IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

"AN EXPLORATORY STUDY TO ASSESS THE EFFECTIVENESS OF EDUCATIONAL INTERVENTION PROGRAMME ON CARE OF PATIENTS WITH INTERCOSTAL DRAINAGE AMONG NURSES WORKING IN SELECTED HOSPITALS OF INDORE IN THE YEAR 2020-2021"

RESEARCH ARTICLE FOR PUBLICATION

"To assess the effectiveness of educational intervention programme on care ofpatients with intercostal drainage."

Author 1 -Ms. Reetika William, Associate Professor
Author 2 - Ms. Divya Saxena - Associate Professor

ABSTRACT

A chest tube insertion is a surgical procedure in which a hollow, flexible drainage tube is inserted through the side of the chest in to the pleural space in order to drain the pleural cavity of air, blood, pus or lymph. The study was conducted with the aim to assess the effectiveness of educational intervention programme care of chest tube drainage among staff nurses working in selected hospital of Indore in the year 2022-2023. Quantitative research approach with quasi-experimental one group pre-test post-test design was used to assess the knowledge of 60 nurses and were selected as the participants through purposive sampling technique who fulfilled the inclusion criteria. Data was collected using Structured knowledge questionnaire. Intervention was administered in the form of an informational booklet on intercostal drainage and care of patients with intercostal drainage. Data was analyzed using descriptive and inferential statistics. The findings of the study concluded that in the pre-test most of the study subjects had poor knowledge, while as in the post-test most of

the subjects had good level of knowledge indicating that the educational intervention programme was effective in improving the knowledge. The study concluded that there was statistically significant improvement in knowledge scores after implementation of an informational booklet regarding care of chest tube drainage indicating that the educational intervention programme was effective in improving the knowledge scores. The study recommended that regular educational program should be designed to give information for enhancing andreinforcement of nurses' knowledge to achieve high quality patient care.

BACKGROUND OF THE STUDY

Care is the heart soul of smart nursing. Value of care is an ethical code which governs how care giver ought to act in a certain situation within a health or social care setting. The patient is the center of the nurse's concern. Nurses take care of their patient, making sure that they can breathe properly, seeing that they get enough fluid, and help nourishment, helping them rest and sleep, making sure that they are comfortable etc. A chest drain is a tube inserted through the chest wall between the ribs into the pleural cavity to allow drainage of air (pneumothorax), blood (hemothorax), fluid (pleural effusion) or pus (emphysema) out of the chest. The effective drainage of air, blood or fluid from the pleural space requires an adequately positioned drain and an airtight, one- way drainage system to maintain sub atmospheric intrapleural pressure. This allows drainage of the pleural contents and reexpansion of the lung. While caring a patient with a chest tube drainage the nurse requires problem solving skill and critical thinking ability. After the chest tube has been inserted, it is the nurse's responsibility to maintain a patent (clear) and intact pleural drainage system. Several complications can occur when managing a patient with a chest tube due to the carelessness of the health care professionals. It is important that nurses receive appropriate training in the management of chest drains and ensure that patients are cared for safely and competently; and keep themselves updated. Various teaching strategies are used to increase knowledge, such as lecturing, demonstration, discussion, and self-education. These methods of self-education have an advantage over the others as the learner can educate himself at his own pace and it also stresses on rereading.

NEED FOR THE STUDY

Disorders of the thoracic cavity are common and are encountered by nurses in every setting from the community to the intensive care unit. Chest tubes are used after chest surgery and chest trauma and for pneumothorax or hemothorax to promote lung reexpansion. While caring a patient with a chest tube drainage the nurse requires problem solving skill and critical thinking ability. After the chest tube has been inserted, it is the nurse's responsibility to maintain a patent (clear) and intact pleural drainage system. Several complications can occur when managing a patient with a chest tube due to the carelessness of the health care professionals.

