

Effectiveness of Structured Teaching Program on Self-Care Management among Heart Failure Patients

Lijo P Joseph

Associate Professor, Lourde College of Nursing, Taliparamba, Kerala.

ABSTRACT

Prevalence of heart failure is increasing among older adults. Though health care providers have a significant role to play in alleviating the distressing symptoms of heart failure, their efforts are limited especially in home set up. It would make significant impact in early recovery if the patients know the self-care management of heart failure. To evaluate the effectiveness of such teaching program the researcher selected 40 heart failure patients those who admitted in selected hospital. The design adopted for the study was one group pre-test post-test, Tools used were structured knowledge questionnaire and attitude questionnaire to assess the knowledge and attitude regarding self-care management of heart failure. The findings of the study showed a significant difference between the pre-test knowledge score and post-test knowledge score as well as pre-test attitude and post-test attitude, which was significant at 0.05 levels. Result of the study implies that the structured teaching programme was effective in increasing the knowledge and changing the attitude of subjects regarding heart failure self-care management.

Key words: Heart failure, Self-care management, Structured Teaching Programme

INTRODUCTION

Heart failure, sometimes referred to as congestive heart failure is the inability of the heart to pump sufficient blood to meet the needs of tissues for oxygen and nutrients, characterized by signs and symptoms of fluid overload or inadequate tissue perfusion. The longer the heart must overwork to compensate for its shortcomings, the more its pumping ability is impaired. The failing pump causes blood and fluid to back up throughout the circulatory system.^[1]

Heart Failure is a chronic and progressive condition that can be managed but rarely cured. The treatment of heart failure is a combination of lifestyle changes and medication. For the effectiveness of the management, The patient diagnosed with heart failure should eat a healthy diet, Exercise regularly, Keep blood pressure low, Monitor symptoms, Maintain fluid

balance, Limit salt intake, Take the medications prescribed, stress reduction, see the doctor regularly, Eliminating the use of alcohol and cessation of smoking.^[2]

Self-care stands for the decision making of the patient that signifies the choice of positive health practices (also called self-care maintenance) and the behaviours used to manage signs and symptoms of illness and disease (termed self-care management)^[3] Knowledge about heart failure and its lifestyle implications is the foundation of success in self-care.^[4] Attitudes and beliefs about heart failure have been linked directly and indirectly to the ability of patients to perform self-care.^[5]

A study conducted in U.K says that up to 50% of the hospital readmissions might have been prevented if patients had performed self-care and complied with treatment and discharge planning

successfully. They also suggest that there would have been a major reduction in the number of people living with disabilities related to heart failure, if proper self-care maintenance techniques were imparted to them. [6]

According to a study conducted in Pretoria University, South Africa it is proved that even the illiterate patients who have undergone self-care programme successfully, reduces the risk of further hospitalizations and death. [7]

Heart Failure self-care program that aims at improving patient's self-care, making them the experts in heart failure self-management and could be effective in teaching them to recognize deterioration and take relevant actions in case of exacerbation which would make significant impact in patient's adjustment towards a positive living after an episode of heart failure. [8] In this context the present study has been taken up

MATERIALS AND METHOD

In view of the nature of the problem selected for study, an evaluative research approach was used and a pre experimental, one group pre-test and post-test research design was adopted to assess the knowledge and attitude of heart failure patients regarding self-care management. The study comprises of 40 heart failure patients of selected hospital who fulfilled the inclusive criteria. The sampling technique adopted was non probability convenient sampling method. The tool used to collect the data was a structured questionnaire to assess the knowledge and attitude of heart failure patients regarding self-care management. The tool comprises of three parts that is section A-demographic profile, section B-knowledge questionnaire, and section C-attitude questionnaire which were rated on a Likert-type scale. The content validity of tool was established after consultation with

experts from field of nursing. Data was collected after obtaining permission from the authority. The purpose of the study was explained to the sample and informed consent was taken before starting the study. A pre-test was conducted by administration of structured questionnaire to each sample. Duration of 40-45 minutes was given for each sample to complete the tool. On the same day the Structured Teaching Program was administered for 1 hour using the A.V Aids. Post test was conducted by using the same structured questionnaire after 5 days of the structured teaching program

Statistical analysis

The data was entered into excel spread sheet, tabulated and subjected to statistical analysis. Statistical measures such as mean, standard deviation (SD), test of significance such as paired t-test, F-test and Carl person correlation test was used to analyse the data. P value of < 0.05 was considered as significant.

