TO ASSESS THE KNOWLEDGE REGARDING TRACHEOSTOMY CARE AMONG THE STAFF NURSES WORKING AT SELECTED HOSPITAL, UTTARPRADESH

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ABSTRACT
The research study was conducted to assess the knowledge, regarding the tracheostomy care among the staff nurses. Further expansion of education programs like health awareness camps, continuing nursing education, can improve self-regulatory awareness of tracheostomy care among the staff nurses which may reduce the morbidity and mortality of patients die due to tracheostomy care among the staff nurses working at CIMS Hospital and MRC, Lucknow. OBJECTIVES OF THE STUDY: 1. To assess the knowledge regarding tracheostomy care among the staff nurses.2. To develop information booklet on tracheostomy care. METHODS: A non-experimental descriptive research design was adopted to carry out the present study non probability purposive sampling technique was used to select 50 staff nurses. Data was collected by means of structured knowledge of questionnaire to assess the knowledge of tracheostomy care. The main study was conducted in CIMS hospital Lucknow The analysis was done using descriptive and inferential statistics in terms of frequency, percentage, means, median, mode, standard deviation and range. RESULTS: Study revealed distribution of staff nurses with gender, age, education, work, experience, and source of information. Majority of the staff nurses were female 62%, and 38% were male, 52% staff nurses belonged to the age group between 20 -25 years and 56% staff nurses were B.Sc. (N). Majority of the staff nurses have 0-5 years of work experience that is (86%). More than 5 year is (12%), 24.99% of the staff nurses got information through continuing education, 20% through books, 16.2% through workshops and 20% through mass media and others.

KEYWORDS: Knowledge, tracheostomy care, nurses.
INTRODUCTION

Tracheostomy care is a major health issue in various parts of the world. The number of patients with tracheostomy is increasing in both developed and developing countries. Tracheostomy is a surgical procedure to create an opening in the neck at front of the windpipe (trachea). A surgical procedure which consists of making an incision on the anterior aspect of the neck and opening a direct airway through an incision in the trachea. The resulting stoma can serve independently as an airway or as a site for tracheostomy tube to be inserted. This tube allows a person to breathe without a use of his or her nose or mouth. Tracheostomy can also be stated as an opening into trachea through neck, with the tracheal nervosa into continuity of the skin, also the opening being created. Tracheostomy is performed by making an incision in the lower neck. It can be performed as an emergency elective procedure.

The types of tracheostomy includes: Emergency Tracheostomy in which laryngeal obstruction is acute and demanding an urgent relief. Elective tracheostomy in which the incision is given as prophylactic, therapeutic. Permanent Tracheostomy is required for the patients with bilateral abductor paralysis, laryngeal stenosis, laryngectomy, or laryngo pharyngectomy, lower tracheal slum and is being stitched to the skin. For the clients with tracheostomy, the nurse reinforces education provided by the physician or respiratory therapist. The clients understanding of the tracheostomy tube may be enhanced by looking at and touching a tube. The changes in the ability to speak and eat should also be explained. If it is expected that the tracheostoma will be permanent information about living a productive life with modifications in clothing can be provided. The nurse should monitor the vital signs and assess for the indications of shock haemorrhage or complications from the patient’s general condition or the surgical interventions.

Respiratory distress and tube obstruction: mucus plug is the most common cause of respiratory distress, this complications includes bleeding, a very small amount of bleeding (pink or red streaked mucus) often occurs as a result of routine suctioning, infection tracheitis in which there is infection due to inadequate humidification of the trachea, tracheal stenosis where in scar tissue accumulate at the site of tracheostomy tube, tracheoesophageal fistula; an abnormal connection between the trachea and the oesophagus, formation of inflammatory growth of tissue, and pressure necrosis; a sore skin and soft tissues around the tracheal site are the late complications of tracheostomy. Similarly early complications include bleeding, Pneumothorax, Pneumomediastinum, and subcutaneous emphysema. Other complications include; accidental decannulation, severe infection, damage to the windpipe, tracheomalacia and collapse or narrowing of the airway.

The reported complication rates in adults undergoing tracheostomy vary considerably but it is generally held that complications are more frequent after emergency tracheostomy for airway obstruction. Complications of tracheostomy includes: Intraoperative i.e. Bleeding, Damage to adjacent structures, False passage, Postprocedural i.e. Cuff leak, Tube occlusion, Tube dislodgement, Trachea-esophageal fistula, Tracheo-innominate fistula, Tracheal stenosis. The prevalence of tracheostomy was 10% in the long-term ventilated patients (defined as > 24 h), or 1.3% of all patients. Most tracheostomies were performed during the 2nd week of ventilation. An overall complication rate of 13 % was reported, bleeding and infections being at the top of the scale. Tracheostomy is one of the most frequently performed surgical procedures on critically ill patients required prolonged mechanical ventilation in the intensive care unit. It is performed in about 24% of all patients in intensive care units. Nurses are the care providers and play a central role in providing quality of care. They must be aware of modified and advanced technics and versions in medical terms. It is important for nurses working in the ICU set up regarding the knowledge of tracheostomy care as this will improve their professional skills and get to know about abreast of knowledge regarding tracheostomy and develop deep interest to study this significant, researchable and feasible problem.

