Self-Belief and Social Support Factors on the Emotional Response of Patients with Hypertension

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Abstract

Introduction: Emotional responses that occur in patients with hypertension will affect the compliance of healthy life behaviors and treatment of hypertension. The study aims to analyze the effect of self-belief and social support on the emotional responses of patients with hypertension. Method: The study was analytic observational design with a cross-sectional study approach. Samples were taken by multistage random sampling as many as 225 people with hypertension who have systolic blood pressure above 160 mmHg and or diastolic pressure above 100 mmHg. Research instruments of the study are in the form of self-belief questionnaires, social support, and emotional responses. Data analysis performed using Pearson test and linear regression. Result: The results of the study describe all the variables of self-belief showing that more than 50% of sufferers have self-belief in the moderate category. Moderate social support variables describe more than 50% of sufferers have less social support. Pearson test found a significant relationship between self-belief and social support to emotional responses on patients with hypertension. Linear regression analysis found self-belief in the form of perceived severity, perceived threat and health worker's support affect the emotional response of patients with hypertension. Conclusions: The emotional response of patients with hypertension is influenced by health worker's support, perceived severity, and perceived threat.

Keywords: *Self-belief, Social support, Emotional response, Hypertension.*

Introduction

Hypertension is a disease in which number continues to increase every year [1]. This prevalence increases the risk of cardiovascular disease [2]. A proper self-care in managing patients with hypertension is needed to control blood pressure and prevent complications [3,4]. However, several studies have found that the ability of patients with hypertension to perform self-care appropriately is still low [4, 8].

The study found that good drug adherence in hypertension patients was very low [9]. One of the contributing factors is an inability to conduct self-regulation properly [10]. Self-regulation is closely related to the process of emotional regulation. When individuals self-regulate, they are often confronted with emotional situations within themselves [11]. The study results as many as 52.3% of people with hypertension show growing anxiety resulting in the emergence of unorganized behavior and as much as 47.4% of having pressure and rejection regarding their conditions which cause the sufferers to be in a stressful condition [12]. Someone who has been diagnosed with hypertension has a higher risk of anxiety compared to those who do not have hypertension [13].The emergence of this emotional response will affect the sufferer's behavior in conducting self-care.

Emotional responses affect treatment adherence that results in changing blood pressure in patients with hypertension [14]. The health belief model is a model that explains that beliefs affect one's health behavior. Several studies have found that the application of the health belief model is the main factor in self-care behavior for people with hypertension [15]. Social support, especially from a good family and good patient knowledge could improve self-care behavior [16, 18, 19].

The family is a support system that will produce good development [20]. The social support is also able to reduce health problems in a person [21, 23]. The purpose of the study is to analyze the effect of self-belief and social support factors on the emotional response in people with hypertension.

Method

Design, Settings, and Samples

The study employs an observational analytic design with a cross-sectional study approach. The research was conducted by the year 2019 in the Malang Regency area. The sample of the study were hypertension sufferers who have systolic blood pressure above 160 mmHg and or diastolic blood pressure above 100 mmHg. The sampling technique used multistage random sampling.

Variables, Instruments and Data Collection

The independent variables of the study are self-belief and social support. Self-belief consists of perceived susceptibility, perceived severity, perceived threat, perceived benefit, and perceived barrier. Social support consists of family support, peer support and health worker's support. The dependent variable is the emotional response consists of fear, anxiety, and depression. The research instrument is in the form of a questionnaire. Self-belief questionnaire refers to the perceived susceptibility and perceived severity of chronic diseases and the perceived benefit and barrier questionnaire prepared by the researcher.

The choice of answer from the states listed for the variable of self-belief uses a Likert scale with the choice of answers: strongly disagree (0), disagree (1), agree (2) and strongly agree (3). The social support questionnaire presenting an informational, instrumental, emotional/appreciation social support questionnaire obtained by respondents from family, peers and health workers.

The answer choices for each social support question are never (0), sometimes (1), often (2) and always (3). While the emotional response questionnaire was modified from the Depression Anxiety Stress Scale (DASS 42). The emotional response questionnaire choice answers also use a Likert scale with choices never (0), sometimes (1), often (2) and always (3).

