Effectiveness of Planned Pre-operative Teaching on Self-care Activities for Patients undergoing Cardiac Surgery

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Any type of surgery is a stress to the patient. It becomes even more stressful when the heart – a vital organ is involved. Some of the patients may respond with expression of helplessness, insecurity and isolation due to discomfort, pain and fear of breaking stitches. These feelings can be minimized with pre-operative teaching about post-operative self care practices related to activity, nutrition, medication and ambulation. Having previewed that the operative success of cardiac surgery could be strengthened in patients who adhere to the above practices, enforced by nursing personnel, the current study was conducted.

Objectives
- To develop a teaching module on self-care activities for patients undergoing cardiac surgery.
- To develop a check list on performance related to self-care activities by the above subjects.
- To assess and compare the level of performance on self-care activities pre and post operatively for both control and experimental groups.

Material and Methods
With a quasi-experimental research approach the study was conducted in cardio-thoracic unit of Nehru Hospital, PGIMER, Chandigarh. The sample consisted of 40 subjects, 20 subjects each in the experimental and control group. Both the groups comprised of an equal number of subjects (10) undergoing open and closed heart surgery.

Instruments
a) By developing an interview schedule socio-demographic data was collected for each subject.
b) A check-list consisting of 40 items related to 10 variables in terms of self care activities was devised and used pre-operatively and post-operatively for comparison of scores in both the groups. The score range was 0-40. The validity and reliability was ensured. Test-retest (r = 0.99) and split half (r = 0.93) was found highly significant.
c) A teaching module on self-care activities was developed by including 10 variables i.e. breathing exercises, turning/positioning, extremeties exercises, ambulation, eating/drinking, elimination, wound care, personal hygiene chores, coping with pain, rest & sleep.

Results
- Initially the pre-test performance was assessed in 40 subjects from both control and experimental groups two days prior to their surgery. It followed implementation of planned pre-operative teaching to the experimental group only. Post – test performance in both the groups was assessed on 4th post-operative day.
- Socio – demographic characteristics of both the groups (control and experimental, N = 40).
- Gender distribution was homogenous, majority of the subjects in both the groups were married, between 16-35 years age, educated up to middle, were housewives and unemployed.
- Experimental groups in both closed and open heart surgery had shown an increase in their post test performance scores in their self care activities.

Discussion
No statistical significant difference in pre test scores of both (control and experimental) the groups was found. There was no statistical significant relationship between few demographic variables i.e. age and education and pre-post test performance of subjects for their self care activities.

Lamb (1984) reported in her study that teaching on cardiac catheterization was equally effective in various age groups having different levels of edu.
cation, hence she found no relationship between knowledge gained and demographic variables. The findings of this study were also similar indicating no relationship between these demographic variables and the pre-post performance of these subjects related to their self-care activities.

After implementation of the planned pre-operative teaching to the experimental group, a highly statistical significant difference (p < 0.001) between post test performance of both the groups was found except in eating-drinking, positioning and elimination. This could be due to the fact that subjects of control group may have inconsistent information regarding these variables because of more emphasis by hospital staff and relatives on these activities.

The findings similar to this study were found by Wong & Wong (1984) and Rice VH et al (1982) in their studies. Like this study they assessed the effect of pre-operative teaching on patient compliance for post-operative exercises and found a statistically significant (P < 0.001) increase in the post-operative performance of their activities followed by pre-operative teaching.

CONCLUSIONS

- No significant difference was found in the pre test performance of subjects for their self-care activities belonging to both the groups.

After implementation of the planned pre-operative teaching to the experimental group only, the comparison of post test performance scores between both the groups had shown statistical significant (p < 0.001) increase in the performance scores of the experimental group. The increase was found in total scores as well as scores in each self-care activity.

There was no statistical significant relationship between the performance of activities and their demographic variables i.e., age and education.

On the basis of the findings, it was decided that pre-operative teaching was an extremely effective media to increase the level of performance of the subjects for their self-care activities.

Teaching the subjects prior to their surgery was pre-requisite to their effective compliance and strengthen their self-care abilities leading to uneventful post-operative recovery.

REFERENCES


Sixth International Neonatal Nursing Conference 2007

The 6th International Neonatal Nursing Conference 2007 is being organised in Delhi from September 15-18, 2007. A large number of neonatal nurses from India and abroad are expected to participate in the conference. Nurses are invited to submit scientific abstracts for the conference. A nursing quiz is being planned on this occasion. For more details log on to the conference website www.icpnn2007.com

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