

## Conference Paper

# Family Support for Controlling Blood Pressure of Elderly Patients in Health Facilities During the Covid-19 Pandemic in Banjarmasin

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**Abstract**

At the time of writing, Covid19 cases were steadily increasing in Banjarmasin. Elderly people were afraid to go to the health facilities to control their blood pressure because they were afraid of catching this disease. However, checking blood pressure in the elderly with hypertension is extremely important, and in the absence of qualified medical staff their families need to take on the role. This research is to find the correlation between family support and controlling blood pressure of elderly patients in health facilities. This study was a quantitative research with cross sectional design that used documentation sheets and questionnaires about family support. Selected via purposive sampling, 50 people from families with hypertension were included in this study. The research period was May to July 2020. Data analysis used Chi Square test at  $\alpha = 0.05$ . The results indicate that the majority of the respondents have a good family support (56%). For control compliance to health facilities, most respondents selected 'Not Compliant' (40%). The Chi Square analysis showed p value = 0,024 with a significancy  $0.05 < 0.05$  there is a relationship between family support controlling blood pressure in health facilities. Nurses are expected to participate in the efforts on empower families to improve a health of community especially elderly patients with hypertension.

**Keywords:** Elderly, Blood Pressure Control, Family Support, Hypertension

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## 1. Introduction

The Covid-19 (COVID-19) pandemic was declared to a global pandemic after the infections number in worldwide reached more than 121,000 cases [1]. As time goes on, more people are becoming panicked and scared because the number of infected patients continues to increase including in Indonesia. The increase of sufferer number in Indonesia raises concerns in general, where is the effect on society is make it easier to panic, anxiety and stress [2]. An increase in the number of Covid-19 cases of also

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occurred in Banjarmasin, so the community in Banjarmasin also experienced anxiety about the transmission of the disease [3].

The group that susceptible to psychological stress during the Covid-19 pandemic are children, the elderly, and health workers [4]. Statistical data of the elderly population by Statistics Indonesia that the elderly population belongs to a group that is susceptible to corona virus infection. Elderly with cardiovascular disease and hypertension have more high risk of being infected and suffering from Covid-19 [5].

The fear that felt by the elderly with hypertension about contracting the disease was causes them to become afraid to go to check themselves to the health facility or just doing a hypertension medication every week. Even though the blood pressure check in elderly suffering from hypertension is a very important thing to do. Regular control to health facilities such as checking blood pressure and following hypertension gymnastics will help to decreased the blood pressure of elderly patients [6]. Regular examination of blood pressure will help the elderly avoid the risk of hypertension complications such as heart disease, stroke and other preventable vascular diseases [7].

The anxiety or stress that felt by have an affected to elderly patients with hypertension. Stress is one of the factors that causing the blood pressure of elderly patients to become unstable [6, 8]. The confession of puskesmas officers in charge of recording patient of hypertension during this Covid 19 pandemic, the schedule of visits of elderly patients with hypertension was decreased. Elderly patients with hypertension are usually scheduled every 2 weeks to check their blood pressure and take hypertension medication. In the fact now, the are many elderly people with hypertension come only 1 time per month for reasons of fear to health center. The compliance of the treatment for hypertension patients is important because hypertension is an incurable disease but the hypertension must always be controlled so as not to cause complications that lead to death [9].

The compliance of elderly patients in routine control requires support from the family. Elderly people who have an experienced of decreased function and have chronic diseases such as hypertension are in desperate need a support and help from others. A study shows there is a link between the level of elderly education, elderly attitudes, affordability of health services and family support with the practice of seniors visiting the elderly posyandu [10]. Family is a main support system for the elderly in maintaining their health. The role of families in elderly care is to look after or care for the elderly, maintain and improve mental status, anticipate socioeconomic changes and provide motivation and facilitate a spritual needs for the elderly [11]. The support of the family will give strength and create an atmosphere belong to each other members of family to a meeting the needs of the family development.

A family has a several forms of support, that are information support, assessment support, instrumental support and emotional support [12]. This is the best preventative strategy to increase a strong family support in helping family members maintain health. A good family will have a positive impact on the development of the elderly, and vice versa [13]. The results of research by Herlinah on the relationship of family support and elderly behavior in hypertension control showed there was a link between emotional support, reward support, information support and family instrumental support and elderly behavior in hypertension control, and found that information support was the dominant factor in elderly behavior in hypertension control [14].

