Original Research Paper

Nursing

A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING USE OF INCENTIVE SPIROMETERY IN POST-OPERATIVE PATIENT UNDERGONE ABDOMINAL SURGERY ADMITTED IN SURGERY WARD AT KGMU, LUCKNOW, UP.

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ABSTRACT **Method:** Research methodology indicates the general pattern for organizing the procedure to collect valid and reliable data for the problem under study. This chapter deals with methodology adopted for "Effectiveness of planned teaching programme on knowledge regarding use of incentive spirometery in post-operative patient undergone abdominal surgery". It includes a research approach, design of study, population, inclusion and exclusion criteria sample and sampling technique, size of sample, setting, methods of data collection and data analysis.

Research Approach- Quantitative

Research designe- Pre –Experimental

Variables- Knowledge regarding incentive spirometry

Setting of the study- Surgery ward ,KGMU

Sample- 50

Sampling Teachnique- Conenient sampling

Data tools & technique- Self structured questionnaire.

INTERPRETATION- the means of two independent variables groups, patients of pre test and post test, are 9.90 and 15.87 respectively. The z test was perform to determine if the 5.97 (i.e. 15.87-9.09) mean difference is significant enough to conclude that the post test from this population performed better in test than pre test. For discussion of results purposes, compute for the standard deviation (SD) that corresponds to each group variance . To do that, just compute the square root of the variance correct to two decimal places in example, SD (Pre test) =sqrt (8.6)=2.93, SD (Post test)= sqrt (8.33)= 2.88The variance/ SD simply tells us the dispersion of the test of the patients within a group from their average test score.This simply tells us that there are 55 participants utilized under pre test and post test. **Conclusion:** The chapter deals with the conclusion of the study, implication for nursing practice, Nursing education, nursing Administration and followed by its limitation and research recommendation in future.The aim of the study was to assess the effectiveness of planned teaching program on knowledge regarding use of incentive spirometry in post-operative patient undergone abdominal surgery. Finding proof that planned teaching program administered by the researchers was effective to increase the knowledge regarding use of incentive spirometry in post-operative patients. Hence the study was found to be effective.

KEYWORDS : Assess, Efffectiveness, Planned Teaching Program, Abdominal Surgery.

INTRODUCTION

Incentive spirometry (IS) is widely prescribed to prevent postoperative pulmonary complications. Respiratory therapists and nurses are responsible for instruction and monitoring of patients receiving Incentive spirometry. Intermittent reassessment of patient performance after initial instruction is recommended. However, the amount of time that providers spend onIncentive spirometry related to activities has not been reported, nor have optimal use procedures been established. In this article, we review the current state ofIncentive spirometry (IS) and question its role in the management of postoperative pulmonary complications.

LITERATURE SURVEY:
Background

Incentive spirometry is a method of encouraging voluntary deep breathing by providing visual feedback about inspiratory volume. Using a specially designed spirometer, the patient inhales until a preset volume is reached, then sustains the inspiratory volume by holding his or her breath for 3 to 5 seconds. Incentive spirometry reduces the risk of atelectasis and pulmonary consolidation**.**[1]

Incentive spirometry (IS) is commonly prescribed to reduce pulmonary complications, despite limited evidence to support its benefits and a lack of consensus on optimal protocols for its use. Although numerous studies and meta-analyses have examined the effects of Incentive spirometryIS on patient outcomes, there is no clear evidence establishing its benefit to prevent postoperative pulmonary complications. Clinical practice guidelines advise against the routine use ofIncentive spirometry (IS) in postoperative care. Until evidence of benefit from well-designed clinical trials becomes available, the routine use of Incentive spirometry (IS) in postoperative care is not

supported by high levels of evidence.

In the 1960s, intermittent positive-pressure breathing (IPPB) was commonly used to prevent postoperative pulmonary complications. However, intermittent positive-pressure breathing came under scrutiny at the Sugarloaf Conference, where it was determined that there was not sufficient evidence to support its use.[2] Coincidental with the criticism of intermittent positive pressure breathing, the incentive spirometer was introduced by Bartlett et al. after observations that yawning might generate pulmonary benefits for postoperative patients.[3]

Deciding that it was the sustained inspiration of yawning that yielded the benefit, the group constructed a device to coach patients to emulate a yawning-like sustained maximal inspiration in an effort to prevent atelectasis. The inventors' early data from postoperative patients performing sustained maximal inspiration demonstrated improvement in ventilation/perfusion mismatch and alveolar-PaO2 gradient, the latter suggestive of alveolar inflation and subsequent reduction in intrapulmonary shunt. When sustained maximal inspirations were repeated each hour, PaO2 levels remained near normal. These preliminary findings came to define the anticipated physiologic effects providing visual light feedback when patients achieved their inspiratory target volume.[4] In 1975, the Spirocare device further enhanced the electronic IS visual feedback by putting the display lights on a scale indicating increasingly larger inspiratory volumes, attempting to gamify patient engagement and adherence.[5] These electronic IS devices were in use for many years but have been replaced by less expensive, disposable units.

METHODOLOGY:

Research methodology indicates the general pattern for organizing the procedure to collect valid and reliable data for the problem under study. This chapter deals with methodology adopted for "Effectiveness of planned teaching programme on knowledge regarding use of incentive spirometery in post-operative patient undergone abdominal surgery". It includes a research approach, design of study, population, inclusion and exclusion criteria sample and sampling technique, size of sample, setting, methods of data collection and data analysis.

Research Approach:
The research approach is the broad basic procedure for collecting data in a particular research situation. In quantitative research, data collection and analysis are developed within a scientific philosophy; it is used when the researcher wishes to collect information in a numerical form as the results will be based on rigor, objectivity and control.A quantitative approach was selected for the present study.

RESULT/ DISCUSSION:
the means of two independent variables groups, patients of pre test and post test, are 9.90 and 15.87 respectively. The z test was perform to determine if the 5.97 (i.e. 15.87-9.09) mean difference is significant enough to conclude that the post test from this population performed better in test than pre test. For discussion of results purposes, compute for the standard deviation (SD) that corresponds to each group variance . To do that, just compute the square root of the variance correct to two decimal places in example, SD (Pre test) =sqrt (8.6)=2.93, SD (Post test)= sqrt (8.33)= 2.88The variance/ SD simply tells us the dispersion of the test of the patients within a group from their average test score.This simply tells us that there are 55 participants utilized under pre test and post test.:Based on the objectives of the study and hypothesis, the detailed discussion of the result of the data interpreted from the Statistical analysis is done. The purpose of study was to evaluate "the study to assess the effectiveness of planned teaching program on knowledge regarding use of incentive spirometry in post- operative patient undergone abdominal surgery admitted surgery ward at KGMU Lucknow UP".

CONCLUSION:
The chapter deals with the conclusion of the study, implication for nursing practice, Nursing education, nursing Administration and followed by its limitation and research recommendation in future.The aim of the study was to assess the effectiveness of planned teaching program on knowledge regarding use of incentive spirometry in post-operative patient undergone abdominal surgery. Finding proof that planned teaching program administered by the researchers was effective to increase the knowledge regarding use of incentive spirometry in post-operative patients. Hence the study was found to be effective.

Future Scope:
The study was limited to selected words in KGMU, Lucknow, Uttar Pradesh, and it was difficult to make broad generalization of the findings.

The study was limited to patients who have undergone abdominal surgery.

The study was limited to the patients who were available at the time of data collection.

The study was limited to the patient admitted in surgery ward.

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