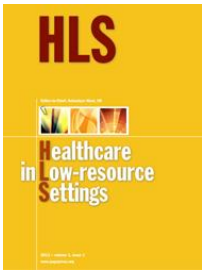
Healthcare in Low-resource Settings



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Original Research

Hypertensive patients' experience of care: a qualitative study

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Running title: Hypertensive patient experience of care: a qualitative study

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Significance for public health: Adhering to medication is essential for the management of hypertension, mitigating complications, and preventing mortality. Diverse factors influence treatment adherence, including age, education, employment status, knowledge, motivation, and stress levels. Consistent adherence to pharmacologic and non-pharmacologic interventions can significantly decrease blood pressure and avert complications. Behavioural compliance can be modified using the Health Promotion Model, which underscores personal traits, behaviours, cognition, and emotions. This study investigates the adherence experiences of individuals with hypertension and the associated benefits. By comprehending and advocating for respectful attitudes toward care and treatment, healthcare professionals can assist hypertensive individuals in realizing improved health outcomes and ultimately contribute to the overall well-being of the Indonesian populace.

Abstract

Hypertension is an incurable disease, requiring patients to comply with treatment in order to reduce the risk of complications, including death. Therefore, this study aimed to explore the experience of individuals with hypertension in relation to compliance with treatment.

The study adopted a qualitative descriptive design using semi-structured questions, and a total of 20 patients with hypertension participated.

The result of this study found 5 themes, namely, not taking the medication regularly, adhering to a diet, using complementary medicine, stable blood pressure, and dizziness as the primary complaint.

There were significant and exciting results from this study, namely, patients who do not take medication regularly and do not adhere to their diet.

Introduction

Compulsory long-term care for hypertensive patients is often an obstacle to achieving medication compliance and treatment success.[1] Obedience to medication is the only way for individuals with hypertension to control the disease and lower the risk of both complications and death.[2,3] Data from the Basic Health Study (Riset Kesehatan Dasar) showed that the proportion of hypertension treatment in Indonesia had not reached the target of 100% in 2018. Specifically, the proportion of hypertension medication only reached 54.4%, and about 32.3% did not take regular medication, while 13.3% did not partake in the treatment.[4]

Previous studies in several Indonesian regions reported a tendency for non-compliance of hypertensive patients to treatment, including the Primary study, Mbakurawang, Liberty, et al., Purnawan, and Tumundo, accounting for 63.9%, 57%, 80%, 58.68%, and 57.5%, respectively.[5–9] Similar studies in other countries also showed the same trend as the conditions are similar to Indonesia. Akoko (2017) in Cameroon stated that the percentage of non-compliance to the treatment of hypertension patients was 56.1%. Furthermore, North Vietnam (Nguyen, 2017) Jankowska-Polanska in Poland, and the United States reached 50.2%, 63.1%, and 59% non-adherent patients, respectively.[10–12]

Data from the World Health Organization (WHO) in 2013 showed that hypertension affects 972 million individuals worldwide, accounting for 26.4%.[13,14] According to the Basic Health Study in Indonesia by the Ministry of Health compiled in doctors' diagnosis medications and measurements, the increase of hypertension incidents among 18-year-old individuals increased from 25.8% to 34.1% in 2018. The prevalence of hypertension at the age of <20 years from the results of the 2016 National Health Indicator Survey (Survey Indicator Kesehatan Nasional) based on blood pressure measurements was 10.7%. The result showed that the prevalence of hypertension in Indonesia increased from 25.8% to 34.4% in individuals aged 18 years people and above. In Surabaya City, hypertension was ranked

first for non-communicable diseases in 2016 (Surabaya City Health Office, 2017). The provincial data in the 2018 Basic Health Study stated that hypertension in Surabaya is 18.42%.[4]

Hypertension is classified as one of the non-communicable diseases or NCDs, representing the leading cause of mortality worldwide and accounting for 68% of the 56 million deaths in 2012. When not treated adequately, hypertension damages a target organ and triggers a stroke, which is the occurrence of coronary heart disease, resulting in death. A previous study reported that 7 million people die from hypertension in the world annually.[13] Generally, the contributing factors of hypertension treatment compliance include age, sex, education level, employment status, length of suffering from hypertension, length of treatment, level of knowledge, motivation for treatment, drug side effects, perceptions of health surfaces, and family sports.[15–18] Stressful conditions also cause non-compliance with the treatment of hypertensive patients and blood pressure control.[19] Another determinant of compliance is the experience of service satisfaction, including drug counseling and home care received by patients.[20] Non-compliance with hypertension treatment can occur due to obstacles to seeking treatment, fulfilling prescriptions, correctness in taking medication, and health checks. Treatment compliance to hypertension can prevent complications. Previous studies showed that 17.7% of deaths are due to stroke, and 10% are caused by ischemic heart disease.[13]