RESULTS

Findings of the study are organized in the following sections

Section 1: Demographic characteristics of respondents

Most numbers of samples 24 (60%) belonged to the age group of 61-75 years. It is observed that most of the subjects 36 (90%) were male. Most of the samples 32 (80%) were admitted I for a duration of 1 week to 1 month. 38 (95%) of respondents did not attend any self-care management program before and 2 (5%) had undergone training. maximum numbers of samples 22 (55%) have completed secondary education. Most of sample 28 (70%) were belongs to Hindu religion. Family income of most of participants 24 (60%) between 4001- 6000. 40% samples were daily wagers and 85% samples were married. Most of the samples 36 (90%) were residing in urban area.

Section 2: Assessment of knowledge and attitude regarding self-care management

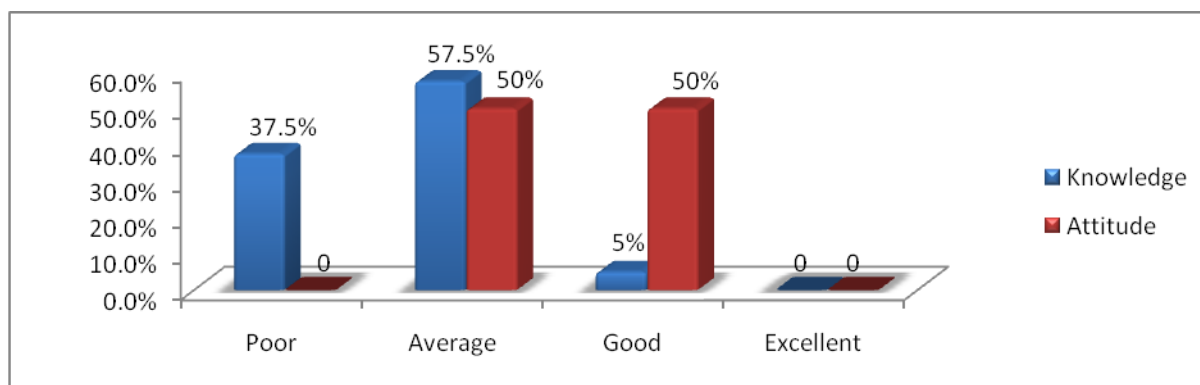


Figure1: Pre-test of level of knowledge and attitude regarding self-care management

The pre-test knowledge scores revealed that 15 (37.5%) had poor knowledge, 23 (57.5%) had average knowledge, 2 (5%) had good knowledge and no one having excellent knowledge. The pre-test attitude scores revealed that 20 (50%) had average attitude, 20 (50%) had good attitude and no one had poor and excellent attitude Hence it was necessary for the investigator to improve the subject's knowledge and attitude by giving teaching on self-care management of heart failure patient.

Section 3: Effectiveness of structured teaching program regarding self-care management

Table 1: Comparison of pre-test and post-test knowledge score

Knowledge score	Maximum score	Mean	Standard deviation	Mean percentage	t-value	p-value
Pre Test	13	7.70	2.18	32.08	50.21	0.000
Post Test	23	18.45	1.81	76.87		

Table 2: Comparison of pre-test and post-test attitude score

Attitude score	Maximum score	Mean	Standard deviation	Mean percentage	t-value	p-value
Pre Test	32	25.25	3.73	50.50	24.90	0.000
Post Test	45	39.00	2.69	78.00		

Table 1 and 2 showed that mean post test score of knowledge and attitude was higher than their pre-test score. The calculated t-value is higher than table value at $p < 0.05$ level which proved the effectiveness of STP in increasing knowledge and attitude.

Section 4: Correlation between knowledge and attitude regarding self-care management Obtained co-efficient of correlation of knowledge and attitude in pre-test was $r=0.31$ and post- test was $r=0.44$. This indicates that there was a highly positive correlation and marked relationship between knowledge and attitude scores which was significant at 0.05 levels.

Section 5: Association between knowledge and attitude score with selected demographic variables.

The F-test value of the demographic characteristics, such as educational status, previous attendance in self-care management programme and family income

showed that there was statistically significant association with knowledge and attitude regarding self-care management.

