, one of which is patient knowledge regarding hypertension¹. Hypertension refers to an abnormal blood pressure that can be measured in at least three different situations. Generally, if the blood pressure is more than 140/90 mmHg, the person is considered to have high blood pressure². Based on Kurnia A. prediction, in 2016 the prevalence of hypertension worldwide among adults will reach 29.2%³. Based on Basic Health Research in 2018, the prevalence of hypertension in Indonesia was 34.1%, with the highest prevalence in South Kalimantan by 44.1%, the lowest prevalence in Papua by 22.2%⁴. The number of cases of hypertension in Indonesia was 63,309,620, while the death rate due to hypertension in Indonesia was 427,218⁵. The prevalence of hypertension in South Sulawesi was 31.68%. The prevalence of hypertension among women was 36.9%, higher than in men by 31.3%. Furthermore, the prevalence in urban areas was 34.4%, slightly higher than in rural areas by 33.7%⁶. This prevalence will continue to increase with age. Based on data by Regency/City, the highest prevalence of hypertension was found in Makassar City by 290,247 cases, then Bone Regency by 158,516 cases, and the third highest was in Gowa Regency by 157,221 cases, and the lowest prevalence was in Barru Regency by 1,500 cases⁷.

Hypertension is a serious chronic disease that can damage organs. Nearly 1 billion people or 1 in 4 adults suffer from high blood pressure. Many factors cause hypertension, such as poor lifestyle, environment, education,
experience, and the lack of public knowledge about the treatment that must be performed for people with hypertension. Therefore, it is very necessary for people with hypertension to have knowledge about management of hypertension at home, since this will affect their health status.

Surely, patients with hypertension should have knowledge regarding hypertension, especially knowledge about how to manage the disease in order to achieve optimal health status. With proper treatment or management, high blood pressure can be controlled and the risk of recurrence can be reduced. Combined with lifestyle changes and anti-hypertensive medication, blood pressure can usually be maintained within a range that does not damage the heart and other organs. Good knowledge is a domain for the formation of good behavior. The results of a study conducted by Laili, (2021) showed that 27.37% of patients had good level of knowledge and 72.63% of patients had a moderate level of knowledge. Further finding was also obtained from a study conducted by Suaib M, (2019) that the high prevalence rate of hypertension did not only occur at the national and international levels, but also in the Paccerakang area. Based on the data derived from the Paccerakang Center, there were 2,599 outpatients with hypertension in 2020. Based on these data, Community Health hypertension ranked first out of the top 10 types of diseases in the Paccerakang area.

Based on a preliminary study conducted by researchers among 10 teachers with hypertension at the State Senior High School in Paccerakang Village, it was found that 8 teachers said that hypertension should be treated by taking medication when symptoms were felt, while 2 other teachers said that hypertension treatment was carried out by taking medicines and maintaining a healthy lifestyle. Proper management of hypertension among hypertensive patients is very crucial. Knowledge is needed to manage such disease, and it is expected that hypertensive patients can treat and prevent recurrence of hypertension through good knowledge and understanding with the aim of creating optimal health conditions. This study aims to describe knowledge about management of hypertension.

METHOD

This was a quantitative descriptive study. The population in this study was all teachers at State Senior High School in Paccerakang Village who had hypertension with a total population of 50 people. 50 samples were selected using total sampling technique. The current study was conducted at State SHS in Paccerakang Village on December 1, 2022. Data were collected using a questionnaire and were analyzed using univariate analysis.

RESULTS

Table 1. Frequency distribution of knowledge regarding management of hypertension.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>6</td>
<td>7.5</td>
</tr>
<tr>
<td>Moderate</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td>Poor</td>
<td>24</td>
<td>52.5</td>
</tr>
</tbody>
</table>

Based on table 1, it was found that a small number of respondents had a good level of knowledge. Furthermore, almost half of respondents had a moderate level of knowledge and most of respondents had a poor level of knowledge regarding management of hypertension among teachers with hypertension at State SHS of Paccerakang Village in 2022.