Pharmacological and non-pharmacological management has been shown to reduce blood pressure when carried out regularly, necessitating compliance. Non-compliance in treatment is a form of behaviour that can be changed. Compliance behaviour based on the Health Promotion Model assumes that characteristics and experience, behaviour, personal, cognition, and affection factors can determine an individual respectful behaviour.[21,22] Hypertensive patients have complex bio, psycho, social, and spiritual needs. Individual efforts in carrying out care require personal commitment and support from the environment.[17,23] The application of the model in this study includes adaptation and integrity or wholeness. Adaptation is a change process while conservations represent the daily outcome. According to a previous study, adaptation is a process where the integrity of patients grows in the

natural environment.[24] Conservation enables individuals to face constraints and adapt to the situations while maintaining uniqueness. In addition, conservation also aims to keep an individual healthy and have the strength to encounter disability and even death. This study aimed to explore the experience of people with hypertension in relation to compliance with treatment and the benefits. The experience of respectful behaviour towards care and treatment is the reference in providing nursing services to groups, specifically in behaviour modification. Therefore, a group of individuals with hypertension are wholly healthy and productive, as well as become quality assets of the Indonesian nation.

Materials and Methods

Study Design

This qualitative study used a phenomenological method to explore the unique meaning of each experience or phenomenon of mankind.

Participants

A total of 20 patients with hypertension in Krembangan Selatan Public Health Center were selected as the study samples, using the purposive sampling method.

Data Collection and Instrument s

Data were collected from July to August 2022 using semi-structured questions. The interview guide was prepared based on the study objectives according to the Health Promotion and Conservation Models. This study found data saturation after interviewing 20 participants.

Data Analysis

Data analysis includes the identification of various themes selected from interviews and observations. Intensive reading of the transcriptions of the interviews and observations yields several themes, which are subsequently labeled with attached meanings or contextual significance.

Ethical Clearance

Ethical clearance was obtained from the Health Research Ethics Committee of the Indonesian STRADA Institute of Health Science with study number 3613/KEPK/IX/2022, dated 22 September 2023.

Results and Discussion

The demographic characteristics of participants are shown in the following Table 1. Based on Table 1, it showed that the majority of participants were female, aged 50-59 years, with senior high school education, and married, accounting for 75%, 55%, 65%, and 85%, respectively. A total of 65% work from home, with a percentage of 75% income, which is below the local standard of payment in Surabaya (4,375,479.19 IDR). Furthermore, 35% of patients suffered from hypertension for 6-10 years with a single common health complaint, accounting for 45%. The majority, accounting for 55% took drugs other than those for hypertension. The two most commonly consumed types were anti-diabetic and anti-hyperlipidemic medications, with each being taken by 5 patients.

Theme Analysis

The theme of this study includes the treatment experiences, comprising the following sub-themes 1) experience of taking hypertension medication, 2) experience of undergoing a hypertension diet, and 3) experience of using complementary/traditional medicine.

Previous Care Experiences

Experiences taking hypertension medication

An interesting result of this study was that 9 participants took medication when there were complaints, such as chest pain or headache.

> *"When my chest hurts, I will just take medicine, sis" (R2). "The headache is reduced. Take medication not continuously when there are complaints" (R4). "Drink when symptoms appear" (R9). "Rarely take medicine, just when you feel dizzy" (R10). "I do not take medicine when the body feels good" (R11). "Take medicine if there are complaints" (R12). "I take medicine every day, but sometimes I stop. Take medication when there are complaints" (R14). "When a headache arises, then we take medicine" (R15). "Do not take medication continuously or only when there are complaints" (R17).*

Experiences with a hypertension diet

The experiences of participants in a hypertension diet included not eating meat, avoiding fried foods, and reducing salty foods.

> *"Regular diet, do not eat meat and chicken" (R1). "Avoid fried foods" (R2). Reduce eating salt and fried foods" (R6). Reduce salty foods (R7). "Eat 3 to 5 cucumbers and star fruit a day, as well as when blood pressure increases and other symptoms" (R9). "Reduced eating coconut milk, foods high in salt" (R10). "Reduce salty food" (R12). "Do not eat salty foods" (R13). "Reduce salty food" (R17). "Regular diet, reduced salt" (R18). "Reduced salt, regular diet" (R19).*

Experiences using complementary/traditional medicine

> Traditional therapy includes consuming ginger, honey, mangosteen, and coriander.
>
> *"Ginger, Moringa leaves, lemongrass, bay leaves, and coriander are boiled" (R2). "Drink boiled celery water" (R3). "Bay leaf herb. Mangosteen" (R5). Consume garlic and turmeric sometimes" (R6). "Drink red ginger, cabepuyang" (R7). "Herbs, ginger, honey" (R8). "Lemon grass, celery, ginger, boiled turmeric and drink for two days, once each morning" (R9). "Drink celery/coriander water" (R17).*

