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Elderly perception of hypertension and its treatment in Gianyar District, Bali

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ABSTRACT

Background and purpose: The risk of hypertension increases in the elderly, while treatment adherence plays a crucial role in controlling blood pressure in the elderly. This study aims to explore the elderly's perception of hypertension and its treatment.

Methods: This study used an exploratory qualitative design. Data were obtained through in-depth interviews about the elderly's perception of hypertension and its medication, health-seeking behavior, and cues to action in undergoing treatment for 6 elderlies with hypertension and 4 health workers in Gianyar District in July-September 2020. The data obtained were analyzed using thematic methods.

Results: This study identified 2 big themes, namely the elderly's perception of hypertension and seeking behavior. The elderly's perception of hypertension is described from the perceived vulnerability from the aspect of age, lifestyle, and heredity. Hypertension is seen as a serious disease by the elderly, particularly from the complications aspect, while complaints felt are not considered serious unless they interfere with activities or have to undergo treatment. Reduced complaints and controlled blood pressure are the perceived benefits of treatment and lifestyle adjustments: long-term medication, side effects of drugs, and traditional medicine as obstacles for the elderly in undergoing treatment. The elderly seek treatment based on their trust and comfort in health workers, infrastructure, access to health services, and support from health workers and the government.

Conclusion: The perception of barriers to treatment and health-seeking behavior of the elderly in seeking treatment play a significant role in determining the medicational therapy that the elderly undergoes, which can prevent complications. Family support for the elderly is essential in overcoming obstacles and increasing elderly adherence to medication.

Keywords: hypertension, medication, health-seeking behavior, elderly

INTRODUCTION

The prevalence of hypertension increases with age; in the elderly, hypertension is primarily due to stiffness of the large arteries, which is usually indicated by an increase in systolic blood pressure while diastolic blood pressure is normal or low. Hypertension in the elderly can affect the heart, kidneys, and brain, which can cause cognitive decline and loss of independence in later life.¹

The incidence of hypertension in the elderly in Indonesia reaches 65.23%.² It can increase the risk of stroke by 14.34%,³ coronary heart disease is 1.4 times greater than in the younger group and 1.9 times higher than those without hypertension.⁴ Hypertension in the elderly is associated with 20% of the incidence of cardiovascular disease within 10 years.⁵ Antihypertensive treatment in the elderly with hypertension has proven to reduce dementia by up to 50%.⁶

Hypertension is often found without signs and symptoms, so it is often not realized that it is necessary to have regular blood pressure checks.⁷ Weak and inaccessible health services in low and middle-income countries mean that hypertension frequently undiagnosed early.⁸⁻¹² The behavior of seeking treatment is often carried out by most elderly after experiencing complaints in the form of dizziness, nausea, or fainting, then getting a blood pressure check and diagnosed with hypertension.¹³ Early detection to diagnose hypertension at an early stage, accompanied by adequate treatment and controlled blood pressure, can reduce the possibility of complications and reduce the economic burden due to complications of hypertension.^{13,14} Health workers need to be involved in communication with patient about hypertension and the dangers of uncontrolled hypertension, and implement recommended guidelines for diagnosing and managing hypertension to avoid complications.¹⁵ Health workers' support, information, and motivation will affect the elderly's perception of the disease and have a fairly important role in the treatment.¹⁶

In this study, the elderly's perception of hypertension and its treatment was explored using the Health Belief Model (HBM), while seeking behavior was explored using the Lawrence Green's PRECEDE-PROCEED Model. HBM explains the failure of people to carry out various efforts to prevent, detect and control disease. Perceptions of vulnerability, seriousness, benefits and barriers to behavior, cues to action and self-efficacy are in this model. Treatment adherence is the main thing that determines the success of chronic disease management, including hypertension, and preventing complications in the elderly.^{9,17} Elderly with hypertension often do not comply with the rules for taking antihypertensive drugs because they have a wrong perception of hypertension or do not believe in antihypertensive drugs that can have specific side effects. Lack of knowledge about medication and misperceptions about hypertension management have resulted in inappropriate treatment.¹⁸

Several studies that were conducted previously to see the relationship between treatment behavior and perceptions of vulnerability, severity, barriers, and benefits to hypertension and its treatment measures, as well as how to seek treatment behavior in elderly with hypertension, have been carried out.^{13,18} However, the perception or belief of the elderly towards their hypertension, the treatment they believe in or are suggested, and their health-seeking behavior still need to be explored. Thus, this study aims to examine the perception or belief of the elderly towards hypertension, its treatment, and their behavior in finding health care that they

believe in.

