



SELF CARE AND SOCIAL SUPPORT AMONG PATIENTS WITH HEART FAILURE

Cardiology

Prof. Kanmani. J*

Professor, Department of Medical and Surgical Nursing, Amrita College of Nursing, Amrita Vishwa Vidyapeetham, Health Sciences Campus, AIMS-Ponekkara P.O, Kochi - 41, Kerala. *Corresponding Author

Ms. Shariga A

Fourth Year B.Sc Nursing, Amrita College of Nursing, Amrita Vishwa Vidyapeetham university, Health Sciences Campus, AIMS -Ponekkara P.O, Kochi-41, Kerala

Mr. Sidharth R

Fourth Year B.Sc Nursing, Amrita College of Nursing, Amrita Vishwa Vidyapeetham university, Health Sciences Campus, AIMS -Ponekkara P.O, Kochi-41, Kerala

ABSTRACT

Background: Heart failure (HF) occurs when the heart muscle doesn't pump blood as well as it should. Self-care is a decision-making process whereby individuals choose to perform health behaviours that promote physiological stability and respond to symptoms. Social support may influence a person's physical and psychological wellbeing. **Purpose:** The main purpose of the study is to assess the self-care and social support among patients with heart failure. **Method:** A quantitative study was conducted to assess the self-care and social support among patients with heart failure at a tertiary care hospital in Kochi. The study was done on 111 subjects, and a non-probability convenience sampling technique was used. A standardized SCHFI and MSPSS tool was used for data collection. **Result:** The study result shows that there is a moderately high level of social support (6.70 ± 5.40), and the level of self-care management includes maintenance (44.06 ± 11.55), management (25.49 ± 7.25), and confidence (56.74 ± 13.25). There was no correlation between self-care and social support. **Conclusion:** The study concludes that there is a mild positive correlation between self-care and social support. Self-care was limited among patients living with HF, and it was associated with a better quality of life.

KEYWORDS

Self-care, Social Support, Heart Failure, Patients.

INTRODUCTION

Heart failure (HF), often referred to as congestive heart failure (CHF), is when the heart is unable to pump sufficiently to maintain blood flow to meet the body's needs.¹ It's one of the most common chronic diseases and long-term adherence to therapeutic recommendations is required for favorable outcomes. Non-adherence to medical treatment among heart failure patients is high and results in frequent exacerbations and premature death. Heart failure (HF) is a syndrome characterized by high mortality, frequent hospitalization, reduced quality of life, and a complex therapeutic regimen.¹

The increased prevalence of HF in recent decades is due, among other reasons, to population aging and higher survival rates as a result of improvements in diagnosis and treatment methods. The extreme fatigue these patients are victims of due to the low perfusion of body tissues influences the worsening of quality of life and personal and social roles and leads to a progressive loss of self-care abilities. As a result, one of the main challenges nursing faces in the care delivery of HF patients is improving self-care, which Orem defines as the practice of activities that individuals initiate and perform on their own behalf, consciously and continuously, in maintaining life, development, health, and well-being.²

"Self-care is the practice of activities individuals initiate and perform on their own behalf to maintain health and wellbeing". In Orem's theory of self-care, self-care is performed as a means of satisfying the individual's self-care requisites.² These can be divided into three types: universal, such as breathing, drinking, and eating; developmental, which is associated with an individual's life cycle (e.g., giving birth or getting divorced); and health deviation, which includes various aspects of health related to a particular disease or a side effect of treatment.² Normally, the universal and developmental self-care requisites are performed by the individual without help from others, with the expectation of perhaps families and partners.² However, when it comes to health-deviation self-care requisites, there is a risk that a person's own ability to perform self-care is not sufficient. The reason for that might be a lack of knowledge on how to handle self-care activities in relation to a disease or treatment for it. Another reason might be that, because of the condition, the individual is physically unable to perform self-care. When self-care limitations occur in that way, it is necessary to bridge the gap between the individual's resources and the required needs. Thus, in such a circumstance, professional care is authorised.² Depending on the severity of the individual's condition, it may also be necessary for professional help to perform universal self-care requisites such as eating, drinking, and breathing. In the concept of self-care, as defined by Orem, there is an ambition within

the individual to regain independence from professional care and to perform self-care on their own. One might question whether that is the case for all individuals in all types of situations. Orem's theory of self-care is generic and not focused on a specific disease or condition of illness.²

