



Impact of Early ambulation as nursing care in post operative patients– Putting evidence into practice

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ABSTRACT

Almost 70% of surgeries performed in the hospitals are related to the abdomen. Many patients develop complications after the surgery and nurses are at the high priority care giver to the patients after surgery. According to quality analysis more than 60% of all the surgeries are provided on the basis of early ambulation. This is a development that is changing the focus of nursing care of postoperative patients based on scientific knowledge of all the phases of rehabilitation after surgery.¹

KEYWORDS: early ambulation, patient care, postoperative ambulation, postoperative care, quality improvement.

Introduction:

The ambulation of patients soon after surgery is now a fundamental part of nursing care. Today, it is recognized and is rapidly approaching a 'must' procedure following a surgical operation.¹ Indeed, the practice of having patients walk as soon as possible after surgery constituted a major change in patient care, based on the new evidence of the benefits of exercise and its positive impact on patient recovery. Since then, facilitating ambulation has been considered an important part of excellent nursing care, particularly in postoperative patients.²

There were two problems related to postoperative ambulation. First, patients were informed before surgery that they would be expected to get out of bed and ambulate the day of surgery, but because of other demands on nursing time, nurses and nursing assistants were not always able to accomplish early ambulation. Therefore, some patients who didn't receive the expected assistance in ambulating complained, and physical therapists who received some of these patients' requests for ambulation assistance objected, because this is a standard nursing function. Second, although there were a variety of areas within the nursing documentation system to document ambulation, none was readily viewable by other providers who needed to know this information.²

Title of the study: Impact of early ambulation as nursing care in post operative patients–Putting evidence into practice.

Aim: To find out the impact of Early ambulation as nursing care in post operative patients.

Objectives:

1. To identify the existing knowledge & practice of nurses on early ambulation as nursing care in post operative patients.
2. To determine the effectiveness of planned teaching on early ambulation as nursing care in post operative patients.
3. To correlate the knowledge and practice of the nurses regarding early ambulation as nursing care in post operative patients.
4. To associate the knowledge and practice of nurses on early ambulation as nursing care in post operative patients.

Hypothesis:

H1: There will be significant difference in knowledge and practice of nurses regarding early ambulation as nursing care in post operative patients after implementation of planned teaching.

H0: There will be no significant difference in knowledge and practice of nurses regarding early ambulation as nursing care in post operative patients after implementation of planned teaching.

Ethical Consideration:

The study was conducted after the sanction and clearance by the Institutional Ethical Committee of the University. Written consent was taken from the participants. They were explained about the study.

Methodology:

Interventional evaluative approach was used in this study. In the present study pretest and post test research design with control group was used. In this study sample size were 100 staff nurses for experimental group and 100 staff nurses for control group of selected hospitals. The sampling technique used in the study was purposive sampling.

A pretest was administered to collected evidence by means of structured questionnaire and observing the procedure how much nurses have knowledge and are performing procedure for early ambulation and then planned teaching was given based on evidenced generated and post test was conducted using the same structured questionnaire and observing the selected procedure how the nurses are performing procedure.

Data Analysis:

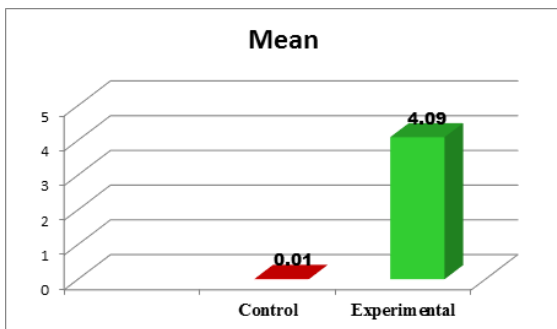
The collected data was organized in relevant tables of frequency, percentage etc, as per the objectives of the study. Interpretation of data was based on the calculated value at 5% levels of significance. Proportion (95% CI), mean, standard deviation are used for describing the study samples with their demographic information. To test reliability of tool Chronbach's alpha statistics was estimated. Levene's test for equality of error variance was used to tests the null hypothesis.