Discussion

Previous Care Experiences

Experience taking hypertension medication

Hypertensive patients take antihypertensive drugs only when there are complaints or feelings of dizziness and only 3 participants did not take at all. The result of this study showed that commitment to taking medication affects patients' compliance. Commitment of hypertension patients was influenced by the acceptance of health conditions. Self-acceptance also affected compliance with self-care. Accepting oneself in all circumstances includes cultivating an attitude of contentment and self-acceptance, acknowledging and appreciating inherent qualities and talents, while also recognizing and respecting one's limitations.[10,25] According to Arthur (2010), individuals who accept health conditions have good self-acceptance. Another study by Rizqinda (2021) showed that there was a close association between self-acceptance and compliance with treating Lupus patients.[26] Wahdania (2021) also explained the association between self-acceptance and compliance to care for patients with chronic kidney failure.[27] Several other aspects affect self-acceptance, including the belief in facing problems, self-esteem, rejection from society, and feeling uncomfortable with health conditions, responsibilities, specifically the head of the family, as well as praise and criticism. Patients need to adjust to the conflict between ideal desires and the continued necessity for conventional therapy to regulate blood pressure, alongside exercise or holistic interventions. According to a previous study, patients tend to lose courage when criticized and feel demotivated to experience hemodialysis.[28]

Experiences in a hypertension diet

Hypertensive patients have made several treatment efforts regarding a proper hypertension diet, such as abstaining from salty foods (low salt), coconut milk, and fries. Diet compliance needed family support, which was explained by Sumarni et al. (2021) showing a significant influence.[29] A study by Chandra showed that family support was an important factor in the nutritional intake among adults with primary hypertension.[18] Friedman (2013) also explained that family support referred to the assistance provided in terms of informational appraisal instruments and emotional. This result was consistent with a previous study about the association between family support and dietary compliance among hypertensive patients.[30]

Experiences using complementary/traditional medicine

Most hypertensive patients do not use traditional medicine. Some natural ingredients commonly used by patients who select traditional medicine include ginger, moringa leaves, lemongrass, bay leaves, coriander, celery, garlic, turmeric, red ginger, chilipuyang, temulawak, and honey. Previous studies found various alternative therapies that could reduce high blood pressure. Furthermore, many herbal medicines, such as Punarnava, Barberry, Rouwolfia, Garlic, Ginger, Ginseng, and Arjuna, are safe to treat hypertension. The result explained that the most effective use of complementary therapy in the elderly with hypertension was using herbal medicines. This suggests the continued necessity for conventional therapy to regulate blood pressure, as well as exercise or holistic therapy.

Conclusions

In conclusion, treatment experience was a factor related to medication compliance. Furthermore, commitment from the patient and acceptance of the health condition could increase compliance. Family support in the diet was essential because the family was the closest to patients. Experience in carrying out traditional medicine could also complement medical treatment for hypertensive patients. The result also showed that knowledge of hypertensive patients affected compliance to carry out care. Hypertensive patients were then required to strengthen commitment to care through condition acceptance. Family support was needed to support compliance with medication, diet, and regularly controlling blood pressure.

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Table 1. Demographic Characteristics of Participants

Demographic Characteristics	Frequency (n)	Percentage (%)
Gender		
Man	5	25
Woman	15	75
Age (years)		
<30	1	5
30-39	1	5
40-49	2	10
50-59	11	55
60-69	3	15
70-79	1	5
>80	1	5
Occupation		
Private employee	2	10
Businessman	2	10
Retired	1	5
Housewife/Not working	12	60
Other	3	15
Income		
Less than the local standard of payment	15	75
Equal to the local standard of payment	5	25
Marital status		
Married	17	85
Not married/widow/widower	3	15
Length of time suffering from hypertension (years)		
< 1	6	30
1-5	5	25
6-10	7	35
11-15	2	10
Number of health complaints		
1	9	45
2	7	35
3	1	5
4	2	10
≥ 5	1	5
Total consumption of drugs other than hypertension drugs		
There is not any	4	20
1 kind of drug	11	55
2 kinds of medicine	4	20
3 types of drugs	1	5
Types of consumption of drugs other than hypertension drugs		
OAD	5	25
Anti-hyperlipidemia	5	25

Demographic Characteristics	Frequency (n)	Percentage (%)
Anti-hyperuricemia	2	10
Anti-anginal medication	3	15
Other types of drugs (multi-vitamins, analgesics, hyperthyroid drugs, antacids)	7	35