Social support can be defined as the process of interacting with others which is³ comprised of emotional and informational support, tangible support, affectionate support, and positive social interaction.⁴ Social support may influence a person's physical and psychological wellbeing. A high level of self-care management is an important correlation of social support, and due to this, family members should play a greater part in clinical care with regards to improving patients' health status. Moreover, social support can lead to improvements in several health conditions and wellbeing, helping people cope with various situations, making them feel better about themselves by raising their self-esteem, and improving their ability or competency to perform task.⁵ Besides that, good family support care can enhance medication adherence among CHF patients. Supportive relationships have been known to help manage outcomes for people with CHF. Therefore, social support proportions in interpersonal relationships are recognized to influence adherence to health behaviors and enhance self-confidence.⁶

At the global level, HF is considered a severe public health problem because of its extremely high morbidity and mortality rates and the enormous economic and social costs it generates for patients, their families, health care providers, and society in general. Heart failure has been signed out as an epidemic and is a staggering clinical and public health problem associated with significant mortality, morbidity, and health care expenditures, particularly among those aged 65 and older. HF is a major public health problem, with a prevalence of more than 5.8 million in the United States and more than 26 million worldwide.⁷

Yunus H. D, KhuzaimahS., and Sharoni A conducted a cross sectional study on social support and self-care management among patients with chronic heart failure at the cardiology clinic in Hospital Serdang from April 2014 to June 2014. A questionnaire consisting of demographic characteristic, the MOS Social Survey, and the Self-Care Heart Failure Index (SCHFI) were distributed to a total of 113 respondents. The results show a moderately high level of social support (3.5 ± 0.89) and self care management (160.49 ± 44.39). There was a positive correlation between social support and self-care management ($r = 0.263$, $p < 0.05$), and the findings suggest that social support should be considered a predictor in the self-care management of patients with chronic heart failure.⁹

Chamberlain L conducted a study on perceived social support and self-care in patients hospitalized with heart failure in a Central Florida hospital in 2015. The aim of the study was to determine if hospitalized heart failure patients had deficiencies in self-care and perceived social support when compared with a sample of community-dwelling heart failure patients, define the relationship of perceived social support to self-care, and establish the association of self-care confidence with self-care maintenance and self-care management. A questionnaire consisting of demographic and clinical data, the Blessed Orientation Memory-Concentration (BOMC) test, the Medical Outcomes Study-Social Support Emotional Informational Subscale (MOS-SS) and the Self-Care of Heart Failure Index (SCHFI) sample of 121 hospitalized patients at four central Florida hospitals. The results show that the percentage of patients with adequate self-care confidence scores was higher than scores reported for community-dwelling patients. 25% of patients demonstrated cognitive impairment.¹⁰

Mansoreye N, Poursharifi H, Sadegi MRT and Seirafi MR conducted a study on the correlation between social support and self-care in patients with heart failure: the mediating role of illness perception in 2016. The aim of the study was to determine the correlation between social support and self-care in patients with heart failure through the mediating role of illness perception. A descriptive-correlation study, among 149 HF patients in Tabriz, Iran, was selected using the convenience sampling method in 2016. To collect the data, a demographic questionnaire, the European heart failure self-care behavior scale, a brief illness perception questionnaire, and a social support scale were used. The results show that there was a significant correlation between social support and self-care ($r = 0.518$, $p < 0.01$). The Sobel test showed the mediating role of illness perception between perceived social support and self-care (sobel test = 4.73, $p < 0.01$).¹¹

Graven LJ and Grant JS conducted a study on social support and self-care behavior in individuals with heart failure: an integrative review. By using an integrative review method, thirteen studies were identified that met the inclusion criteria from a review of current empirical literature and were conducted in a computerized database for a period of January 2000 to December 2012. And the results show that social support appears to have a positive relationship with heart failure self-care behaviors, with an individual's family playing an important role in assisting individuals to maintain positive self-care behaviors.¹²

MATERIAL AND METHODS

Research design

A quantitative approach with cross sectional research design was adopted for the study.