During our clinical posting we observed many patients with chest tube drainage has complications like infection at incision site, soiling of the dressing. Documentation is also not maintained properly so that for

physician it was impossible to know how much fluid were drained in 24 hours. To overcome these challenges, we have an insight to increase the knowledge regarding care of patient with chest tube drainage among staff nurses to provide quality care.

STATEMENT OF THE PROBLEM:

"An exploratory study to assess the effectiveness of educational intervention programme on care of patients with intercostal drainage among nurses workingin selected hospitals of Indore in the year 2022-2023"

OBJECTIVES:

1. To assess the existing knowledge of nurses regarding intercostal drainage andcare of patients with intercostal drainage.
2. To assess the effectiveness of educational intervention programme onknowledge of nurses regarding the care of patients with intercostal drainage.
3. To find out the association between the knowledge of nurses and selecteddemographic variables.
4. To provide booklet on intercostal drainage and care of patients withintercostal drainage, to each unit.

HYPOTHESES:

The study is tested at the level of **p≤0.05**

H01 - There is no significant association between the knowledge level regarding the care of patients with intercostal drainage and selected demographic variable among nurses.

H1 - There is significant association between the knowledge level regarding the care of patients with intercostal drainage and selected demographic variable among nurses.

H02 - There is no significant difference between pre-test and post-testknowledge of nurses regarding care of patients with intercostal drainage.

H2 - There is significant difference between pre-test and post-testknowledge of nurses regarding care of patients with intercostal drainage.

ASSUMPTION:

1. The nurses will have inadequate knowledge regarding intercostal drainagesystem and care of patients with intercostal drainage.
2. The educational intervention programme will enhance the knowledge of nurseregarding intercostal drainage and care of patients with intercostal drainage.

THE SETTING

The setting of present study was Vishesh Jupiter Hospital , Indore

TOOL

Structured knowledge assessment questionnaire was used to collect data regarding the existing knowledge of nurses on care of patient with intercostal drainage and the effectiveness of structured educational programme. The tool consisted of two sections:

Section A: Social demographic variable

It deals with the structured interview scheduled to collect socio-demographic data which consists of 10 items for obtaining information about the selected factors such as age, gender, religion, education, work experience, monthly income, designation, specialized unit, duration of experience in specialized unit. **Section B: Questionnaire**

This section includes structured knowledge questionnaire to assess the knowledge on care of patients with intercostal drainage among nurses. The questionnaire consists of 30 questions related to intercostal drainage and care of patients with intercostal drainage, which has 4 options includes 1 correct answer and 3 wrong. The respondent was requested to place a tick against one single answer.

PROCEDURE FOR DATA COLLECTION

Written permission was obtained from the Administration authority and research ethical committee of Vishesh Jupiter Hospital , Indore. The investigators then collect data from 60 nurses working in Vishesh Jupiter Hospital, Indore. The purpose of the study was explained to the respondent. Informed consent was taken from the respondents prior to data collection. Confidentiality was assured and maintained. The structured knowledge questionnaire was used for data collection to assessing the existing knowledge of nurses on care of patients with intercostal drainage in pre-test. An informational booklet on "Intercostal drainage and care of patients with intercostal drainage" was administered. Re-assessment of knowledge regarding care of chest tube drainage among nurses after administration of informational booklet has been done through same structured knowledge questionnaires (post- test). The investigator terminated the data collection process by thanking respondent for the participation and co-operation.

MAJOR FINDINGS OF THE STUDY

In this study, investigators develop a strategy to assess the effectiveness of educational intervention programme on care of patients with intercostal drainage among nurses for which an informational booklet has been provided as educational intervention programme and structured knowledge questionnaire was utilized as tool.

The finding shows that there was a significant increase in the knowledge scores regarding care of chest tube drainage in post-test after administration of informational booklet, reveals the effectiveness of educational intervention programme in increasing the knowledge of nurses.