Based on all of the above explanations of the important of family support, researchers are interested to find out about Family Support to Controlling Blood Pressure of Elderly Patients In Health Facilities During The Covid 19 Pandemic

## 2. Methods and Equipment

### 2.1. Methods

This research was a quantitative research with a observational research with cross sectional research design. The population in this study was the family of elderly patients (>60 years) who suffered from hypertension in the working area of Puskesmas Teluk Dalam during January – May 2019 of 150 families with hypertension. This study used 50 people to be sample that representatives from families of elderly people with hypertension. The sample in this study was conducted with purposive sampling techniques where the sample criteria had been determined by previous researchers.

This research was conducted from May 2020 to July 2020. The research location is the Teluk Dalam area of Banjarmasin City. Data analysis is done in 2 stages, namely univariate analysis and bivariate analysis. Univariate analysis was conducted on every variable of the study results: demographic data: respondent's age, occupation, gender and education of each participant, family support and compliance of screening elderly hypertension patients. Bivariate analysis was conducted with Chi Square tests to see if there was a relation between family support to elderly patient compliance with health checks.

## 2.2. Equipment

Researchers used a family supports questionnaires that was validated before. Questionnaires for family support are compiled according to family support theory including emotional support and appreciation for 4 item, material support for 3 item, information support or knowledge and assessment support for 3 items. For family support result used 3 category that were good, moderate, and low [15]. Compliance data will be viewed from the documentation sheet listing visits of elderly patient with hypertension who doing control.

## 3. Result

### 3.1. Characteristics of respondents

TABLE 1: Distribution of Frequency Characteristics Family of Elderly Patients with hypertension.

<b>Age</b>	<b>F</b>	<b>%</b>
20-Dec	12	24%
21-40	23	46%
41-65	10	20%
> 65	5	10%
Total	50	100%
<b>Gender</b>	<b>F</b>	<b>%</b>
Man	26	52%
Woman	24	48%
Total	50	100%
<b>Education</b>	<b>F</b>	<b>%</b>
Elementary school (SD)	10	20%
Junior High Scholl (SMP)	19	38%
Senior High School (SMA)	20	40%
Scholars	11	22%
Total	50	100%

Based on the characteristics of respondents in table 1, the majority of respondents aged 21-40 (46%), the majority of respondents were male as many as 26 respondents (52%). The majority of respondents when viewed from the characteristics of the most of high school educated education are 20 respondents (40%).

TABLE 2: Distribution of Family Support for elderly wit Hypertention.

Family Support	F	%
Good	28	56%
Moderate	15	30%
Low	7	14%
Total	50	100

### 3.2. Distribution of family Suport

Result in table 2 appears that family support for elderly people with hypertension is in the category of good support (56%), while the category is moderate (30%), and support is low (14%).

### 3.3. Distribution of Control data for Elderly Patients with Hyperten- sion

TABLE 3: Distribution of control compliance of elderly people with hypertension to health facilities

Control Compliance	N	%
Fully Compliant	14	28%
Partial Compliant	16	32%
Not Compliant	20	40%
Total	50	100

Based on result in table 3 it showed that the majority of elderly with hypertension are not compliant to control their blood pressure at health facilities which is 20 people (40%).

### 3.4. The relationship Family support with elderly patient control compliance

TABLE 4: Cross-table relationship between family support to control compliance of elderly patients with hypertension to health facilities

Family Support	Control compliance			Total
	Fully Compliant	Partial Compliant	Nont Compliant	
Good	12 (24%)	9 (18%)	7 (14%)	28
Moderate	2 (4%)	25 (10%)	8 (16%)	15
Low	0	2 (4%)	5 (10%)	7
Total	14 (28%)	16(32%)	20(40%)	$\frac{50}{100}$

Chi-square: 0,024; Sig. 0,05 ( $\alpha = 0,05$ )

The result from table in table 4 above shows that a good family support keeps patients always to control to health facilities by 24%, family support is good but less compliant in health control as much as 18%, and family support is good but control compliance is not compliant as much as 14%. Sufficient family support but control compliance in the compliant category was 4%, while with a sufficient family support but have a disobedient control was 16%. It also appears that poor family support only leads to 4% less compliant and 10% non-compliant category.

## 4. Discussion

Based on result in table 1 for Characteristics of respondents obtained the result that the majority of respondents aged is young adults (21-40 years old) as many as 23 people (40%). Families in that age range should have knowledge and be able to provide attention, motivation, and information to clients about things that could lead to worse circumstances. One of research stated if people have older age then the level of a person maturity will be more mature in thinking and working. In terms of public trusted a mature person will be more trusted than a person who is not high enough in maturity [16].

