

Early Ambulation : An Ugly Phrase for a Beautiful Idea

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Abstract

The present study was undertaken to assess the effect of scheduled ambulation of selected post-operative outcomes between control and experimental groups in two hospitals of Bangalore; scores of post-operative outcomes of the two groups were also associated with demographic variables. The sample of 60 major abdominal surgery patients admitted in two hospitals was subjected to a rating scale of 14 demographic items and 35 items on parameters of post-operative outcomes like pain, fatigue, urine retention etc. The results showed that scheduled ambulation was effective in reducing the severity of selected post-operative outcomes.

Almost 70 percent of surgeries performed in the hospitals are related to the abdomen. Many patients develop complications after the surgery and nurses are the primary care giver to the patients after surgery. In modern times the field of abdominal surgery has been greatly extended. But the plea for relief from suffering remains essentially same. To the patient it is likely to be most feared for recovery, increasing disability. Early ambulation, a new concept brings together different post-operative strategies. Early ambulation means that patients are out of bed as soon as possible, perhaps one or two days after the operation, with less fatigue, better healing of muscles and fewer "sick-man complexes"; patients can relieve bowels and bladder normally, eat better, sleep better, and feel better. Early ambulation after surgery has raised medical interest and enthusiasm. Many studies have been published on strategies adopted in different types of surgeries like orthopaedics, gynaecology, urology, vascular etc.

Objectives

The study aimed to (i) determine the effectiveness of scheduled ambulation measured by scores of selected post-operative outcomes between control group and experimental group; and (ii) associate the scores of selected post-operative outcomes of control group and experimental group with selected demographic variables.

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Assumptions

1. All the patients operated for major abdominal surgeries are at the risk of delayed recovery and post-operative complications.
2. Post-operative outcomes will vary with demographic variables.

Methodology

In this pre-experimental with non-equivalent post-test only control group design was adopted because of availability of samples and feasibility. The study was conducted in KC General Hospital, Bangalore and ESI Hospital, Bangalore. The populations under study consisted of post-operative major abdominal surgery patients in the hospitals. The sample consisted of 60 major abdominal surgery patients, 30 samples each from control group and experimental group. Purposive sampling technique was adopted to select the subjects.

Development of the tool: The tool used for the data collection was rating scale, which comprised of 14 items on demographic data and 35 items on parameters of selected post-operative outcomes such as level of pain, level of fatigue, urinary retention, orthostatic hypotension, collection of flatus, constipation and activity of daily living. The items were graded by none, mild, moderate and severe. Low score was given to the most favourable outcome and high score was given to least favourable outcomes. High score indicates the more severity of problems and less score indicates the favourable outcomes.

The scheduled ambulation was implemented on the major abdominal surgery patients by the

researcher for post-operative day 1 to 3, four times in a day to the experimental group and routine care was given to control group.

Pilot study: A pilot study was conducted after assessing the effectiveness of the tool and to find out the feasibility of undertaking final study and to decide plan of statistical analysis. It was effective and feasible for the study. The pilot study subjects were not included in the study.

Results

Routine care was given to the control group and scheduled ambulation was implemented in the experimental group from post-operative day 1 to 3 and on post-operative day 4, post-test was conducted.

Findings related to demographic variables : Majority of the abdominal surgery patients were in the age group of 41-55 years and most of them studied up to PUC. Maximum numbers of major abdominal surgery patients were involved in business and were Hindu by religion. Majority of them belonged to joint family and were from urban area. Majority of patients had family income of Rs 2,001-4,000 per month and mass media as source of health information. Many of them were without any major medical or surgical history in past. Maximum number of major abdominal surgery patients were diagnosed as intestinal obstruction and underwent exploratory laparotomy. Majority of them did not have any complications during present surgery.

Findings related to the effectiveness of scheduled ambulation measured by scores of selected post-operative outcomes between experimental group and control group: On statistical analysis it was found that the severity of selected post-operative outcome parameters (pain, level of fatigue, urinary retention, orthostatic hypotension, collection of flatus, constipation and delayed activity of daily living) was decreased with implementation of scheduled ambulation in experimental group of major abdominal surgery patients. The post-test mean of selected post-operative outcome score in control group was 59.6 percent and in experimental group it was 44.9 percent, indicating the less severity of selected post-operative outcome parameters in experimental group than in control group. The selected post-operative outcomes score was found statistically significant at 5 percent level. The student t-test value was 7.91.

Findings related to associate the effectiveness of scheduled ambulation on selected post-operative out-

comes with selected demographic variables : The association between variables likes age, sex, education, religion, place of residence, family income, source of information related to health, past surgical history, name of present surgery, diagnosis and complication during present surgery with selected post-operative outcomes scores were found to be non-significant except type of family in control group and except occupation and past medical history in experimental group.

Conclusion

The scheduled ambulation reduces the severity of selected post-operative outcome parameters level. The overall mean percentage of selected post-operative outcome in control group was 59.6 percent which is apparently higher than the overall mean percentage of selected post-operative outcomes in experimental group 44.9 percent, and was significant at 0.05 level. Student t-test (7.91, $p < 0.05$), indicated that the scheduled ambulation was effective in terms of reducing severity of selected post-operative outcome parameters level.

Recommendations

Since this study was carried out on a small sample, the results can be used only as a guide for further studies. Similar study can be (i) replicated with a randomised control group, (ii) conducted on a large sample for wider generalisation, (iii) can be done to assess the needs of the major abdominal surgery patients. A comparative study may be conducted to compare the selected post-operative outcomes with different surgeries. A study on effectiveness of structured teaching programme on scheduled ambulation can be done among staff nurses.

References

1. Richard G, Sanderson M. Surgery Today. *Annals of Surgery*, 1997; 113(1): 227-32
2. Cahill H, Jackson I. Day Surgery - Principles and Practice. *British Journal of Surgery*, 1997; 83(2): 267-68
3. Rao M, Sharma P, Rathod M. Fast track surgery-New concept. *Indian Journal of Surgery*, 2007; 56(3): 314-23
4. Jon S, Thompson P, Timothy B, John G, Allison S, Frank E, et al. Temporal patterns of postoperative complications. *Archives of Surgery*, 2003; 138(3): 596-603
5. Lang M, Nichen, Meittein P. Outcome and resource utilization in surgery. *British Journal of Surgery*, 2006; 88(5): 1006-14
6. Valerie A, Helen P, John E, Thomas P, Bradashaw T, Murlow D. Functional independence after major abdominal surgery. *Journal of the American College of Surgeons*, 2006; 54(6): 1072-75