



Effectiveness of Nursing Intervention Package on Adherence to Quality of Life Among Patients with Heart Failure Admitted in Hospitals at Selected District of Rajasthan

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Citation: Vikas Sharma (2026) Effectiveness of nursing intervention package on adherence to quality of life among patients with heart failure admitted in hospitals at selected district of Rajasthan. *J of Card Vas Insights* 2(4), 01-07. WMJ/JCVI-125

Abstract

Introduction: Heart failure is a physiologic state in which heart doesn't pump enough blood for body's needs. The management of HF includes medicine, reduction of risk factors and lifestyle modification.

Aim: To evaluate effectiveness of nursing intervention package on adherence to quality of life (QOL) among patients with HF.

Methods and Material: Study was conducted on 200 patients with HF admitted in selected hospitals. Researcher used convenient sampling technique for sample selection with standardized tools i.e. EHFScBS, SF-36 Questionnaire and MLHF Questionnaire to evaluate QOL among patients with HF. The researcher give nursing intervention package for this study.

Results: The data revealed that effectiveness of nursing intervention package through EHFScB achieved through pre-test mean score was 36.15, SD=5.81 whereas in post-test mean score was 18.80, SD=3.07 and t value was $t=59.40$, ($P<0.001$, Significant). Thus, there was significant relationship between nursing intervention package and score obtained on the QOL among patients with HF. Through SF-36 QOL; the data revealed that obtained pre-test mean score was 41.10, SD=4.23 whereas in post-test mean score was 74.40, SD=3.42 and t value= -110.68 , ($P<0.001$, Significant). So, there was significant relationship between nursing intervention and score obtained on QOL. And through MLHF tool; the data revealed that obtained pre-test mean score was 51.38, SD=9.44 whereas in post-test mean score was 29.98, SD=5.09 and t value was $t=35.86$, ($P<0.001$, Significant). Thus, there was significant relationship between nursing intervention package and score obtained on QOL.

Conclusions: Nursing intervention package were found effective for patients with HF to improve QOL.

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Submitted: 31.08.2026

Accepted: 05.09.2026

Published: 16.10.2026

Introduction

HF is one of the greatest devastating of all the chronic diseases due to the unpredictable daily fluctuations in functional capacity and the threat of death. HF is a physiologic state in which heart is unable to pump adequate blood to meet the metabolic needs of the human body.

HF management includes pharmacological intervention, risk factor reduction, and dietary modification, improve exercise tolerance and lifestyle modification.

It is projected that 36 million expiries or around 63 percent of the 57 million expiries that occurred worldwide in year of 2008, were due to non-communicable diseases, comprising mainly cardiovascular diseases 48 percent, cancers 21 percent, chronic respiratory diseases 12 percent and diabetes 3.5 percent. All these major non-communicable illnesses share 4 behavioral risk factors i.e. tobacco use, unhealthy diet, physical inactivity and injurious use of alcohol.

The management of HF often includes several components with different objectives, for e.g.; enhancing treatment compliance, modification of risk factors and enhancing social livelihood. The goal of nursing intervention package for HF patient's is to incorporate patients with heart disease into their physical and social activities that allow them to improve QOL "as good as possible".

According to WHO Cardiovascular diseases were estimated that 17.9 million individuals died from cardiovascular diseases in the year of 2019, representative 32 percent of all world-wide deaths. From all these deaths, around 85 percent deaths were due to heart attack as well as stroke. HF ranks as one of the leading chronic disorders affecting health related QOL. At the beginning of the 21st century, HF nurses are able to do much more than ever before.

Nurse intervention package program becomes significant because it can provide clear and objective information regarding the health status and prognosis of the patient. This program educate and teach to the HF patients on regarding disease process, take healthy diet, measure daily weight monitoring,

medicine compliances, fluid management and salt restriction, regular activity, exercises, smoking, alcohol cessation and lifestyle modification behaviour and their importance which help to fast recovery, facilitate to attain and maintain better health with improve QOL and decline the risk of death.

Objectives of the study

- To assess the quality of life among patients with heart failure admitted in hospitals.
- To evaluate the effectiveness of nursing intervention package on adherence to quality of life among the patients with heart failure admitted in hospitals.
- To find out the association between pre-test quality of life score with selected socio- demographic variables.

Subjects and Methods

Research Approach: Quantitative pre-experimental research approach had been used by the researcher.

Research Design: Researcher used a pre-experimental one group pre-test post-test design.

- **Setting:** All these participants also fulfil selection criteria for the present study. These hospitals were-
 - Geetanjali Hospital (GMCH), Udaipur.
 - Shree Siddhi Vinayak Hospital, Bhilwara.
 - Ramsnehi hospital, Bhilwara.
 - Krishna Hospital, Bhilwara

Target Population: All HF patients admitted in hospitals of selected districts of Rajasthan.

Sampling Technique: Researcher had been used a convenient sampling technique in this research study.

