

## Family Support and Coping Mechanism in Congestive Heart Failure Patient

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### Abstract

Congestive Heart Failure (CHF) requires long-term care, which can affect the psychological aspects of the patient. In carrying out long treatments patients need adaptive coping mechanisms to maintain positive psychological aspects. One factor that can maintain adaptive coping mechanisms is with family support. The purpose of this study was to determine the relationship of family support to coping mechanisms in CHF patients. This research is a kind of descriptive research with cross sectional design. The sample in this study was 80 respondents, who was determined by purposive sampling technique. The results showed that the majority of CHF respondents aged 56-65 (77.5%), male sex 63.5%, long suffered 1-5 years 60.5%, had family support 77.5%, and adaptive coping mechanism 69%. Respondents who have family support and have adaptive coping mechanisms are 87% respondents. Chi-square test results indicate that there is a relationship of family support to coping mechanisms in CHF patients ( $p$  value 0.002), and family support will have the opportunity 12 times to achieve adaptive coping mechanisms. Family support can improve the coping mechanism of CHF patients because family support acts as a source of coping, so patients have coping mechanisms that are adaptive to deal with the disease and undergo the treatment process. The results of the study recommend the importance of family support in the form of informational, emotional, instrumental, and assessment support for CHF patients in order to achieve adaptive coping mechanisms. Further researchers are expected to conduct more specific research related to family support.

**Keywords:** Congestive heart failure; Coping mechanism; Family support

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### Background

Congestive Heart Failure (CHF) is a condition where the heart fails to pump blood to supply oxygen and nutrients to the body's organs adequately, resulting in dilation (dilation) of blood vessels and more blood that must be pumped throughout the body [1]. These conditions cause the heart to become stiff and thickened while the heart is only able to pump with a short time [2]. As a result the heart holds water and salt which causes dams in several organs such as hands, feet, lungs and other organs so that the body swells (congestive).

Globally cardiovascular disease is the number one cause of death each year [3]. In Indonesia, heart disease is the highest cause of death at all ages after stroke [4]. Based on doctor's diagnosis the prevalence of heart disease in Indonesia is 1.5% or an estimated 20,000, in Central Java as much as 18,750 (1.6%) [5].

CHF causes sufferers to be unable to carry out daily activities, thus requiring long-term care and is a fairly high cause of death in CHF. CHF sufferers if not treated immediately will experience

a decrease in health status so that the impact on the severity of CHF disease which ultimately causes a person to need long-term care [6].

The existence of long-term treatment will have an psychological impact. In general, the community believes that the worsening of CHF patient's condition is caused by excessive sadness or anger and lack of controlling coping mechanisms in individuals, as well as CHF's disease can affect individuals in controlling coping mechanisms [7]. Hardiansyah said CHF patients need adaptive coping mechanisms to maintain positive psychological aspects and reduce stress levels. It is used to maintain adequate oxygenation and psychological imbalances that often arise at the time of the attack. However, in reality patients with CHF often show maladaptive coping, thus worsening the patient's condition and can even result in death.

Maladaptive coping mechanisms require an intervention from both nurses, patients, and the support of people around. Support from people around you can be obtained from family support. Family support is a very important factor for someone who is

facing a health problem such as CHF. Families are able to provide very strong support and are more active in providing emotional and spiritual assistance, helping to meet diverse life needs and working together to motivate the fulfillment of health status as a coping mechanism for CHF patients [8] said the effects of social support coming from families on health and well-being function together. More specifically, family social support has been proven to reduce mortality, make healing easier, physical cognitive function and emotional health easier.

Several studies have shown the influence of family support on coping mechanisms of mastectomy patients, ovarian cysts. The results of research conducted by Dyanna [7] showed a relationship between family support and coping mechanisms in postoperative mastectomy patients (p value 0.030). The results of Triyanto's study also showed a significant relationship between husband's support and the coping mechanism of the wife suffering from ovarian cysts as evidenced by the existence of a value (p value <0.05). In the above research shows that family support affects the coping mechanism in mastectomy patients and patients with ovarian cysts. Researchers assume that family support will also affect the coping mechanism of CHF patients, so researchers are interested in conducting a study entitled "Relationship of Family Support to Coping Mechanisms in Congestive Heart Failure (CHF) Patients" [8-13].

## Research Method

This research is a kind of descriptive research with cross sectional design, which is a study that explains the relationship between risk factors and effects, by way of approach, observation or data collection at once at a time [14]. This technique is used to determine the relationship between independent variables (family support) to the dependent variable (coping mechanism).

The population in this study were all congestive heart failure patients who were treated at the inpatient and outpatient in Semarang hospital. The total sample in this study was 80 respondents. The sampling technique in this study uses a non probability sampling method by purposive sampling. Purposive sampling is a sampling technique where the researcher samples the population among the population based on certain criteria set by the researcher, so that the sample can represent the characteristics of the population that have been known previously [15].

As for the inclusion criteria in this study are: patients aged 26 - 65 years, not in an emergency condition, patients can communicate well and patients are willing to be respondents. The instrument in this study used demographic questionnaire, family support questionnaire and Coping mechanism questionnaire that had been tested for validity and reliability.