The majority of respondents by gender give a result in table 1 were male 26 (52%). At the time of the study, the number of male respondents whose families had elderly with hypertension was more male than female, this was because there were some female respondents who were unwilling to be respondents when the study was conducted, and usually from families representing one person to the respondent in filling out the questionnaire.

The results in table 1 also show the most education is Senior High School which is 20 people (40%) and Junior High School 19 (38%). The data shows that although there are more in senior high school, but it should not be trivialized that the majority of respondents are also still low educated such as junior high school. In general, the higher a person's education, the easier it is for a person to obtain information. The study before also said that have a lack of public knowledge about health care will affect the utilization of existing service facilities [17].

The previously in Table 2 showed a result that the majority of family support for elderly people with hypertension was in the good support category there were 28 people (56%). The family have an important role because each family member has their own roles and responsibilities and they all have inseparable relationships. The responsibility and need from each other in the family lead to mutual need between

each other. Family members also give an emotional support that helps patients deal with the stress of their illness. When the family provides support to the patient, the patient's condition will improve. Increased family support will be associated with better blood pressure control in hypertensive patients [18]. The support provided by family members shows the care and concern of the family so that hypertensive patients will be motivated to undergo treatment properly and properly [19].

The results showed that the majority of elderly with non-compliant hypertension control the health facilities are 20 people (40%). This disobedience figure is based on the patient's fear of covid-19 pandemic that is currently occurring. Some patients explain that they are afraid to go to the health center or to the hospital because of the risk of transmission of the disease. One of the highest causes of death from Covid-19 is the age factor. Biologically the elderly population will experience an aging process characterized by decreased physical endurance [2]. This can make the body more susceptible to certain diseases. Who added that congenital disease factors such as asthma, diabetes mellitus, or cardiovascular disease also cause a tendency to contract Covid-19 with a poor prognosis. Some of the cardiovascular diseases (heart and blood vessels) in question are hypertension, coronary heart disease, hypertensive heart disease, rheumatic heart disease, heart failure, valve heart disease, peripheral vascular disease, congenital heart disease, cardiomyopathy and so on [20].

Based on statistical analysis using chi-square tests on family support for elderly patient control compliance showed a p value of 0.024 with a significant level of 0.05. Since the p value is smaller than 0.05 then  $H_0$  is rejected and  $H_a$  is accepted. That result mean there is a relationship between family support and control compliance of elderly patients with hypertension.

Family support is quite affected for patients in controlling the disease. Family is one of the main supports for elderly patients with hypertension in maintaining their health. Families play an important role in the care and prevention of health in other family members. Family support has a close relationship with drug compliance so family support is expected to be improved to support the success of hypertension therapy [21].

Good emotional support with a providing care, motivation and attention to elderly families with hypertension is expected to help elderly patients to relieve excessive stress and fear so that the controlling of patient to health facilities will run properly. The informational support provided by the family in the delivery of information, knowledge, and correct instructions on hypertension is expected to support the patient's treatment program. One of the reasons of patients experience failure in controlling hypertension is

due to lack of compliance levels. Patient control for the disease will provide the effective results if educated about knowledge, ideas, thoughts and feelings against hypertension, resulting in efficient blood pressure control [22, 23]. The task is expected to be carried out by the family at home as a party that has more time with the patient.

Have a good material or financial support in a family will also have an impact on patient compliance to doing health control in health facilities. Financial hardship can lead to unstableness and fear in a family [23]. Financial balance is needed to treatment hypertension programs are sustainable and financial balance is necessary to maintain the therapy that is being carried out. In health control is indispensable family support, because the family acts as a primary group that acts as a reminder [23, 24].

The assessment support that required in here is that families are expected to participate directly in encouraging patients to adhere to hypertension control to health facilities. Families also give a help to decide what foods is good to consume, appropriate physical activity and how health is a priority in the family [18]. Families play an important role in encouraging and strengthening patient behavior in the compliance of elderly patients to perform Health control.

## 5. Conclusion

Based on the results of the research, it can be given the conclusion that there is a relationship between family support with health controls of elderly patients in conducting health control to health facilities. Family support is needed by elderly patients to always routinely perform blood pressure control in health facilities during the pandemic as it is today. Health workers, especially nurses, are expected to participate in family empowerment efforts to improve health care efforts, especially elderly patients with hypertension.

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## Conflict of Interest

The authors have no conflict of interest to declare on.



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