DISCUSSION

➢ Socio-demographic variables

- ✓ The study revealed that 55(91.6%) nurses belong to 20-30 years and 4(06.6%) nurses are in the age of 31-40 years and 1(01.6%) nurse in the age group of 36 and above.
- ✓ It is evident that in the sample there are 56(93.3%) female and 4(06.6%) male nurses participated.
- ✓ The majority 52 (86.6%) nurses were belonging to the Hindu religion and 8(13.3%) were Christian.
- ✓ According to education majority 23(48.3%) nurses were B.sc Nursing, 28(46.6%) were GNM nursing, 2(3.3%) of them are Post-basic nursing and 1(1.6%) were ANM nursing.
- ✓ The study revealed that 50(83.3%) nurses belong with 0-4 years of work experience and 7(11.6%) were in the 4-8 years and 1(01.6%) nurse was of 8-12 year of work experience and 2(03.3%) nurses were in the year of 12 and above.
- ✓ It is evident that in the sample there are 47(78.3%) having income between 10000-20000 rupees, 13(18.3%) were having 20000-30000 rupees of monthly income.
- ✓ Among 60 samples, 59(98.3%) were staff nurses and 1(1.6%) was in charge.
- ✓ According to specialized unit, 35 (58.3%) were ICU nurses, and 25(41.6%) of nurses were from the Wards.
- ✓ According to the year of experience in specialized unit, 57(95%) nurses have 0-5 years of experience, 2(3.3%) nurses have 5-10 years of experience and 1(1.6%) has 10 and above years' experience.

➢ Assessment pre-test and post-test knowledge

- ✓ The study revealed that the pre-test knowledge of 41(68.3%) nurses were average and 17(28.3%) were poor and 2(3.3%) nurses have good knowledge of intercoastal drainage and care of the patient with intercoastal drainage.
- ✓ Assessment of post-test knowledge revealed that the knowledge of regarding intercoastal drainage 44(73.3%) nurses were good and 15(25%) were average and 1(1.6%) nurse has poor knowledge of intercoastal drainage and care of thepatient with intercoastal drainage.

➢ Association between pre-test knowledge score and socio-demographic variables.

- ✓ There was no significant association between risk score and selected Socio demographic variables (Age, Gender, Religion Education, Monthly Income, Designation, Specialized unit) which reject hypothesis. There was significant association between the risk score and selected socio demographic variables (Work experience

and Year of Experience in a Specialized unit) of the nurses.

- ✓ Thus, there is significant association between risk score and selected socio demographic variables among nurses at the level $p \leq 05$ hypothesis for which H1 is accepted.

- ➢ **Difference between pre-test and post-test knowledge**

- ✓ The knowledge regarding intercoastal drainage in pre-test reveals 41(68.3%) nurses were average and 17(28.3%) were poor and 2(3.3%) nurses have good knowledge of intercoastal drainage and care of the patient with intercoastal drainage.
- ✓ The study revealed that the knowledge of nurses in post-test 44(73.3%) nurses were good and 15(25%) were average and 1(1.6%) nurse has poor knowledge of intercoastal drainage and care of the patient with intercoastal drainage.
- ✓ There is significant difference between pre-test and post-test knowledge of nurses regarding care of patients with intercostal drainage which suggests that the informational booklet was effective in increasing the knowledge of nurses on intercostal drainage and care of patients with intercostal drainage. Hence, research hypothesis H_2 is accepted.

CONCLUSION

The present study was to assess the effectiveness of educational intervention programme on care of patients with intercostal drainage. After a detailed analysis of the samples, the study leads to the following conclusions. The educational intervention programme, an informational booklet in present study is effective in increasing the knowledge of nurses on intercostal drainage and care of patients with intercostal drainage. There is significant association between the knowledge level regarding care of patients with intercostal drainage and selected demographic variables i.e., work experience and year of experience in specialized unit. Thus, the research hypotheses H_1 and H_2 are accepted and null hypothesis are rejected.