METHOD

This study used an exploratory qualitative approach that aims to explore in-depth the views and beliefs of the elderly towards hypertension, its treatment, and the behavior of the elderly in finding health care services that they believe. In this study, the elderly's perception of hypertension and its treatment was explored using the HBM, while seeking behavior was explored with the PRECEDE-PROCEED Model by Lawrence Green.

This research was conducted in July – September 2020 in Gianyar District, where the elderly population reached 12.53% in 2019 and made Gianyar one of the districts with a relatively high aging population. Informants were selected purposively in two *puskesmas* (public health center) in Gianyar District: *Puskesmas* Gianyar I and Gianyar II. The informants in this study consisted of the elderly group, which aims to obtain in-depth information regarding the elderly's perception of the disease, treatment of hypertension and treatment seeking behavior, as well as groups of health workers to obtain information about communication, support, and management of hypertension applied to the elderly with hypertension.

The elderly group was selected from hypertension patients aged 60-74 years who came for treatment at the *Puskesmas* Gianyar 1 and Gianyar 2 in the July - September 2020 period. The inclusion criteria were 2 elderly with hypertension who had been taking the treatment regularly in *puskesmas*, 2 elderly with hypertension who did not take the treatment regularly at the *puskesmas*, and 2 elderly who were diagnosed with hypertension for the first time at the *puskesmas* during the study period. Group of health workers consisting of 1 doctor and 1 person who implementing the elderly program at each *puskesmas*.

Data were collected through in-depth interviews using semi-structured interview guidelines consisting of several open-ended questions developed by the researchers, carried out at the *puskesmas* or the informant's house under the researcher's and the informant's agreement. The recorded interviews were transcribed and then analyzed thematically. Triangulation of data sources, member checking, and peer debriefing were carried out to ensure the quality of the data obtained. The researcher obtained Ethical Clearance from the Ethics Commission of the Faculty of Medicine, Udayana University, No. 1917/UN14.2.2.VII.14/LT/2020.

RESULT AND DISCUSSION

The characteristics of each informant can be seen in Table 1. The informants in this study consisted of elderly with hypertension who routinely underwent treatment, elderly with hypertension who did not routinely undergo treatment, elderly who had just been diagnosed with hypertension, and health workers consisting of doctors and the person in charge of the elderly program at the health center. Elderly informants in this study were 66.67% women, and 50% had elementary school education. Most of the elderly informants were housewives (50%), and some were retired civil servants (33.3%) and traders (16.7%). Interviews were conducted with a duration of 22 minutes to 45 minutes.

The analysis obtained 2 themes from the interviews, including the elderly's perception of hypertension and treatment-seeking behavior. The theme of perception of hypertension found 2 sub-themes: the perception of

vulnerability and the perception of seriousness. There were 5 sub-themes in the behavioral theme of seeking services: the benefits of treatment, treatment barriers, family support, belief in service quality, and cues to action.

Table 1. Characteristics of informants

No	Informant code	Gender	Age (y.o)	Education	Occupation	Address	Informant group
1	L01	M	64	Senior High School	Retired civil servants	Bukit Batu, Samplangan	The elderly with routine treatment
2	L02	F	60	Junior High School	Housewife	Br Mantring, Petak kaja	The elderly with routine treatment
3	L03	F	67	Primary School	Housewife	Br. Peteluan Temesi	The elderly were not routinely treated
4	L04	M	69	Bachelor	Retired civil servants	Br Mantring, Petak kaja	The elderly were not routinely treated
5	L05	F	65	Primary School	Trader	Br. Serongga tengah, serongga	The elderly were newly diagnosed with hypertension
6	L06	F	67	Primary School	Housewife	Br. Medahan petak kelod	The elderly were newly diagnosed with hypertension
7	D01	M	45	Master	Civil servant	UPTD Puskesmas Gianyar I	Doctor
8	D02	F	40	Bachelor	Civil servant	UPTD Puskesmas Gianyar II	Doctor
9	P01	F	45	Bachelor	Civil servant	UPTD Puskesmas Gianyar I	Nurse (Elderly program holder)
10	P02	F	31	Diploma	Civil servant	UPTD Puskesmas Gianyar II	Nurse (Elderly program holder)

1. Perception of hypertension

Various aspects are considered by the elderly to play a role in their risk to develop hypertension and encourage the elderly to have their blood pressure checked. The results of the analysis of the elderly's perception of hypertension include the perception of vulnerability and seriousness. The elderly with hypertension consider their risk or vulnerability to hypertension and the complications that can occur to them, and how this situation can be potentially difficult for themselves and their families. If it is not treated and handled correctly, it will have medical and clinical consequences (such as the occurrence of pain, disability, and death) as well as the possible social consequences (such as barriers to work, home and social activities) and their effects on the family.