Table 2. Analysis on knowledge regarding pharmacological treatment of hypertension.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Moderate</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Poor</td>
<td>33</td>
<td>75</td>
</tr>
</tbody>
</table>

Based on table 2, it was found that a small number of respondents had a good level of knowledge, some respondents had a moderate level of knowledge and most respondents had a poor level of knowledge regarding pharmacological treatment of
Based on Table 3, it was revealed that the majority of respondents had a good level of knowledge, almost half of respondents had a moderate level of knowledge and almost half of respondents had a poor level of knowledge regarding non-pharmacological treatment of hypertension among teachers with hypertension at State SHS of Paccerakang Village in 2022.

### Table 3. Analysis on Knowledge Regarding Non-Pharmacological Treatment of Hypertension

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>21</td>
<td>42.5</td>
</tr>
<tr>
<td>Moderate</td>
<td>14</td>
<td>27.5</td>
</tr>
<tr>
<td>Poor</td>
<td>15</td>
<td>30</td>
</tr>
</tbody>
</table>

DISCUSSION

Knowledge is the result of human sensing, or the result of observation related to objects through their senses (eyes, nose, ears and so on). Production of knowledge through sensing time is influenced by the seriousness of attention and response to objects. Most of a person's knowledge is obtained through the sense of hearing (ears) and the sense of sight (eyes). A person's knowledge of objects has different seriousness or responses.

The knowledge questionnaire applied in this study only assessed the basic knowledge that a hypertensive patient must have in terms of distinguishing between normal and high blood pressure, lifestyle, symptoms experienced, frequency of drug use, complications, and distinguishing which foods that should be limited in consumption or not consumed at all which can be determined primarily from the salt content. Proper management of hypertension among hypertensive patients is very crucial. Knowledge is needed to manage such disease, and it is expected that hypertensive patients can treat and prevent recurrence of hypertension through good knowledge and understanding with the aim of creating optimal health conditions. According to Notoadmojo (2012), a person's knowledge can be developed through various factors such as experience, level of education and sources of information.

The results of the study showed that most of respondents had a poor level of knowledge so that it significantly affected the level of community ability in the management of hypertension. Lack of information obtained either from social media or lack of exposure to sources of information is the cause of the lack of knowledge. The study finding regarding respondents' knowledge on pharmacological treatment showed that most of them had a poor level of knowledge. Hypertension is often referred to as the "silent killer" because people with hypertension often have never experienced health problems due to their condition or any symptoms for many years. Without realizing it, people with hypertension will experience complications in important organs in the body, such as the heart, brain and kidneys.

Hypertension is very closely related to lifestyle so that it takes a long time to treat it through lifestyle modifications for a long time accompanied by drugs. Various efforts can be tried to overcome hypertension, including controlling blood pressure by administering medication. Pharmacological treatment is in the form of administration of antihypertensive medication such as diuretics, beta-adrenergic blockers or beta-blockers, vasodilators, calcium channel blockers and angiotensin converting enzyme (ACE) inhibitors.

Experience shows that the longer a patient has an illness, the higher the tendency to consider the symptoms that appear as normal so that patients tend not to take treatment because they are considered normal symptoms and they take medication if the symptoms are felt to be severe. The result of the study on patient knowledge regarding non-pharmacological management of hypertension was found to be good for the majority of respondents. The intended treatments include lifestyle modification, a low-salt diet, a reduction of alcohol consumption, smoking cessation, exercise, and hypertension medication. One component that influences self-care for people with hypertension is self-efficacy. People with hypertension who have good self-efficacy can
treat hypertension well, for example through adherence to taking anti-hypertensive drugs\textsuperscript{19}. Various efforts can be tried to overcome hypertension, including controlling blood pressure by administering medication. In addition, non-pharmacological treatment methods can be applied in the form of lifestyle modifications, losing body weight, limitation of sodium consumption, modification of low-fat diets, alcohol and caffeine restriction, relaxation method, and smoking cessation\textsuperscript{20}.

**CONCLUSION**

It can be concluded from this study that among teachers with hypertension at State SHS of Paccerakang Village in 2022, the majority of respondents had a poor level of knowledge regarding the management of hypertension, had a poor level of knowledge regarding pharmacological treatment of hypertension, and had a good level of knowledge regarding non-pharmacological treatment of hypertension. Based on the results of the study, it was found that more than half of the respondents had a poor level of knowledge. Thus, there should be further efforts which involved coordination with the local Community Health Center to provide health education about hypertension management for State SHS Teachers in Paccerakang Village.

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**CONFLICTS OF INTEREST:**
The authors declare no conflict of interest.

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