Sample and sample size

Patients with heart failure who come follow up in at cardiology OPD AIMS, Kochi. Total 111 subjects were chosen for the study.

Sampling technique

Non probability convenience sampling.

Inclusion Criteria:

- Those who are willing to participate in the study.
- Those who are available at the time of data collection.

Exclusion Criteria:

- Patients who are critically ill.
- Patients with recurrent active heart failure.

Data collection instrument

Tool 1: Socio demographic and Clinical data

Tool 2: Self-Care Heart Failure Index (SCHFI) -

is a standardized tool with three subscales. Each score is standardized to a 0 to 100. In maintenance the highest possible score is 40 and the lowest possible score is 10. In management the highest possible score is 24 and the lowest possible score scale is 4. In confidence the highest possible score is 24 and the lowest possible score scale is 6.

Tool 3: Multidimensional Scale of Perceived Social Support (MSPSS) -

is a standardized with three subscales. The scale score ranging from 1 to 2.9 could be considered low support; a score of 3 to 5 could be considered moderate support; a score from 5.1 to 7 could be considered high support.

Data collection: After getting ethical clearance, a rapport was developed with subject by researcher, then the study and the purpose of the study was explained and informed consent was taken. The validated tool will be administered maintaining a good interpersonal relation. The mean time spent for a subject is 25- 30 minutes.

RESULTS:

Section A: demographic characteristics

Table 1: Demographic characteristics of patients with heart failure (n=111)

Variable	Frequency (f)	Percentage (%)
Age		
41-60	30	27.0
61-70	47	42.3
71-80	29	26.1
81-90	5	4.5
Gender		
Male	82	73.9
Female	29	26.1
Education		
Degree	24	21.6
Higher secondary	17	15.3
Nil	5	4.5
Primary	18	16.2
Secondary	47	42.3
Marital status		
Married	111	100
Current occupation		
Nil	85	76.6
Pension	8	7.2
Present	18	16.2
Food habits		
Both	91	82.0
Vegetarian	20	18.0

Table 1 shows that the majority of CHF patients are male ($n=82, 73.9\%$), most of them in 61-70 age group ($n=47, 42.3\%$), all of them married ($n=111, 100\%$), with a secondary level of education ($n=47, 42.3\%$), most of them preferred both non vegetarian and vegetarian food ($n=91, 82.0\%$), and the people are unemployed ($n=85, 76.6\%$).

Section B

Table 2: Subscale score of social support patients with HF (n=111)

Items	Mean	SD
Significant other subscale	6.89	0.40
Friends subscale	6.29	1.21
Family subscale	6.90	0.43
Total score	6.70	0.54

Table 2, the level of social support was calculated based on the MSPSS with 3 subscales. The highest score is observed in under family subscale ($6.9009 \pm .43989$), followed by significant other subscale ($6.8986 \pm .40785$), the lowest possible score is friends subscale (6.2995 ± 1.21394). The overall MSPSS is obtained from the study is ($6.70 \pm .540$), it is considered as the high level of social support among patients with HF.

Section C

Table 3: Subscales score of self care management among patients with HF. (n=111)

Items	Mean	SD
Maintenance	44.06	11.55
Management	25.49	7.25
Confidence	56.74	13.25

Table 3 shows that the level of self-care management among heart failure patients based on the SCHFI survey was obtained with the use of 3 subscales. The highest possible score is observed under the confidence (56.7413 ± 13.25918), followed by maintenance (44.06257 ± 11.55284), and the lowest score is obtained from the management (25.4955 ± 7.25994). The calculating the total combined score of SCHFI¹³.

Section D

Table 4: Correlation between mean score of MSPSS and SCHFI among patients with HF (n=111)

	Maintenance	Management	Confidence
	r(p value)	r(p value)	r(p value)
MSPSS	0.78(.416)	0.22(.820)	-.163(0.088)

Table 4: there is a mild significant positive correlation between social support and self-care.