Table 2. Summary of data analysis results

Theme	Sub-theme	Definition
Perception of hypertension	Vulnerability perception	The elderly's opinion about the risk or possibility of experiencing hypertension and complications that may occur.
	Perception of seriousness	The views believed by the elderly about the seriousness and the medical and clinical consequences as well as the social consequences that can occur if they have hypertension.
Seeking behavior	Treatment benefits	The elderly's opinion about the benefits of treatment and the recommended actions.
	Treatment barriers	The elderly view the obstacles in carrying out treatment, and the actions suggested to them.
	Family support	The elderly's opinion on attitudes, actions, and family acceptance of the elderly with hypertension.
	Confidence in service quality	Efforts or behavior by the elderly in seeking the treatment they believe in
	Cues to action	Signs shown by the elderly to take action or not to undergo treatment or the actions suggested to them.

Perception of vulnerability

Not all elderly perceive that they are susceptible to hypertension. Elderly who had just been diagnosed with hypertension did not feel vulnerable to hypertension. The perceived vulnerability of the elderly to hypertension refers to several aspects, including age, lifestyle, and heredity. Old age is seen by the elderly as one aspect that plays a role in the occurrence of hypertension. Some informants revealed that hypertension occurs when they are retired or old.

Usually, it is elderly, I started having high blood pressure about 2 years ago..." (L04)

The age aspect gives susceptibility to the occurrence of hypertension in all informants, where increasing age underlies changes in organ function and body abilities such as stiffness of large arteries and results in an increase in blood pressure.^{1,19,20}

In addition to age, unhealthy lifestyles such as the habit of consuming foods that are high in fat, high in sugar, high in salt and work pressure or stress factors, and lack of exercise or physical activity are also seen by the elderly as having a role in the occurrence of hypertension.

"...I am fond of eating something a little sweet...in every feast, we do eating and slaughtering pork. I eat quite a bit, to have fun..." (L01)

"... yes, because stress is due to emotion... stress can also be a problem for me if I have much work..., when I am exhausted, I will automatically get stressed, then my tension will rise..." (L03)

"Those who do not like sports are probably... I like gymnastics..." (L02)

Lifestyle is an aspect that plays a vital role concerning the risk of hypertension in the elderly. It is in line with a systematic review of qualitative research, which found that most of the participants in qualitative research thought that hypertension was mainly caused by stress.²¹

Whether seen from the parents or the presence of family history, the heredity aspect is also something that makes the elderly view themselves as vulnerable to hypertension. Genetics or heredity revealed by some informants is in line with an article that describes 30-50% of the variation in hypertension that exists in the population is related to heredity. However, it is not a direct cause and is often accompanied by age, lifestyle, and environmental conditions.²²

"...because my mother has high blood pressure, she cannot stand a stroke, 12 years... it is heredity too because I have had it myself..." (L03)

"There is no heredity factor from my parents who have high blood pressure..., now there is my younger sister who has a bit high blood pressure but not 180, only 140 or 150 is the highest, apart from that there is no high tension anymore..." (L06)

The elderly who have just been diagnosed with hypertension are not aware of their susceptibility to hypertension because lack of knowledge about hypertension; in this study, the knowledge aspect was not explored in depth. The influence of knowledge in shaping attitudes and perceptions of elderly with hypertension is contained in a mixed-method study on older people with hypertension in Thailand, which found that knowledge about hypertension plays a vital role in attitudes and perceptions of elderly with hypertension.²³

Perception of seriousness

The elderly view hypertension as a serious disease because of the complications that can interfere with their daily activities and work, and even cause them to be hospitalized. As hypertension frequently occurs without symptoms, the elderly tend to ignore and discontinue treatment. The seriousness of hypertension mainly arises from the patient's view of the complications that can affect their lives and independence, ultimately affecting their children's lives.

