



Original Article

Effect of information booklet about home care management of post operative cardiac patient in selected hospital, New Delhi

Abstract:

Introduction: Shortened hospitalizations following cardiac surgery necessitate re-evaluation of how pertinent information for self-care management and reduction of coronary artery disease risk factors can be incorporated into an effective inpatient cardiac patient teaching program. Patient education post-cardiac surgery is an essential component of nursing care aimed at assisting patients in caring for themselves at home, following discharge from hospital.

Objectives: The study was conducted to develop and evaluate the effectiveness of an information booklet on home care management; to assess the knowledge regarding post operative home care management after cardiac surgery; also to seek association between post test knowledge score and selected demographic variables.

Methods and Materials: Quasi experimental design pre test- post test experimental design to measure the effectiveness of Information booklet on post operative care. The study was conducted among the 60 post operative cardiac patients(30 in experimental group and 30 in control group) from two selected hospital of New Delhi (G. B. Pant and Safderjung hospital). Sample was chosen using non probability purposive sampling and selection criteria. Structure Interview Schedule was used in order to collect data. Data was analyzed by inferential and descriptive statistics.

Results: Maximum number of subjects (48.3%) were in the age group of 60-69 years, Hindu (51.6) and 75% were Male. 88.3% were married. Majority (58.3%) had education up to secondary level. 30% of them were Retired. According to duration of illness maximum (58.3%) of subjects were having duration of more than 2 years. Significant association ($t=14.69$; $df=29$; table value= 2.04) was found between post test knowledge (22.3) and pre test knowledge score(12.9) in experimental group which indicate that information booklet is effective in increasing the knowledge level.

Conclusion: The study showed that information booklet is effective in increasing the knowledge of post operative cardiac patient regarding home care management.

Key Words: Information booklet, Knowledge, Post- Operative Cardiac Patient, Effectiveness, Evaluate.

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Introduction

Cardiovascular diseases exert a burden on individual and society which is the single most common cause of death. The population

based surveys conducted in India shows that there is an increase in the prevalence rate of Ischemic heart disease from 1-4% to 10%.¹

Hypothesis

Alternate Hypothesis

H₁: There will be significant association between mean post test and mean pre test knowledge score in experimental group.

H₂: There will be significant difference in mean post test knowledge score of control group and experimental group.

Null Hypothesis

H₀₁-There will be no significant association between post test knowledge scores and selected demographic variables.

Methodology

A Quasi experimental design pre test post test experimental design to measure the effectiveness of Information booklet on post operative care. The researcher designed and developed an information booklet for post operative cardiac patient on home care management of post operative cardiac patient after reviewing research and non research literature, discussion with experts and personal experience. It includes sections like home care management of post operative Cardiac patient, precaution for heart valve surgery patient, important instructions, do's and don'ts for heart valve surgery patient, how to promote healthy lifestyle and regarding follow up. The study was conducted among 60 post operative cardiac patients (30 in experimental group and 30 in control group) from two selected hospital of New Delhi (G. B. Pant and Safderjung hospital). Sample was chosen using non probability purposive sampling and selection criteria. The criteria for the selection of the sample was, patients who were posted for Cardiac surgery, patients who were in recovery unit and patients who came for follow up in OPD. Structured Interview Schedule was used in order to collect data. On the same day the information booklet was administered to them, then on 8th day post test was taken from patients. Data was analysed by inferential and descriptive statistics with level of significance 0.05.

According to the hospital statistics in 1980 Coronary Artery Bypass Grafting (CABG) accounted for less than 10% of all cardiac surgeries. Today, it accounts for more than 62%. Every year 25,000 coronary bypass operations and 12,000 Percutaneous coronary. Therefore researcher felt strong need for assessing the needs of post operative cardiac patient and developing a home care information booklet on post operative care of patient who underwent Cardiac Surgery to increase knowledge and develop a proper , regarding post operative care. Teaching include promotion of health, prevention of disease or complication ,early detection of complication, treatment and rehabilitation. There is a need to develop a more unified approach to the care of patients. Education needs to take place in post operative care. This is important so that patient can recognize the sign of complication and improve compliance to future management.²

A study was conducted to administer an educational intervention before the surgical intervention with a pre-test and post-test to improve the knowledge, practice and attitude of the patient about the surgical process and complications with a view to reduce/ prevent post-operative complications and to compare the effect of educational intervention in the test and control group. This study proves that pre-operative educational intervention is a very useful tool in the total management of heart valve replacement surgery. Hence this should be practiced in every centre where this surgery is performed.³

Present study was conducted to develop and evaluate the effectiveness of an information booklet on home care management of post operative cardiac patient after cardiac surgery and to assess the knowledge of the patient regarding post operative home care management after cardiac surgery before and after administration of information booklet.