DISCUSSION:

The first objective of the study was to identify self-care among patients with heart failure. The study result shows that a mild level of self-care management. While comparing to other similar studies, there is a decreased level of self-care management.⁹⁻¹⁰ While comparing to other subscales, the confident subscale has a low score. The results showed that the patients with heart failure were less confident in performing self-care management. Comparing to other studies, most patients were not confident in self-managing heart failure and wished a health care provider would guide them in health care services. It can be suggested that health care providers should develop confidence in patients so that they will have the ability to self-manage heart failure. Experience and skills, motivation, habits, cultural beliefs and values, functional and cognitive abilities, confidence, support and access to care are all important to consider when developing or improving interventions for patients with heart failure and their families.¹⁴

The second objective of the study was to identify social support among patients with heart failure. The result shows that there is a moderately high level of social support. While comparing to other studies, there is a high level of social support.⁹⁻¹¹⁻¹²

The third objective of the study is to identify the correlation between self-care and social support among patients with heart failure. The result shows that there is no significant relationship between social support and self-care management. This means that if the social support received by patients with heart failure is high, then self-care management would be better.

The fourth objective of the study is to identify the association between clinical variables and sociodemographic variables. The result shows that there is no significant association between the clinical variables and sociodemographic variables. The result of the independent t-test and ANOVA did show a significant relationship between self-care management and hypertension ($p = 0.001$) in the NYHA classification with management ($p = 0.000$) and confidence ($p = 0.003$).

CONCLUSION

The investigators conclude that the self-care management and social support among patients with heart failure are mildly high. There is no significant correlation between the self care and social support. More research is needed, specifically longitudinal and experimental designs, to determine the effectiveness of social support on self-care behaviors in individuals with heart failure.

Ethical Consideration

Permission had been taken from the research committee of Amrita college of Nursing and thesis Review committee of Aims, Kochi. Consent was obtained from the subjects.

REFERENCES

1. Beaunwald E, Zipes DP, Libby P. A Textbook Of Cardiovascular Medicine Heart Disease 6th Edition. W.B. & Saunders Company. Philadelphia. United States of America.2001
2. Tomey AM, Alligood MR. Definition of Self-Care. United States of America. Mosby,inc.2002.
3. Gottlieb B. Selecting and Planning Support Interventions. In S.Cohen ,L Underwood, &B. Gottlieb (Eds), social support measurement and intervention. 2000: London: oxford University Press.
4. Sherbourne CD, Stewart AL. The MOS Social Support Survey. social science & medicine 1991;32(6):705-714.
5. Mattson M & Hall JG. Linking Health Communication with Social Support. In Health as Communication Nexus pp.181-218. 2001
6. Sebern M, Riegel b. contributions of supportive relationships of heart failure self-care .European journal of cardiovascular nursing: journal of the working group on cardiovascular nursing of the European society of cardiology 2009;8(2):97-104.
7. Roger VL. Epidemiology of Heart Failure.CircRes.2013 Aug30; 113(6):646-659
8. Huffman MD, Dorairaj ,Prabhakaran. Heart Failure: Epidemiology and Prevention in India. Nalt Med J India.2010 Sep-Oct;23(5):283-288.
9. Yunus HD, Sharoni SKAS. Social Support And Self-care of Patients among with Chronic Heart Failure. MJPHM.2016Feb;16(1):92-98.
10. ChamberlainL. Percieved Social Support and Self-care in Patients Hospitalized with Heart Failure. Eur J CardiovascNurs.2017 Dec;16(8):753-61.
11. Mansoreye N, Poursharif H, Sadegi MRT, Seirafi MR. The Correlation Between Social Support and Self-Care In Patient With Heart Failure: A Mediating Role Of Illness Perception. JHPM. 2017Nov;6(5):43-50.
12. Graven LJ, Grant JS. Social Support and Self-Care Behaviour In Individuals With Heart Failure :An Integrative Review.int J. Nurs.2014 Feb;51(2):320-33.

13. Riegel B, Lee C S,Dickson V V, Carlson B an update of heart failure index: J Cardiovasc Nurs.2009;24(6): 485-497.