Results:

In pretest knowledge scores of control group, 9.0% of samples were having poor knowledge and 91.0% samples were having average knowledge. Minimum score is 14 and maximum score is 24. Mean score is 19.08 and percentages mean score is 47.7, whereas in post test knowledge score of control group, 4.0% of samples were having poor knowledge and 96.0% samples were having average knowledge. Mean score is 19.61 and percentage mean score is 49.02. Whereas in pretest knowledge scores of experimental group, 23.0% of samples were having poor knowledge, 73.0% samples were having average knowledge and 4.0% were having good knowledge. Minimum score is 14 and maximum score is 29. Mean score is 18.97 and percentages mean score is 47.42, whereas in post test knowledge score, 28.0% of samples were having good knowledge and 72.0% samples were having excellent knowledge. Mean score is 33.77 and percentage mean score is 84.42.

In pretest practice score of early ambulation of control group, in which 82.0% of samples were having poor practice and 18.0% samples were having average practice. Minimum score was 7 and maximum score was 12. Mean score was 9.41 and percentage mean score was 42.86. Whereas in the post test practice score 82.0% of samples were having poor practice 18.0% samples were having average practice. Mean score is 9.43 and percentage mean score is 42.86. Minimum score was 8 and maximum score was 12. Whereas in pretest practice score of Early ambulation of experimental group, in which 25.0% of samples were having poor practice and 75.0% samples were having average practice. Minimum score was 7 and maximum score was 12. Mean score was 9.39 and percentage mean score was 42.68. Whereas in the post test practice score 100.0% of samples were having excellent practice. Minimum score was 19 and maximum score was 22. Mean score is 20.98 and percentage mean score is 95.36.

The "t" test result regarding effectiveness of teaching module of planned post operative nursing care on knowledge of early ambulation showed that the combined mean knowledge score of posttest and pretest is 7.665 with standard deviation of 7.668. At 95% confidence interval of the difference "t" value is 14.137 and p value is 0.000 which is far lower than expected level of significant value i.e. 0.05, hence the teaching module of planned post operative nursing care is found effective as evidenced in post test score of experimental group.

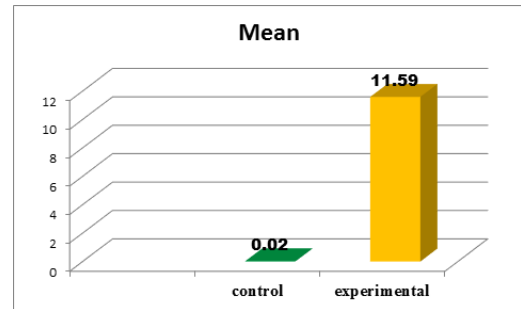


Graph. no. 1 Estimated Marginal Means for effectiveness teaching module on planned post operative nursing care in regards to knowledge of early ambulation.

The result of Levene's test for equality of error variance which shows that test of the null hypothesis is that the error variance of the dependent variable is equal across groups. P value is .000 which is lower than expected value of significance 0.05, hence H0 hypothesis is rejected as dependent variable is not equal across the group and H1 is accepted.

The "t" test regarding effectiveness of teaching module on knowledge regarding procedure of early ambulation. The mean knowledge score of posttest and pretest procedure of early ambulation together is 5.805 with standard deviation of 5.868. At

95% confidence interval of the difference t value is 13.989 and p value is 0.000 which is far lower than expected level of significant value i.e. 0.05, hence the teaching is found effective in post test.



Graph.no. 2 Estimated marginal means of difference for effectiveness of teaching module on planned post operative nursing care for procedure on early ambulation.

The result of Levene's test for equality of error variance which shows that tests the null hypothesis that the error variance of the dependent variable is equal across groups. But P value is 0.000 which lower than expected value of significance 0.05. Hence H0 hypothesis is rejected as dependent variable is not equal across the group and H1 was accepted for procedure of early ambulation.

The correlation between knowledge and practice of the experimental group regarding procedure of early ambulation; where the r value between the knowledge and practice was 0.158 which shows that the correlation was not significant at the 0.01 level.

