

Effectiveness of structured teaching program on breathing and coughing exercises among post operative clients in bollineni superspeciality hospital, Nellore.



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INTRODUCTION

“Breath is spirit. The act of breathing is living”

Breathing is one of the most important and instant of all the vital functions of the body. Coughing is a form of violent exhalation by which irritant particles in the airways can be expelled. It is something that occurs spontaneously, which influences the activities of each and every cell in the body. Normal Breathing pattern of an Individual becomes altered in certain conditions such as illness, diagnostic procedures, treatment and surgery.

Deep breathing and coughing exercises are movements used to improve pulmonary gas exchange or to maintain respiratory function, especially after prolonged inactivity or general anesthesia. Incision pain after surgery in the chest or abdomen often inhibits normal respiratory movements.

Simple techniques and encouragement significantly improve the effectiveness of the exercises. Positioning increases comfort, allows the abdominal contents to fall away from the diaphragm, and encourages full expansion of the chest wall on

inspiration. If an incision is present, it may be supported with the hands or with a book or pillow held against the abdomen. The patient is often reluctant to breathe deeply or to cough. Adequate analgesia, encouragement, and explanation of the benefits of the exercises may overcome that resistance. Various devices are available for use in deep breathing and coughing, such as those used during atelectasis to strengthen the muscles used in expiration and to empty the alveoli of retained gas.

NEED FOR THE STUDY: The National Surgical Quality improvement Program study found that the post operative clients were the most costly of the major postoperative medical complications, which included cardiovascular, thromboembolic, and infectious. However, estimates depend on a variety of factors, including pre-existing pulmonary conditions, and the type of surgery performed. In some studies 2 to 19% of PPC occur in non - cardiothoracic surgery patients and around 8-60% in patients undergoing cardiothoracic surgery. (CRM.2008).

Encouraging patients to do deep-breathing exercises is a common component of nursing care to reduce respiratory complications, particularly in postoperative patients. Most research supports this practice, although some controversy remains regarding the effectiveness of deep-breathing exercises versus incentive spirometry in particular

patient populations.

There is a 15 per 1000 deaths occurs yearly postoperative patients due to a postoperative pulmonary complications. Pulmonary complications are a major cause of morbidity and mortality during the postoperative period. (CINHAL)

OBJECTIVES OF THE STUDY:

- ❖ To assess the pretest knowledge regarding Breathing and Coughing Exercises among post operative clients.
- ❖ To develop and implement the structured teaching program regarding Breathing and Coughing Exercises among post operative clients.
- ❖ To assess the effectiveness of structured teaching program through post test knowledge regarding Breathing and Coughing Exercises among post operative clients.
- ❖ To find out the association between the pretest knowledge regarding Breathing and Coughing Exercises with selected demographic variables.
- ❖ To find out the association between the post knowledge regarding Breathing and Coughing Exercises with selected demographic variables.

METHODOLOGY:

RESEARCH APPROACH: Quantitative research approach.

RESEARCH DESIGN: One group pre test post test design.

SETTING OF THE STUDY: The study was conducted in Bollineni super specialty hospital.

POPULATION: Post operative patients who has

underwent thoraco – abdominal surgery.

SAMPLE: Post Operative patients who has underwent thoraco – abdominal surgery in Bollineni Super specialty Hospital, Nellore.

SAMPLING TECHNIQUE: Non probability convenience sampling technique.

SAMPLE SIZE: 60 post operative patients who have underwent thoraco – abdominal surgery in Bollineni Super specialty hospital.

Inclusion criteria: The study includes the adults who are:

- Above 20 years.
- Are willing to participate in the study.
- Are able to understand and speak Telugu or English.
- Available at the time of data collection.
- Patients underwent thoraco – abdominal surgical procedure at Bollineni Super speciality hospital in Nellore.

Exclusion criteria: The study excludes adults who are:

- ❖ Below 20years.
- ❖ Not willing to participate in the study.
- ❖ Unable to understand and speak Telugu or English.
- ❖ Patients who have not undergone thoraco - abdominal surgery procedure at Bollineni Super speciality Hospital in Nellore.
- ❖ Clients included in the pilot study.

Description of the tool:

Part A – deals with Socio demographic variables of post operative patients who has undergone thoraco abdominal surgery

Part B – deals with structured questionnaire.

RESULTS: The results were computed using descriptive and inferential statistics based on the following objectives of the study.

Section-I: Description of demographic variables.

Section-II: Item wise analysis of pretest and post test knowledge score on Breathing and coughing exercises among postoperative clients.

Section-III: The effectiveness of structured teaching programme through pretest and post test knowledge scores.

Section-IV: Association between pretest knowledge scores and selected demographic variables.

Section-V: Association between post test knowledge scores and selected demographic variables.

Table: 1: Effectiveness of structured teaching program through pretest and post test knowledge

N=60

SL. No	category	Pre test		Post test	
		Frequency	Percentage	Frequency	Percentage
1	Below average	60	100%	-	-
2	Average	-	-	20	33.33%
3	Above average	-	-	40	66.67%

Table: 2: Comparison of mean and standard deviation of pre-test and post test knowledge score

Sl. No.	Pretest		Posttest		Z test	DF	LOS
	Mean	Standard Deviation	Mean	Standard Deviation			
1.	5.88	1.54	23.52	2.65	41.93	59	S**

Association between post test knowledge score with their selected socio demographic variables: There is no significant association between post test knowledge score with their selected socio demographic variables.

Major findings of the study

- ❖ Majority of the respondents 60 (100%) had Below average knowledge regarding breathing and coughing exercises.
- ❖ The Pre test mean knowledge score of breathing and coughing exercises among postoperative clients

was 5.88% with Standard Deviation 1.541.

- ❖ Majority of the respondents 40 (66.67%) had above average knowledge regarding Breathing and coughing exercises.
- ❖ The post test mean knowledge score of breathing and coughing exercises among post operative client was 23.52% with Standard Deviation of 2.658.
- ❖ There is no significant association between post test knowledge score with their selected socio demographic variables.

Conclusion: Irrespective of the variables like age, gender, religion, income of the family per month, occupation and educational status, there was a lot of improvement in the knowledge of clients after structured teaching program in breathing and coughing exercises i.e., the structured teaching program was highly effective.

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