Sample and sample size: 200 HF patients admitted in hospitals of selected districts of Rajasthan met with the research inclusion criteria.

Variables under the study:

The following three variables were identified in the present study:-

- Independent variables-Nursing intervention package.
- Dependent variables-Adherence to QOL among.
- Attributed variables-It included selected socio-demographic variables like age, gender, education, occupation, marital status, religion, residence and income, type of family and use of tobacco.

Analysis: The plan for data analysis had been based

on the objectives of the present study. The data collection instruments were coded, scored and entered in the master data sheet. The attained data were analyzed by means of descriptive as well as inferential statistics. Selected socio-demographic data were analyzed and represented by frequency and percentage. The result had been organized and represented in following sections:

Section 1: Distribution of participants according to socio-demographic variables.

Section 2: QOL among patients with HF.

Section 3: Effectiveness of nursing intervention package on adherence to QOL among patients with HF.

Section 4: Association between pre-test QOL score with selected sociodemographic variables.

Research Results

Section 1: Distribution of participants rendering to selected sociodemographic variables-

S.no.	Socio-demographic variable		Frequency	Percentage
1	Age in years	31-40	25	12.5
		41-50	58	29
		51-60	61	30.5
		61-70	47	23.5
		71-80	9	4.5
2	Gender	Male	120	60
		Female	80	40
3	Religion	Hindu	110	55
		Muslim	16	8
		Christian	74	37
4	Marital status	Married	157	78.5
		Unmarried	43	21.5
5	Habitat	Urban	82	41
		Rural	75	37.5
		Semi urban	43	21.5
6	Type of family	Joint	104	52
		Nuclear	96	48
7	Educational qualification	Primary level education	7	3.5
		Secondary level education	58	29
		Senior secondary level education	51	25.5
		Graduate and above	84	42
8	Occupation	Skilled labor	42	21
		Home maker	70	35
		Employed	63	31.5
		Self employed	25	12.5
9	Monthly family income	4001 - 6000	17	8.5
		6001 – 8000	40	20
		>8000	143	71.5
10	Tobacco use	Yes	97	48.5
		No	103	51.5

Section 2: QOL among patients with HF

EHFScB Scale Tool

It was observed that in pre-test 7.5% participants had mild level followed by 85.5% moderate level and 7% severe level of QOL where as those participants delivered nursing intervention package then their post-test was 97.5% participants had mild followed by 2.5% participants had moderate and no participants had severe level of QOL. So, there was statistically significant relationship between QOL among patients with HF admitted in selected district of Rajasthan hence research H1 hypothesis was accepted.

MLHF Questionnaire Tool

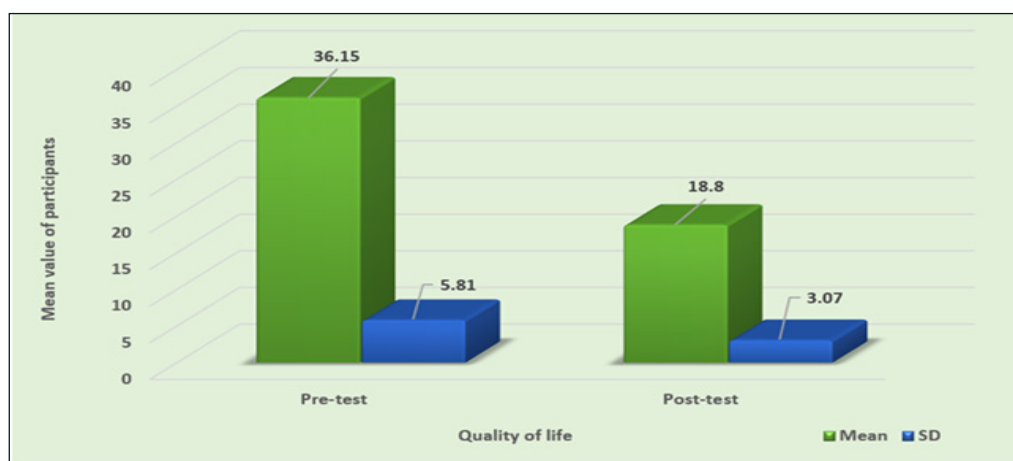
It was observed that in pre-test 2% participants had mild level followed by 94.5% moderate level and 3.5% severe level of QOL where as those participants delivered nursing intervention package then their post-test was 94.5% participants had mild followed by 5.5% participants had moderate and no participants had severe level of QOL. So, there was statistically significant relationship between QOL among patients with HF admitted in selected district of Rajasthan hence research H1 hypothesis was accepted.