The association of pretest and posttest knowledge score of experimental group with gender by one way ANOVA, in which the t value is .296 and p value is .588, which was greater than the significant value of .05. Hence the gender was not found significant. The association of pretest and posttest knowledge score of experimental group with age by one way ANOVA, in which all the six categories F value is .823 and p value is .536, which was greater than the significant value of .05. Hence the age was not found significant. The association of pretest and posttest knowledge score of experimental group with professional qualification by one way ANOVA, in which all the three categories F value is .912 and p value is .405, which was greater than the significant value of .05. Hence the professional qualification was not found significant. The association of pretest and posttest knowledge score of experimental group with clinical experience by one way ANOVA, in which all the four categories F value is 1.632 and p value is .187, which was greater than the significant value of .05. Hence the clinical experience was not found significant.

The association of pretest and posttest procedure of early ambulation score of experimental group with gender by one way ANOVA, in which the t value is .714 and p value is .400, which was greater than the significant value of .05. Hence the gender was not found significant. The association of pretest and posttest procedure of early ambulation score of experimental group with age by one way ANOVA, in which all the six categories F value is .645 and p value is .666, which was greater than the significant value of .05. Hence the age was not found significant. The association of pretest and posttest procedure of early ambulation score of experimental group with professional qualification by one way ANOVA, in which all the three categories F value is .430 and p value is .652, which is greater than the significant value of .05. Hence the professional qualification is not found significant. The association of pretest and posttest procedure of early ambulation score of experimental group with clinical experience by one way ANOVA, in which all the four categories F value is .180 and p value is .910, which was greater than the significant value of .05. Hence the clinical experience was not found significant.

The association of pretest and posttest knowledge score of control group with gender by one way ANOVA, in which the t value is .004 and p value is .950, which was greater than the significant value of .05. Hence the gender was not found significant. The association of pretest and posttest knowledge score of control group with age by one way ANOVA, in which all the six categories F value is 1.934 and p value is .096, which was greater than the significant value of .05. Hence the age was not found significant. The association of pretest and posttest knowledge score of control group with professional qualification by one way ANOVA, in which all the three categories F value is .260 and p value is .772, which was greater than the significant value of .05. Hence the professional qualification was not found significant. The association of pretest and posttest knowledge score of experimental group with clinical experience by one way ANOVA, in which all the four categories F value is 2.045 and p value is .094, which was greater than the significant value of .05. Hence the clinical experience was not found significant.

The association of pretest and posttest procedure of early ambulation score of control group with gender by one way ANOVA, in which the t value is .198 and p value is .657, which was greater than the significant value of .05. Hence the gender was not found significant. The association of pretest and posttest procedure of early ambulation score of control group with age by one way ANOVA, in which all the six categories F value is .545 and p value is .742, which was greater than the significant value of .05. Hence the age was not found significant. The association of pretest and posttest procedure of early ambulation score of control group with professional qualification by one way ANOVA, in which all the three categories F value is .031 and p value is .970, which was greater than the significant value of .05. Hence the professional qualification was not found significant. The association of pretest and posttest procedure of early ambulation score of control group with clinical experience by one way ANOVA, in which all the four categories F value is .371 and p value is .829, which was greater than the significant value of .05. Hence the clinical experience was not found significant.

Discussion:

This study reveals that the early ambulation as nursing care in post operative patients based on evidence based practice has positive outcome, there was no post operative complications and nurses also learned the evidence based practice to follow in the new routine care of post operative patients.

The impact of evidence-based practice (EBP) has echoed across nursing practice, education, and science. The call for evidence-based quality improvement and healthcare transformation underscores the need for redesigning care that is effective, safe, and efficient. In line with multiple direction-setting recommendations from national experts, nurses have responded to launch initiatives that maximize the valuable contributions that nurses have made, can make, and will make, to fully deliver on the promise of EBP. Such initiatives include practice adoption; education and curricular realignment; model and theory development; scientific engagement in the new fields of research; and development of a research network to study improvement in the clinical setting with standard protocols in nursing practice.

Conclusion:

Early walking after surgery is one of the most crucial things you can do to prevent problems. Mobilizing hospitalized adults brings benefits for not only physical functioning, but also their emotional and social well-being. Moreover, ambulation yields important organizational benefits. These benefits of mobilization on four areas required viewing the patient in a holistic manner. Even though each study approached different types of patients, illnesses and procedures, this review showed that most inpatients would benefit from mobilization and would experience optimal functions.

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