"...can feel dizzy suddenly, do not feel well, feeling nauseous... get dizzy, and head feels like speeding up. If feeling unwell, it can be vomiting, feeling sick to the stomach... when it comes out, the dizziness

bothers me, can not work, then I left my work, I immediately tidy up my desk..." (L05)

"...possibly a stroke, that is why I am afraid of high blood pressure... Oh my, I am the most afraid of stroke. I am most afraid of stroke if death is already dead and it is over... But a stroke, my children will be difficult to take care of it later ..." (L03)

The perception of seriousness possessed by the elderly is based on the symptoms they often experience; even though they are considered mild and often ignored, these complaints can interfere with their daily activities or work. It is in line with qualitative research conducted on the elderly who found that hypertension, which often has no symptoms or only mild symptoms, causes the elderly not to view hypertension as a matter of concern, but this complaint can also affect their work or daily activities. This study found that the perception of the seriousness of hypertension was formed when complications occurred.²⁴

2. Health seeking behavior

The behavior of the elderly with hypertension in seeking health services in this study is influenced by the benefit and the outcome of treatment that experienced by the elderly, the obstacles in seeking and undergoing treatment, the presence or absence of support from the family and the elderly's belief on the health facilities.

Perceived benefits

The benefits of treatment lead the elderly to seek the treatment they believe. Hypertension treatment carried out by the elderly can reduce symptoms, maintain blood pressure at normal level, reduce worry about complications, and benefit the family. The informant believed that treatment or other measures suggested to him could reduce the risk of hypertension becoming more serious.

"... it has been three days since the medicine has been finished. Try measuring my blood pressure. Sometimes 140, 150 go up just a little... If I do not get treatment or medicine, yes, pain, dizzy, throbbing, the whole body feels achy, the arm hurts like that, sometimes it gets worse if I do not take medicine... Get headache, once or twice if I do not take medicine then start to feel dizzy..." (L02)

"... to be healthy, that is why we take (the medicine), it is trying to be healthy and routine... We are afraid, from the news that people have complications like this. They have high blood pressure and high blood sugar, so I was first advised to seek treatment to avoid this. To get healthy, I still remember the advice from the health workers..." (L01)

Treatment and recommended lifestyle provides several benefits in reducing perceived complaints, maintaining blood pressure, and preventing complications in the elderly who undergo treatment regularly or not. For some elderly who have just been diagnosed with hypertension, hypertension treatment can maintain work productivity. There are still elderly who feel that the recommended lifestyle does not benefit hypertension

management even though it has been implemented. Non-pharmacological management of hypertension is also often neglected in the elderly.

A qualitative study in Malaysia concluded that treatment adherence and strategies to improve the adherence were identified as key factors in hypertension management. In other words, the success of hypertension management lies in medication adherence. Lack of adherence to antihypertensive medication can result in uncontrolled blood pressure, then contribute to high morbidity and mortality.²⁵ Lifestyle modification may be the only treatment needed to prevent or even treat milder hypertension in the elderly.²⁶ The current lifestyle that tends to be high in pollution, foods containing lots of additives and high fat, high-stress levels, and lack of physical activity are patterns of daily life closely related to hypertension.²⁷

Obstacle perception

Efforts to get the treatment chosen by the elderly often experience obstacles. Various obstacles were faced by all informants, ranging from lifelong treatment to physical and cognitive limitations. The particular time that the elderly had to spend for accessing health services, herbal treatments they believed in, additional costs that had to be incurred to seek treatment, the current pandemic condition and the perceived side effects of drugs are also obstacles for the elderly in seeking treatment.

The COVID-19 pandemic raises concerns about contracting the disease when taking treatment at the health facilities or carrying out recommended activities such as sports outside their house. Information about the presence of infected health workers and the closure of health care facilities due to the spread of COVID-19 caused fear in the elderly to come to health services so that they seek other treatment, buy drugs at pharmacies or delay treatment. Patients with chronic diseases, including hypertension, have a higher risk due to the COVID-19 pandemic. Various strategies are also carried out by the *puskesmas* to keep the elderly with hypertension getting the services they need, namely by making online consultation media, either through Whatsapps groups formed by the *puskesmas* or through online consultations provided by the National Health Insurance (JKN).