DISCUSSION

Self-care is the process by which individual and/or their informal care giver perform the daily activities that serve to maintain or restore health and wellbeing, and manage chronic illness. [9] though health care providers have a significant role to play in alleviating the distressing symptoms of heart failure, their efforts are limited especially in home set up. It would make significant impact in early recovery if the patients know the self-care management of heart failure

Hanyu Deirdre Nauman et al observed a gap between patients receiving and absorbing or retaining information on self-care for congestive heart failure supplied by health care providers. [10] Self-

care management is an important part of HF treatment, thus health professionals working with patients with HF have recognized the need for more specific recommendations on lifestyle advice. [11]

This study evaluated the effectiveness of structured teaching programme regarding self-care management among heart failure patients. The results suggested that the structured teaching programme was effective in increasing the knowledge and changing attitude among heart failure patients

This finding was supported with the study conducted in Netherlands to test the effects of education and support on self-care and resource utilization in patients with heart failure. The supportive educative intervention consisted of intensive, systematic and planned education by a study nurse about the consequences of heart failure in daily life, using a standard nursing care plan developed by the researchers for older patients with heart failure. The study concluded that the education and support from a nurse in a hospital setting and at home significantly increases self-care behaviour in patients with heart failure within one month of discharge. [12]

The present study was conducted on a small sample of 40; hence generalisation should be done with caution. It is highly recommended that similar kind of study can be conducted on a large group adopting true experimental design.

CONCLUSION

From the data analysis and findings of the study it is concluded that most of the heart failure patients had lack of knowledge regarding self-care management. After the structured teaching programme the post-test showed that the maximum number of samples had good knowledge and none of the sample had inadequate knowledge. The comparison of pre-test knowledge and attitude scores and post-test knowledge and attitude scores of the subjects shows that there was a significant improvement in knowledge of after the structured teaching

program. In health care setting, Nurses are the key persons, who play a major role in health promotion and maintenance, the teaching programme, can be conducted by the nursing personnel in the hospital which will improve the knowledge on self-care management among heart failure patients admitted in hospital.

REFERENCES

1. Suzanne C. Smelter, Brenda G. Bare, Brunner and Suddarth's Text book of Medical surgical nursing. 12th edition. New Delhi (INDIA): Wolters Kluwer Health; 2014. p.420
2. Society for heart failure and transplantation. What is Heart failure [Online] 2017 Available from: URL: <http://www.sfhft.org/>
3. Riegel, B. Psychometric testing of the self-care of heart failure index. J. Card. Fail. 10, 350-360 (2004).
4. Stromberg, A. The crucial role of patient education in heart failure. Eur. J. Heart Fail. 7, 363-369 (2005).
5. Bennett, S, Hays, L, Embree, J. et al Heart messages: a tailored message intervention for improving heart failure outcomes. J. Cardiovasc. Nurs. 14, 94-105 (2000).
6. Vinson J.M, Rich M.W, Sperry J.C, et al Early readmission of elderly patients with congestive heart failure. J Am Geriatr Soc 1990; 38:1290-1295.
7. Hicks, F. & Holm, K. Self-management decision influences in heart failure: a preliminary investigation. Clin. Nurs. Res. 12, 69-84 (2003).
8. DeWalt, D. A. A heart failure self-management program for patients of all literacy levels: a randomized, controlled trial [ISRCTN11535170]. BMC Health Serv. Res. 6, 30 (2006).
9. Debra K Moser, John F. Walkins. Conceptualizing self-care in heart failure a life course model. Journal of Cardiovascular Nursing. [Serial online] 2008 [cited 2010 Sep 24]; 23(1): [205-208]. Available from: URL: <http://jcnjournal.com/>
10. Hanyu Deirdre Nauman, Donna Burgess, Kendra Wise et.al. Factors Influencing Knowledge of and Adherence to Self-care among patients with Heart Failure [Serial online] 1999 [cited 2011 Dec 26]. [1613-1619]

Available from: URL: <http://archinte.ama-assn.org/cgi/content/159/14/1613>

11. Lainscak M, Blue L, Clark AL, et.al. Self-care management of heart failure: practical recommendations from the Patient Care Committee of the Heart Failure Association of the European Society of Cardiology. [Serial online] 2010 [cited 2011 Dec 25]. Available from: URL: <http://www.ncbi.nlm.nih.gov/pubmed/21148593>
12. T. Jaarsma, R. Halfens, H. Huijjer et. al. Effects of Education and support on self-

care and resource utilization in patients with heart Failure 2000 [cited 2011 Dec 26]. [673-682].

Available from: URL: <http://eurheartj.oxfordjournals.org/content/20/9/673.short>

How to cite this article: Joseph LP. Effectiveness of structured teaching program on self-care management among heart failure patients. *Int J Health Sci Res.* 2020; 10(8):251-255.