SF-36 QOL Questionnaire Tool

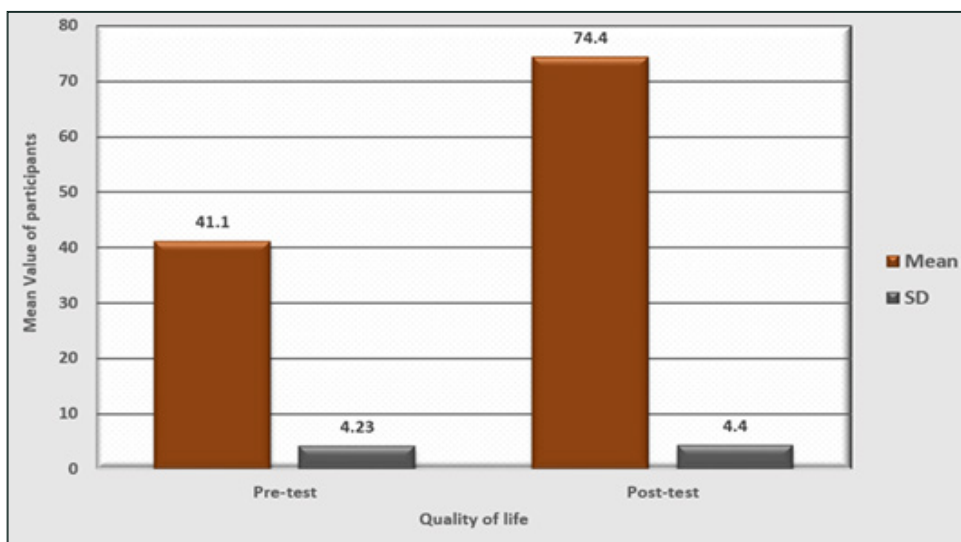
Researcher used a standardized SF-36 QOL Questionnaire tool. The final score and interpretation of scale is SF-36 scores were a higher score indicating a better QOL and lower the score indicates poor QOL.

Section 3: Effectiveness of nursing intervention package on adherence to QOL among patients with HF.

Effectiveness of nursing intervention package on adherence to QOL among patients with HF through EHFS_cB Scale. The data revealed that obtained pre-test mean score was 36.15, SD=5.81 whereas in post-test mean score was 18.80, SD=3.07 and t value was $t=59.40$, ($P<0.001$, Significant). So, there was significant relationship between nursing intervention package and score obtained on the QOL among patients with HF. Hence H₂ hypothesis was accepted.



Effectiveness of nursing intervention package on adherence to QOL among patients with HF through SF-36 QOL. The data revealed that obtained pre-test mean score was 41.10, SD=4.23 whereas in post-test mean score was 74.40, SD=3.42 and t value= -110.68 , ($P<0.001$, Significant). So, there was significant relationship between nursing intervention package and score obtained on the QOL among patients with HF. Hence H2 hypothesis was accepted.



Effectiveness of nursing intervention package on adherence to QOL among patients with HF through MLHF Questionnaire. The data revealed that obtained pre-test mean score was 51.38, SD=9.44 whereas in post-test mean score was 29.98, SD=5.09 and t value was $t=35.86$, ($P<0.001$, Significant). So, there was significant relationship between nursing intervention package and score obtained on the QOL among patients with HF. Hence H2 hypothesis was accepted.



Section 4: Association between QOL Score with selected Sociodemographic Variables.

In this study, table presented that an association between QOL score with selected sociodemographic variables. It was observed that there was a significant ($P<0.05$, Significant) association with age chi square = 9.952, gender chi square value 5.411, religion chi square value 7.136, marital status chi square = 5.335, type of family chi square = 5.215, educational qualification chi square = 10.573, occupation chi square value 8.802, monthly family income chi square value 7.210 and tobacco use chi square value 3.409 of the HF patients. Hence H₃ hypothesis accepted.

Conclusion

The "effect of nursing intervention package on adherence to life satisfaction among patients with heart failure hospitalised in hospitals in designated district of Rajasthan" was studied. In this study, 200 heart failure patients were selected using a streamlined selection procedure based on a before-and-after test group design. The

information was collected using standardised tools such the three different HF questionnaires EHFSB Scale, the Short Form (SF)-36 QOL, and MLHF Questionnaire, were used. We used both inductive and descriptive statistics to examine the data. A few possible conclusions drawn from this research are as follows. The efficacy of a nursing intervention package in promoting QOL among heart failure patients was evaluated. Following therapy, patients' mean scores on EHFSB Scale and the SF-36 QOL instruments dropped from 36.15 (SD=5.81) to 18.80 (SD=3.07). $t=59.40$ indicates this was a significant shift ($P<0.001$, Significant). There was a statistically significant difference between pre-test and post-test scores ($t = -110.68$; mean SD = 41.10, 4.23), with post-test scores averaging 74.40 (3.42). ($P<0.001$, Significant). As can be seen in above table and figure, the QOL of patients with HF who followed the nursing intervention package significantly improved. Using the MLHF instrument, we find that pre-test scores averaged 51.38 (SD = 9.44) and post-test scores averaged 29.98 (SD = 5.09), yielding a t value of $t=35.86$ ($P<0.001$, Significant). Consequently, there was a strong association between the nursing intervention package and the quality-of-life evaluation score among those with heart failure. We may thus consider accepting H_2 hypothesis[01-23].

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