The research instrument is tested for validity and reliability. Cronbach's alpha value perceived susceptibility 0.752; perceived severity 0.769; perceived threat 0.866; perceived barrier 0.835; family support 0.959; peer support 0.958; health workers support 0.949; fear 0.827; anxiety 0.666 and depression 0.850.

The data were collected by giving questionnaires to respondents. Before the questionnaire was distributed, respondents had received an explanation of the aims, benefits, and procedures of the research to be carried out. Respondents who agreed to be involved in this research activity gave their signatures on the informed consent sheet in advance. The study was approved by the Health Research Ethics Committee of the Faculty of Nursing, Airlangga University, Surabaya Indonesia.

Data Analysis

The study results data analysis which was conducted using the Pearson Test and linear regression test. The data processed using the SPSS program

Result

The Self-belief of People with Hypertension

The self-belief of hypertension sufferers is reflected in perceived susceptibility, perceived severity, perceived threat, perceived benefit, and perceived barrier. Table 1 illustrates that the five biggest self-belief respondent's indicators are more than 50% indicates the medium self-belief category.

Table 1: Distribution of Frequency Self-belief (n=225)

Variable	n	%
Perceived Susceptibility		
Low	87	38.7
Medium	115	51.1
High	23	10.2
Perceived Severity		
Low	85	37.8
Medium	117	52.0
High	23	10.2
Perceived Threat		

Low	87	38.7
Medium	115	51.1
High	23	10.2
Perceived Benefit		
Low	81	36
Medium	120	53.3
High	24	10.7
Perceived Barrier		
Low	87	38.7
Medium	115	51.1
High	23	10.2

Social Support

People with hypertension get support from families, peer groups and support from health workers. However, the results obtained according to table 2 illustrate that more than 50% of respondents get less support.

Table 2: Frequency Distribution Social Support

Variable	n	%
Family Support		
Low	118	52.4
Medium	83	36.9
High	24	10.7
Peer Support		
Low	166	73.8
Medium	56	24.9
High	3	1.3
Health Worker Support		
Low	125	55.6
Medium	97	43.1
High	3	1.3

Emotional Response

Indicators of emotional response are reflected in the form of fear, anxiety or depression.

Table 3 illustrates that almost all respondents have low levels of fear, anxiety, and depression.

Table 3: Frequency Distribution Emotional Response

Variable	n	%
Fear		
Low	211	93.8
Medium	14	6.2
High	0	0
Anxiety		
Low	216	96
Medium	9	4
High	0	0
Depression		
Low	219	97.3
Medium	6	2.7
High	0	0

The Relationship between Self-belief and Social Support to Emotional Responses

The analysis test using Pearson listed in Table 4 found that all indicators of belief and social support have a significant relationship to the emotional response of hypertension sufferers.

Table 4: Relationship between self-belief and social support to emotional responses

Variable	Emotional Response	
	r	p-value
Perceived susceptibility	0.176	0.008
Perceived severity	0.191	0.004

Perceived threat	0.176	0.008
Perceived benefit	0.174	0.009
Perceived barrier	0.185	0.005
Family support	0.270	0.000
Peer support	0.174	0.009
Health Workers Support	0.364	0.000

The Effect of Self-Belief and Social Support on the Emotional Response of Patients with Hypertension

Table 5 illustrates that there is an influence of health workforce support and perceived severity with p-values of 0,000 and 0.037,

respectively. While the perceived threat is maintained in the model because it is considered as a variable that plays an important role in the emotional response of hypertension sufferers.

Tabel 5: Linear Regression Analysis The Effect of Self-Belief and Social Support on Emotional Response

Variable	B	SE	β	t	p*
Constant	-0.273	0.256		-1.065	0.288
Perceived severity	1.835	0.877	1.115	2.093	0.037
Perceived threat					
Health Worker Support	-1.617	0.878	-0.981	-1.843	0.067
	0.822	0.150	0.342	5.495	0.000

Discussion

Emotional responses are reflected in three constructs which are fear, anxiety, and depression. The results of the study illustrate that almost all hypertension sufferers experience low categories of fear, anxiety, and depression.

