

**Effectiveness of a Planned Teaching Programme (PTP) on Post-Operative Exercises for clients subjected to abdominal surgery.**<sup>1</sup>Sunita Rani, Principal Govt. College of Nursing, Sirohi, Rajasthan<sup>2</sup>Kanwar Singh, Senior Nursing officer, VVIP, Medical Unit, PMO, AIIMS, New Delhi**Corresponding Author:** Kanwar Singh, Senior Nursing officer, VVIP, Medical Unit, PMO, AIIMS, New Delhi**Type of Publication:** Original Research Article**Conflicts of Interest:** Nil

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**Abstract**

Postoperative pulmonary complications (PPC) contribute significantly to overall peri operative morbidity and mortality rates. PPC occur much often in patient undergoing abdominal surgery. No one can breathe or cough for the client. He himself has to perform breathing, coughing and leg exercises after surgery, as their part in getting themselves well. Adequate knowledge and frequent practice of these exercises before surgery will prepare the clients to practice it effectively during postoperative phase.

**Keywords:** Planned Teaching Programme, Knowledge, Practice, Client, Postoperative Exercises.

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**Introduction****Objectives**

1. To assess the knowledge of postoperative exercises among clients subjected to abdominal surgery, using structured interview schedule.
2. To assess the practice of postoperative exercises, among clients subjected to abdominal surgery using observation checklist.
3. To evaluate the effectiveness of PTP on postoperative exercises as evident from gain in knowledge scores.
4. To find the effectiveness of PTP on postoperative exercises as evident from gain in practice scores.
5. To correlate posttest scores of knowledges and practice among clients subjects to abdominal surgery.

**Materials and Methods**

A pre-experimental evaluative study was conducted using one group pre-test – post-test, research design. Non-probability, convenient sampling technique was used to select 42 clients, undergoing elective abdominal surgery at free surgery wards of KLES Hospital & MRC, Belgaum.

**Instruments**

The tool consisted of three sections:

**Section I:** Socio-demographic data of clients.**Section II:** This section was concerned with items to elicit the knowledge concerning postoperative exercises.**Section III:** To elicit the practice skills concerning postoperative exercises, an Observational checklist was designed with 18 steps.

The validity and reliability were ensured. A CVI (content validity index) of 0.83 was found for the structured interview schedule and 0.68 was found for observation checklist. A CVI of 0.88 was found for planned teaching programme. Reliability of the interview schedule was found ( $r=0.92$ ) by using split half method, followed by Karl Pearson's coefficient of correlation. The reliability of the observation checklist was obtained by using interater reliability which was 0.77. Hence the tool was found reliable for the study.

A lesson plan on post operative exercises was developed including problems of post operative period & purposes and techniques of coughing, deep breathing and leg exercises.

### **Results**

- Initially pretest knowledge and performance were assessed in 42 subjects, two days prior to their surgery. It followed implementation of planned preoperative teaching on postoperative exercises. The posttest was taken on 4th postoperative day.
- Gender distribution was homogenous, majority of clients were married & between the age group of 21 to 30 years of age. One third of the client were not educated and were housewives and unskilled workers.

### **Discussion**

The study revealed that the mean percentage obtained for overall knowledge in the pre-test was 53.33% and in post-test 75.23%. The mean percentage obtained for overall practice in the pre-test was 25% and in the post-test 75%. The improved mean percentage of overall knowledge was 21.9% with t-value 14.27 which is highly significant at  $p<0.01$  level. McNemar test was used for evaluation of practice before and after PTP. It depicts that before PTP only 37.17% clients had favorable practices on coughing and deep breathing exercises, but after PTP 100% had favorable practices with McNemar  $\chi^2$  value 25.03 which is highly significant at  $p<0.001$  This level. These study findings are similar to studies conducted by Chatterjee P(2002) and Lin, Li-Ying, Wang (2005) on abdominal surgery, which revealed that preoperative nursing intervention has positive effects for patients of abdominal surgery.

Hence the preoperative PTP on postoperative exercises is an effective strategy for improving knowledge and ability to perform these exercises postoperatively in an effective manner.

Karl-Pearson's coefficient of correlation was used to correlate posttest scores of Knowledges and practice. The results show that  $r = 0.55$ . Thus, study revealed that there is positive correlation between posttest knowledge and practice.

### **Nursing Implications**

#### **Nursing Administration**

The planned teaching programme and the tool prepared by the investigator can be used by hospital nurses for the benefit for those clients who are undergoing thoracic and abdominal surgeries, as it brings positive health outcomes and decreases the financial burden by shortening lengths of stay, decreasing the rate of complications and reducing malpractice claims.

#### **Nursing Education**

The lesson plan and audiovisual aids can be utilized by the nurse educators to teach postoperative exercises to the nursing students. The lesson plan could be included for ongoing in-service education programme for the staff nurses, to provide health education to the clients in the hospital setting.

### **Nursing Practice**

Nursing personnel are having primary role in imparting health education for the clients who are undergoing abdominal surgery for preventing or reducing postoperative pulmonary complications, DVT, thrombophlebitis and emboli, thereby reducing morbidity and mortality among clients.

### **Nursing Research**

The present study conducted by the investigator can be a source of review of literature for others who are intending to conduct studies on postoperative exercises. It helps the nurse researcher to conduct further research, which provides more scientific data and adds more scientific knowledge to nursing profession. It encourages the nurses to read, discuss and conduct research studies so as to enable the nurse to make data-based decision rather than intuitive nursing decisions.

### **Recommendations**

1. The same study can be done with an experimental research approach having a control group.
2. A comparative study may be done by using two categories of clients – one client subjected to thoracic surgery versus client subjected to abdominal surgery.
3. Different teaching strategies can be used to educate the clients regarding postoperative exercises.

### **Interpretation and Conclusion**

The study findings concluded that PTP on postoperative exercises related to abdominal surgery was effective strategy in improving knowledge and practice of clients. The study also revealed that there is positive correlation between the improved knowledge and practice of clients regarding postoperative exercises.

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