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EFFECTS OF STRUCTURED PREOPERATIVE TEACHING UPON
POSTOPERATIVE PHYSICAL RECOVERY AND PSYCHOLOGICAL WELFARE

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ADDENDUM

1. Pages 129 and Page 130: Chi-square tests are inappropriate. A t-test for independent groups is appropriate. In each case the dependent variable is the percentage of patient-nurse interaction. The data were reanalysed as follows:
 - 1.1. The t-test was applied to the mean percentage of patient-nurse interaction between (8) homogenous and (4) heterogenous groups. The result yielded that there was no significant difference between means of the two groups ($x=87.82$ and 87.88 respectively).
 - 1.2. Page 130, again the t-test was applied to the mean percentage of patient-nurse interaction between male and female homogenous groups. The result was there was no significant difference between means of the two groups. ($t=0.3359$ whereas at 5% level, $df\ 6$, $t\ expected=2.447$). This result was contrary to the previous analysis.
2. Page 157 Table 7.2.3: Chi-square is not appropriate for these data. An appropriate procedure is t-test for independent groups. In this case each patient was given a combined + and - score summing over all hospital days. It was found that there was no significant difference of mean deviation either in systolic blood pressure level or pulse rate between the control and experimental group patients. This finding was contrary to the previous analysis ($t=0.2734$ and 0.7888 whereas at 5% level, $df=58$, $t\ expected=2.01$).
3. Pages 171, 173 and 176: Using degrees of freedom at 58, t-test for two independent groups was applied to the data on vomiting, sleep pattern, and postoperative complications. It was found there was no significant difference between means of the two groups ($t=0.909$, 1.764 and 1.529 respectively).
4. Pages 188 and 189: The absence of dfs in the subscore analysis and the value of x in Table 7.16 suggests that average score were not used for these analyses and that instead each group was treated as if it contained approximately 60 individuals instead of 30 with two scores per person.

In view of the above problems, the data were analysed again using the average score for each category of the PCE. The findings were similar to the previous analysis i.e., there was no significant difference between the average score under each category of the PCE even though it appeared as though the experimental group patients had better scores on the communication aspect than did the control group patients.

Thus the reader should note that conclusions from the initial analyses which appear on pages 129, 130, 157, 171, 173, 176 and especially on pages 211 and 212 may be invalid.

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ABSTRACT

An experimental study to test the effects of structured pre-operative teaching on the physical recovery and psychological welfare of patients admitted for elective surgery was conducted in a 600 bed general hospital. The 30 experimental subjects, 16 women and 14 men, received pre-operative instruction by means of a booklet issued shortly after arrival in hospital, and a group teaching and discussion session conducted on the evening prior to surgery. A variety of general and specific information about surgery and hospitalization was provided, including instructions for self-assessment after discharge. Teaching in the group was by means of slide and tape presentation. An equal number of control patients received only the preparation routinely provided in the ward.

Comparisons were made between the two groups of patients according to criterion measures in three categories: physical recovery, psychological welfare, and complex criteria. The latter used subjective evaluation by independent nurse observers of physical, sensory, cognitive, psycho-social and communication aspects of the patient's condition. Measures of physical recovery were complaint of pain, analgesic consumption, nausea and vomiting, post-operative complications, time to resumption of various normal body functions, sleep pattern and sedative consumption, and length of hospital stay. For psychological welfare criterion measures included scores on a specially constructed Surgical Patient Anxiety Scale; physiological indicators in the form of systolic blood pressure and pulse:

patient postoperative psychological state as observed by independent nurse observers and patients' own assessment of their feelings after discharge.

The overall results supported the general hypothesis that the structured pre-operative teaching reduced patient anxiety and aided recovery. Although few direct relationships were identified between level of pre-operative anxiety and specific aspects of post-operative recovery, there was evidence suggesting a more complex set of relationships. Analysis of group interaction in the teaching sessions showed that the teaching session had served its purpose well, and also that group composition, particularly in terms of sex, had influenced both the content and structure of patient interaction.

Implications for nursing practice, derived from these findings have been suggested, and recommendations for further study are included.

INTRODUCTION

Patient welfare and recovery is the central concept for the organization of the present study. Surgical patients are known to experience physiological and psychological stress resulting from illness, surgery and hospitalization. Therefore it is worthwhile considering the extent to which the person can be prepared for such events.

The aim of presurgical nursing intervention is to prepare the patient, and so place him in the best possible condition for such events. Numerous attempts to fulfil this function of nursing by means of preoperative teaching are reported in nursing and medical literature. In the area of preoperative teaching, two main approaches can be distinguished, one physiologically oriented and the other psychologically oriented. Taking either approach alone is inadequate from the point of view of a total person oriented approach to nursing.

In the present study, a structural preoperative teaching programme was established with the aim that it would serve as an effective tool for preoperative nursing intervention and one that could be employed readily by nursing staff. The content of the programme integrates physiological and psychological approaches.