In this study the variables analyzed using univariate analysis are age, sex, and level of education, level of knowledge and family support. Bivariate analysis was used to examine the relationship and differences between the two variables, using the Chi-Square statistical test.

## Result

### Characteristics of respondents

Table 1 shows that the majority of CHF respondents aged 56-65 (47.5%), male sex 53.75%, long suffered 1-5 years 48.75%, had family support 57.5%, and adaptive coping mechanism 65% (Table 1).

Based on the results of the analysis is an indicate that there is a significant relationship between family support and coping mechanisms in CHF patients with p-value 0.002 (p value < 0.05). In this study, respondents who had family support with adaptive coping mechanisms were 87% and respondents who did not have family support with maladaptive coping mechanisms were 64.7% (Table 2).

**Table 1** Frequency Distribution of Characteristics of Congestive Heart Failure 2019 (n=80).

No	Characteristics	f	(%)
1	Age		
	26-35	10	12.5
	36-45	13	16.25
	46-55	19	23.75
2	Sex		
	Male	43	53.75
	Female	37	46.25
	Latest Education		
3	SD	20	25
	SMP	23	28.75
	SMA	22	27.5
	Perguruan Tinggi	15	18.75
4	Long Suffered		
	1-5 years	39	48.75
	6-10 years	21	26.25
	>10 years	20	25
	Total	80	100

**Table 2** Relationship of Family Support Against Coping Mechanisms in 2019 Congestive Heart Failure Patients.

Family Support	Coping Mechanism				f		p value
	Maladaptive		Adaptive		f	%	
	f	%	f	%	f	%	
No Support family	19	55.9	15	44.1	34	42.5	0.002
Have support family	9	19.6	37	80.4	46	57.5	
Total	28	35	52	65	80	100	

## Discussion

In line with the results of Dyanna's [7] research on family support for coping mechanisms showed a significant relationship between family support for coping mechanisms and the results of p value 0.03 ( $\leq 0.05$ ). Indotang's research in the Semampir District Health Center in Surabaya showed that there was a relationship between family support and coping mechanisms which had a p value of 0.00 ( $\leq 0.05$ ). Both of these studies show the results

that most respondents have family support with adaptive coping mechanisms.

In this condition family support is able to improve coping mechanisms in CHF patients through assessment support ie the family acts as a feedback, guides and mediates problem solving, as a source and validator of family identity, this assessment can be both positive and negative that the effect is very useful for patients [16], through the support of information in the form of verbal persuasion that can encourage CHF patients in overcoming their health problems, provides an understanding of the effects of disease on their condition and how to cope and provide guidance or feedback on expected behavior [2].

The results showed that the most family support was family support from the instrumental type (100%) and emotional type (97.5%) where in this type of family support respondents received direct support both physically and psychologically from the family. Instrumental family support that is the family is able to accompany when treatment, prepare treatment facilities and infrastructure, finance treatment, whereas emotional support is that the family gives a sense of empathy, attention, encouragement, personal warmth and love. The existence of such family actions can encourage feelings of comfort and lead individuals to believe that respondents are praised, respected, loved, and that others are willing to pay attention [17-21].

Assistance obtained from family or close friends is very valuable in solving health problems. The contribution of family members in CHF patients is needed to complete daily tasks and perform self-care and provide positive reinforcement. Family support is a support system provided by families to family members which includes providing emotional support, material assistance, providing services and information, as well as facilitating family members in forming social contacts with the community. The family support provided to CHF patients makes the patient easily focused and not stimulated by changes that occur in his body so that they are able to carry out adaptive coping mechanisms because they get inner peace from strong family support to quickly recover. So even though they experience shortness of breath, chest pain and fear of death, thanks to the presence of family members who always accompany and provide positive

support, they are able to control changes that occur properly and are willing to comply with all treatment procedures so that they are able to carry out coping mechanisms that are adaptive.

Based on the results of the study there are respondents who have family support but with maladaptive coping mechanisms as many as 9 respondents (19.6%). From the questionnaire analysis the respondent has a maladaptive coping mechanism because the patient does not accept his condition, being closed does not want to share his health problems with others, sometimes the patient becomes angry with others despite being supported by the family. In addition, the results of the study also showed that respondents who did not have family support with adaptive coping mechanisms were 15 respondents (44.1%), the results of the questionnaire analysis of respondents had low family support because the family did not accompany when treatment, did not prepare the need for medical facilities and infrastructure, respondents also decide each treatment action independently. In this study still found the condition of family support with maladaptive coping mechanisms and do not have family support with adaptive coping mechanisms [22-31].

The above statement is supported by Hurlock's [8] theory that there are other factors that influence coping mechanisms besides family support. These factors, among others, are influenced by the development of age, level of education, gender, personality, social maturity, socioeconomic status, and problem solving skills. Low family support can also be influenced by cognitive abilities, emotional states of individuals, economics, lifestyle and cultural background [22].

## Conclusion

The results of this study indicate that most CHF patients already have good family support and have adaptive coping mechanisms. The analysis showed that there was a significant relationship between family support for coping mechanisms in patients with Congestive Heart Failure. The results of the study recommend the importance of family support in informational, emotional, instrumental, and assessment support for CHF patients in order to achieve adaptive coping mechanisms. Further researchers are expected to conduct more specific research related to family support.

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