This shows that most sufferers do not experience significant fear of the illness. Patients also experience a low anxiety category with hypertension and do not cause severe depression due to hypertension. Some research results explain that the emotional response of patients with hypertension affects treatment compliance. However, this emotional response is different between men and women. Emotional response can predict better adherence to treatment and has a relationship with improvement in systolic blood pressure [14].

Treatment of hypertension is associated with the emergence of psychological distress such as anxiety and depression. This can be attributed to the direct influence of increased blood pressure, side effects of treatment or the consequences of individual hypertension diagnosis [13].

Anxiety is significantly related to the risk of increased blood pressure [24]. The study result in the emotional response which occurs in people with hypertension is influenced by individual beliefs regarding hypertension and social support. Overall, the beliefs felt by

most hypertension sufferers are in the moderate category. The results indicate that sufferers have sufficient self-believe in threats, seriousness, and vulnerability. However, sufferers also feel barriers to self-care. Self-belief is an important factor that can affect a person's behavior. Perceived severity, perceived threat and perceived benefit will influence individuals to make behavioral changes even better [25, 26].

Patient's self-belief is an important factor that can affect treatment, lifestyle compliance, disease prognosis, patient satisfaction, patient's quality of life and management and control of the health conditions of patients with hypertension [27].

Patients with hypertension who feel vulnerability, seriousness and high benefits have a high level of adherence to treatment compared with patients who feel vulnerability, seriousness and lower benefits [27]. The perceived vulnerability in addition to influencing medication adherence also affects the regulation of low salt consumption and smoking behavior [28]. The factor of social support is reflected in family support, peer support and health worker's support who have a positive effect on the patient's emotional responses.

Besides, the highest percentage obtained is good family support, peer support and health workers support have fewer categories. This lack of social support results in the emotional

response of hypertension sufferers in the low category. Social support is an important factor that influences the patient's self-care behavior. Social support, especially good family social support accompanied by an increase in patient knowledge, increases self-care behavior [16]. However, this social support does not directly affect patient self-care, but through self-efficacy [29].

Poor social support from family, peer support and health workers support an effect on one's behavior. The lack of support indicates that hypertension sufferers have a deficit in support of providing information regarding hypertension, support for self-care facilities, emotional support for patient's efforts and lack of support to get an award/assessment of what hypertension patients have done. This lack of support has an impact on the ability to take care of patients with hypertension.

This also results in the inability of sufferers to control blood pressure. Another study explained that a lack of social support and somatic health problems were associated with psychological stress. Social support is a less direct effect on psychological pressure. Lack of social support, poor health problems, and problematic economic conditions causes a person to become very vulnerable to mental health [30]. The role of family social support and peer social support is very large in the treatment behavior of patients with hypertension.

Social support is carried out in the form of informational support, instrumental support, and emotional support. The involvement of family and peers is reminiscent of the treatment of very large patients. The care of family and peers is also an important factor [31]. Family support has a positive effect on patient compliance with medication and routine blood pressure measurement [32]. Besides, peer social support affects one's

health status. Family, child and partner support is also effective in reducing depression, increasing healthy behavior [33, 34]. Peer support can influence the stress management of hypertension sufferers [35].

The results of other studies show that social support of health workers is effective in improving the health status of a person with chronic disease. The study results that the social support of health workers changes the body mass index, daily smoking consumption, systolic blood pressure, mental health and changes the quality of patient treatment to reduce the rate of hospitalization in one year by 28% [36]. Health workers as health service providers are very important and play a major role in providing support to patients with hypertension. Support of health workers which provides information and motivation increases knowledge, understanding, and confidence of sufferers in doing a treatment. The patients' self-belief can be used as a basis in self-care properly and correctly.

Conclusions

Emotional responses that occur in a patient with hypertension which is fear, anxiety, and depression are significantly influenced by self-belief such as perceived severity and perceived threat. Moreover, emotional responses are also very significantly influenced by the support of health workers.

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