"... once I did not get treatment, especially during a pandemic, the blood pressure was normal, it continued to be normal, it was only 130 per 80 it was still like that..." (L04)

Pandemic affects chronic disease patients because this group does not easily access health care facilities to carry out their routine check-ups and treatment. As normal reactions in times of crisis, anxiety and stress also contribute to the negative impact.²⁸

The physical and mental health of the elderly has decreased, including decreased ear function, which makes it challenging to provide information or advice from health workers, mental disorders such as dementia, insomnia, or other mental disorders that make the elderly forget to take medication or have difficulty carrying out the recommended lifestyle. Treatment and management of hypertension in the elderly are often more complicated because it must consider the complexity of health conditions due to several comorbidities and decreased physical and cognitive abilities.¹

"...the biggest problem is that the obstacle is the function of itself. Its cognitive function has decreased, so there is no introduction, and then cognitive function goes down. Not only cognitive, but sometimes, hearing also decreases, so when we explain it, sometimes they do not hear or hear it wrong... We have tried to give a sheet that we write down, and the problem is that they can not even read. It is difficult because most of the elderly, if not accompanied by an accompanying person, their cognitive abilities are already very lacking. So when I tell them now maybe a few hours or sometimes they will not remember our advice .." (D01)

Herbal alternative treatments are used by the elderly as a companion or as a substitute for antihypertensive drugs because of concerns about using drugs for a long time. Various types of alternative treatments the elderly undergo for hypertension include herbs made by themselves with ingredients around the house or ingredients purchased from special sellers. This is in line with a qualitative study in Malaysia that found herbal and traditional therapies was considered an alternative method of controlling blood pressure and taking antihypertensive drugs.²⁵

"...I just do not feel well. I immediately drink loloh (a traditional herbs), I take medicine... it is traditional, it is just loloh that is all... I have tried it, I want it to be (lower the blood pressure)... loloh ginseng leaves 2 times a day, 1 time 2 days like that; when it is high, it is only 1 day 1 time... 3 days once, every 2 days, depending on the conditions. I have a blood pressure meter, so I can check it myself. But, oh how come it is still so high..." (L03)

All of the elderly in this study received treatment using their health insurance, so a minimal cost to be incurred for the treatment of hypertension must be undertaken. However, the costs that must be incurred by the elderly are not only medical costs but also other costs needed to support health, such as providing healthy food and getting health services in the private sector; they are often still difficult to get because some of the elderly are no longer able to work productively to make money. This is in line with a qualitative study in Singapore conducted on elderly hypertensive patients from low socioeconomic backgrounds who found that this group had various unmet needs in managing hypertension and other comorbidities.²⁹

Continuous treatment does not necessarily bring blood pressure under control, and the thought of complications due to long-term treatment becomes an obstacle for the elderly to take treatment. Hypertensive patients realize the importance of regular medication, but they consider many of their symptoms and complications due to drug side effects.³⁰

"...I was given captopril, after taking medicine one or two days, what was it called.. oral trush... but when I told the doctor in our consultation, changing the medicine to amlodipine turned out to be suitable..." (L04)

The side effects of antihypertensive drugs felt by an informant who did not undergo regular treatment were not serious, but this caused the elderly to delay taking the medication until they received other drugs that did not give them side effects. This is in line with a qualitative study in Malaysia which found that the side effects that were sometimes experienced by patients were the cause of treatment non-adherence in participants in the study.²⁵

Family support

The family support obtained in this study can encourage the behavior of seeking a health service but can also be an obstacle to getting treatment. There are elderly who can find a health facility for treatment independently, and there are also those who need the willingness of their families to accompany them to get the treatment they need. The elderly who undergo routine and non-routine treatment also believe that their family always pays attention to their medical needs and healthy lifestyle.

"...there is an accompanying person, the father or sometimes my child... always there. Especially now, after all, having retired, there is always time... there is always time for treatment like that..." (L02)

Family support plays a vital role in the treatment of hypertension. Families not only deliver but also accompany treatment to understand what actions are recommended by health workers jointly, remind them of the time and dose of taking medicine, provide all the necessities to maintain the health of the elderly, and provide motivation to continue taking treatment. Elderly informants in this study denied the lack of family support because they could still be independent in finding a place for health services and meeting other needs even though there were still those who received support from their spouses or other family members in reaching health services. It is consistent with a study conducted in Bangladesh that identified the role of family members in supporting medication adherence, patients revealing how their children remind them to take their medication or how their partner puts medication in their pocket to prevent them from missing a dose.³¹

Confidence in service quality

Each patient has their assessment of the quality of service they expect. The confidence or trust of the elderly in health workers and a sense of comfort in health care facilities are important considerations for the elderly in choosing a health care facility. The availability of the facilities and infrastructure they need, including medicines and supporting facilities specifically for the elderly, is highly expected to make it easier to receive the treatment suggested. They hope for support from the government in terms of programs or ease of accessing health services and support from health workers who provide comfort and attention to their respective conditions.

