

Efficacy of Compact Disc in Abdominal Surgery

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Surgical treatment has been attempted since early times but until fairly recently surgery was considered the last resort to be used only when more conservative measures had failed. The present study sought to (i) assess the effectiveness of compact disc (CD) on knowledge and practice of breathing exercises among patients undergoing abdominal surgery; (ii) assess the effectiveness of CD on the knowledge and practice of patients regarding breathing exercises; and (iii) compare the post-test scores with demographic variables.

Filardofe et. al reported that pulmonary complications followed by abdominal surgery were pneumonia (34% - 37%), atelectasis (11% - 24%), broncho constriction (17% - 22.9%), respiratory failure (11% - 13%), prolonged mechanical ventilation (9 % - 11.4%) and bronchial infection (2.5% - 4%).

Overlend et. al stated that breathing exercises were used to optimise the gas exchange, keep airway open, promote lung expansion, promote secretion removal, minimize pneumonia and atelectasis and strengthen the accessory muscle of respiration.

Pre-operative teaching facilitates recovery, decrease in length of hospital stay, smoother induction of anaesthesia, fewer post-operative complications, rapid recovery and

well being. In many institutions, the pre-operative teaching was greatly neglected aspect of nursing care, many patients developed post-operative complications. Thus the compact disc developed and bested can be used in surgical wards to educate the patients on regular basis before the surgery.

Methodology

A quasi experimental design, where pre- and post-test with control group approach was used. The population for the study included the patients with abdominal surgery. Purposive sampling technique was utilised for selecting a sample of 60 patients with abdominal surgery. Tools used for data collection included structured interview schedule, check list and compact disc.

Reliability of the tools was established by split half method and test re-test method respectively. The reliability was found to be $r = 0.92$ for knowledge, $r = 0.87$ for check list and $r = 0.93$ for compact disc.

Data was collected from 60 abdominal surgery patients. The data was analysed according to objectives of study using descriptive and inferential statistics.

Findings

The significant findings of the study were :

- Highest percentage of patients (33%) in control group were in the age group

of 41-50 years and those in experimental group (43%) were in the age group of 31-40 years.

- Most of the patients (67% and 70%) were male in both control and experimental group respectively.
- About 50 per cent of patients in control group had higher secondary education and 36 per cent of patients in experimental group were graduates.
- As many as 30 per cent of patients in control group were self employed and 40 percent in experimental group were private employees.
- Most of the patients (63% and 70%) in control group and experimental group were from urban area, respectively.
- 47 per cent of patients in control group and 70 per cent of patients in experimental group, had television as the source of information.

Findings related to knowledge and practice

- Mean post-test knowledge score (92.9%) of experimental group (abdominal surgery patients) was found to be significantly higher than the post-test knowledge score (36.75%) in the control group, as evident from 't' value (29) = 54.7, $p < 0.05$ level. This suggested the effectiveness of compact disc in increasing the knowledge of abdominal

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surgery patients regarding breathing exercises.

- Post-test practice score (85.91%) of experimental group (abdominal surgery patients) was significantly higher than the post-test practice score (12%) control group as evident by 't' value (29) = 44.9, $p < 0.05$. This suggested the development of correct practice regarding breathing exercises.
- The co-efficient of correlation between knowledge and practice scores of experimental and control group indicated positive relationship which was found to be significant ($r = 0.91$).

since abdominal surgery is associated with several complications, patients need to have adequate knowledge and practices to deal with them effectively. Hence it is imperative for nursing personnel working in a hospital to provide supportive and educative services.

Conclusion

- Knowledge of compact disc was found to be effective in increasing knowledge and improving correct practices regarding breathing exercises.
- A highly positive significant correlation existed between knowledge and practice of breathing exercises.

is recommended that a (i) similar study may be replicated on a large sample for making broader generalisation, and (ii) similar study can be conducted by utilising other teaching strategies.

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Implications

Findings of the study imply that

Recommendations

On the basis of the findings, it

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Profile of Parul Datta

Career Objectives: To grow professionally and to dedicate efforts for development of Nursing profession. To serve for the well being of the Neonates & Children.

Services Rendered: For a total period 28 years, 5 months. Served West Bengal Nursing Services, Dept. of Health & Family Welfare, Govt. of West Bengal, as (i) Staff Nurse (ii) Sister In-charge Gr. I and (iii) Sister Tutor. Staff nurse (GNM) at (i) Bankura Sammilani Medical College & Hospital, Bankura (ii) NRS Medical College & Hospital, Kolkata. As Sister In-charge at Kaina Sub Division Hospital, Sister Tutor for General Nursing & Midwifery and Health Supervisor Course at North Bengal MC & Hospital, Sushratanagar, Darjeeling, (ii) MR Bangur Hospital, Tollygunj, Kolkata, (iii) Burdwan Medical College & Hospital, Burdwan. At PGIMER - SSKM Hospital, Kolkata from 12 May 2006 till date.

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