Result

Maximum number of subjects (48.3%) were in the age group of 60-69 years. Majority of subjects (51.6) were Hindu and Male (75%). Maximum number of subjects (88.3%) were married. Majority of them (58.3%) were having education up to secondary level. 30% were retired. According to duration of illness maximum 58.3% were having duration of more than 2 years

Table 1: Mean, median and standard deviation of pre test and post test knowledge scores of control group and experiment group n=30+30

Groups	Pre- test			Post- test		
	Mean	Median	SD	Mean	Median	SD
Control Group	11.6	12.4	±2.6	12.4	12	±2.22
Experimental group	12.9	13	±3.5	22.3	22.5	±3.71

Table 1 indicates that mean post test knowledge score (22.5±3.71) obtained after administration of information booklet to the experimental group were higher than pre-test (12.9±3.5) and even higher than post test of control group (12.4±2.22).

Table 2: Association between pre and post test knowledge score in Experiment Group n=30

Knowledge test Scores	Mean	Mean difference	SD	df	Table value	't' value
Pre test score	12.9	9.4	±3.35	29	2.04	14.69*
Post test score	22.3					

*Significant at 0.05 level of significance

Table 2 shows that there was significant association between pre and post test knowledge score in experimental group. Hence the alternate hypothesis H_1 was accepted.

Table 3: Association between post test knowledge scores of Experimental and Control group n=30+30

Knowledge test Scores	Mean	Mean difference	SD	df	Table value	't' value
Control group post test score	12.4	9.9	±1.86	58	2.0	42.33*
Experimental group Post test score	22.3					

*Significant at 0.05 level of significance

Table 3 indicates that there is significant difference between mean post test knowledge scores between control group and experimental group; indicating information booklet is effective in increasing knowledge regarding post operative home care management. Hence alternate hypothesis H_2 was accepted.

Table 4: Association between post test knowledge scores of Experimental Group with selected demographic variables n=30

SL NO	Demographic variables	Fair Knowledge (11-20)	Good Knowledge (21-30)	df	Table value	χ^2 value
1.	Age in Years 30-39 40-49 50-59 60-69	1 2 2 6	3 3 4 9	3	7.815	0.359
2.	EDUCATION Primary Secondary Graduate.	4 5 2	3 11 5	2	5.991	1.66
3.	OCCUPATION Government job Private job Business Retired None	1 3 3 1 3	3 5 2 4 5	4	9.4	2.01
4.	INCOME Below 5000/ 5000-10,000 10,000-15000 Above 15000/	4 3 4 0	7 6 4 2	3	7.815	1.8

Data in table 4 shows that there was no significant association between post operative cardiac patient in post test knowledge score of experimental group and their age, education, income and occupation. Thus null hypothesis H_{01} was accepted.

Discussion

A study proved that it is effective to provide a written content on home care management of renal patient to caregivers of patients undergoing haemodialysis in a hospital, Results showed a significant impact in caregiver's knowledge in post test after understanding the information given in the booklet.⁴ Present study also found information booklet was effective to increase mean pre test knowledge (12.9 ±3.5) after intervention (22.3±3.71).

Majority A study conducted in USA by Dona Mayo et al of the cardiac home care program in improving a patient's knowledge level was measured using the pretest and posttest. The possible range of scores of the questionnaire was 0 to 66. A score of zero indicated no knowledge and a score of 66 indicated a high level of knowledge. The pretest scores ranged from 40.0 to 56.0 with a mean of 51.0 and median of 52.0 with a standard deviation of 5.3. The posttest scores ranged from 56.0 to 61.0 with a mean of 59.2 with a median of 60.0 and a standard deviation of 1.9. The difference in the CCK pretest and posttest scores were calculated using one group paired t test. The results of the t test demonstrate a statistically significant improvement in the subjects knowledge level (t= 5.31 ; df= 6; p= .002).⁵ Present study was supported by this study as in the present study also t- test demonstrate a statistically significant improvement in the subjects knowledge level [t=14.69; df=29 (2.04)].

A study was conducted in year 2012 at J.J Hospital Mumbai for assessing and comparing of level of knowledge regarding home care of pacemaker among the patients with complete heart block attending cardiology OPD analysed in terms of frequency and percentage. Evaluation of the effectiveness of information booklet by comparing pre-test and post test knowledge scores of subject analysed in terms of t test to find out the level of significance and proving of hypothesis. The calculated 't' value

was greater than the table 't' value 2.04 at 0.05 level of significance with the degrees of freedom 29. These results support the effectiveness of information booklet in the improvement of knowledge score among the patients with complete heart block attending cardiology. Overall, the analysis and interpretation revealed that the information booklet was an effective for improving the knowledge among the patients with complete heart block attending cardiology OPD.⁶ Present study was supported by this study as in the present study also t test demonstrate a statistically significant improvement in the subjects knowledge level [t=14.69; df=29 (2.04)].

Conclusion

Study concluded that that information booklet is effective to increase knowledge regarding home care of post operative cardiac patients.

Recommendation

- The study can be replicated on larger samples so that the findings can be generalized for a large population.
- A follow up study can be conducted to evaluate the effectiveness of the information booklet on post operative home care management of cardiac patient.
- Study can be replicated by using different educational material.
- A similar study can be conducted to determine the existing role of nursing personnel towards teaching the patient regarding post operative home care management.
- Based on health teaching mass awareness program should be developed.

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Ethical consideration

All administrative permission from ethical committee of G. B. Pant and Safderjung Hospital New Delhi was taken. Informed written consents were taken from participants before data collection.

Fund

Self.

Conflict of interest

Nil

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