The elderly's confidence in the quality of services, in this case, is indicated by the trust and comfort that the elderly feel, facilities, infrastructure, and access to health care facilities, also the support provided by health workers and government support. Those are related to behavior or actions when the elderly with hypertension try to seek treatment. The completeness of advice and infrastructure that supports health services will directly support the elderly in finding the health services they need. Ease of access in reaching and utilizing the service they aim for will also make it easier for the elderly to undergo treatment.

"...I went to the puskesmas, I have said, I was a bit traumatized by the crowds, so I looked for a doctor. Doctors are also compatible with chemistry, my feeling. If not, it is okay... If I get sick, I go to the

doctor, and it is over. My good chemistry matches my heart and feeling, and then I am glad to get treatment there. I do not want to be treated in other places because it does not match my heart, how does that feel..." (L03)

Complete facilities and infrastructure available at the service center are the basis for the elderly to choose a health service place. Only a few elderly do not feel comfortable with the services at the puskesmas because they think that the puskesmas is too crowded and feel unsuitable with the treatment given. A qualitative study in Canada found that health care facilities play an essential role in ensuring the availability of drugs to ensure regular treatment for the elderly.³⁰

"...good... they took a number right away, they were called right away. Like two days ago, looking for a number, called right away, immediately took control, went straight home, nothing happened, everything went smoothly at the puskesmas that way..." (L06)

"...it is also close, near the house beside the government that owns it, so if anything happens we are still directed to be healthy..." (L01)

"...no problems whatsoever...everyone can...get medicine right away...never buy it..." (L06)

Support from health workers in the form of attention, education, and providing advice on behaviors that must be done by the elderly to prevent an increase in blood pressure. A qualitative study in Bangladesh got the attention and time spent by doctors to get more information about how to manage their disease is what patients expect. Often, government health services tend to have a limited number of doctors, so patients take a long time to meet doctors.³¹

"Very good staff... yes, friendly... just like this is enough, I am grateful, the staffs are good" (L02)

Policymakers need an integrated multi-sectoral approach based on the principles of health equity to ensure adequate services for the elderly with hypertension in areas with low socioeconomic levels.²⁹

"... when it comes to policies, in my opinion, the policies already exist. It is just a matter of whether they can be implemented or not because based on the situation, not everything is ideal..." (D01)

Cues to action

Taking action whether or not to undergo the type of treatment they choose, whether to continue treatment at the puskesmas or take treatment only when they feel sick is a sign shown by the elderly based on the perception that the elderly have, the obstacles and benefits of treatment-experienced and the elderly's belief in the quality of treatment available and reachable.

"...if I do not relapse because I am healthy, hahaha... That is because of that fear... Yes, I am healthy, what can I do, I feel a healthy body, once I feel a healthy body, I do not need treatment anymore, at least I just take care of my food.." (L03)

Hypertension, which is often asymptomatic, indicates that the benchmark for complaints or health problems experienced cannot be used as a signal to act on treatment because it does not describe blood pressure levels.³²

The weakness of this study is that the researcher did not get extensive information from some informants who had just been diagnosed with hypertension because they did not have the knowledge and experience of hypertension. This study also only took elderly people with hypertension who had come to the community health center as informants due to limited research time, so this does not fully describe the treatment-seeking behavior of elderly people who underwent treatment outside the community health center.

CONCLUSION

The perception of vulnerability owned by most of the elderly comes from aspects of age, lifestyle, and heredity. The seriousness of hypertension arises from the perceived symptoms and complications that may arise and can affect their family life. Recommended medications and healthy lifestyles are fully realized by all the elderly and can provide benefits in reducing perceived complaints and preventing complications. The perception of barriers owned by the elderly varies, including long-term treatment that perceived unsuccessful, feeling that they are already healthy, side effects of drugs, and herbal treatments they are undergoing. Support from the family is needed not only to reach health care facilities but also to provide assistance or attention in treatment and to meet the daily needs of the elderly. The patient's efforts to find a place for health services are based on the availability of facilities and infrastructure at the place of service, the attention given, and the elderly's trust in health workers. The cues to act on hypertension treatment are based on the advice given by health workers and the health complaints.

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CONFLICT OF INTEREST

Non declared.

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