STATEMENT OF THE PROBLEM

A study to assess the knowledge regarding tracheostomy care among the staff nurses working in selected Hospital

OBJECTIVE OF THE STUDY

To assess the knowledge of staff nurses regarding Tracheostomy care.

OPERATIONAL DEFINITIONS

1) Assess: In this study assess refers to examine knowledge of staff nurses regarding Tracheostomy care.

2) Knowledge: In this study knowledge refers as to appropriate response from the staff nurses about Tracheostomy care.

3) Tracheostomy Care: It is a care provided to the patient undergone tracheostomy with an aim of maintaining patent airway so as to receive oxygen humidity as the patient can be hemodynamically stable and thus can increase breathing workload.

4) Staff Nurses: Qualified or registered nursing personnel working at CIMS Hospital
ASSUMPTION
It is assumed that staff nurses have some knowledge regarding Tracheostomy care.

RESEARCH METHODOLOGY

RESEARCH APPROACH
Descriptive research was used to carry out the study.

RESEARCH DESIGN
A descriptive survey research design was used.

VARIABLES
The research variables are factors that can be manipulated and measured.

1. RESEARCH VARIABLES: Staff nurses working at CIMS Hospital.

2. DEMOGRAPHIC VARIABLES: Selected demographic variables such as Sex, Age, Education, Work experience and Source of information.

RESEARCH SETTING
The present study was conducted at CIMS Hospital, LUCKNOW.

POPULATION
A population in the present study comprises of staff nurses working in CIMS Hospital

SAMPLE
Sample is a portion of population that represents the entire population. The sample chosen for the present study were Staff nurses working in CIMS Hospital

SAMPLE SIZE
The sample size comprised of 50 staff nurses working at CIMS Hospital

SAMPLING TECHNIQUE
The non probability purposive sampling technique was used for the present study.

CRITERIA FOR SAMPLE SELECTION

INCLUSION CRITERIA:
Staff nurses working at CIMS HOSPITAL

EXCLUSION CRITERIA:
Staff nurses who are not willing to participate.
Staff nurses who are on leave on the day of data collection.

SAMPLE CHARACTERISTICS:
The data option to describe the sample characteristics included gender, age, educational status, work experiences and source of information.

PROCEDURE FOR DATA COLLECTION
The formal permission was obtained from the Medical Director of CIMS Hospital Data collection tools are the given instrument used by the researcher to observe or measure the key variables in the research problem. The investigator obtained permission from respective authority to conduct the study. Selection of subjects based on inclusion criteria. Self-introduction of the investigator and Permission from the staff nurses was obtained. The level of knowledge was assessed with the help of questionnaire before intervention. Data collected were tabulated and analyzed by using statistical and inferential tests.

DATA ANALYSIS
For the present study the data obtained were analyzed in respect to the objectives of the study by using descriptive statistics. The plan of data analysis was worked out with experts in the field of statistics and nursing. The plan of analysis was as follows:

a) Organization of data in the master sheet.
b) Tabulation of data in terms of frequencies, percentage, mean, median, mode and standard deviation was done

TOOLS AND TECHNIQUES
The structured questionnaire was prepared for assessing the knowledge.

DEVELOPMENT OF TOOLS
The structured questionnaire was the tracheostomy care among staff nurses working at cims Hospital. Various review of literature was carried out in preparing the tool and the necessary correction had been made by experts.

DESCRIPTION OF THE TOOL
PART I: It comprises of demographic variables such as gender, age, educational status, work experiences and source of information.
PART II: Knowledge questionnaires regarding tracheostomy care.
For 30 items on knowledge, a score of ‘1’ was awarded to the correct response, while a score of ‘0’ was awarded to the incorrect response.

**PLAN FOR DATA ANALYSIS**

The data obtained was analyzed in terms of the objectives of the study using descriptive statistics. The plan of data analysis was worked out with experts in the field of statistics and nursing. The plan of analysis was as follows:

a) Organization of data in the master sheet.
b) Tabulation of data in terms of frequencies, percentage, mean, median, mode and standard deviation and range to describe the data.
c) Classifying Knowledge score using mean and standard deviation as follows:
   - Mean + standard deviation = Good
   - (Mean + standard deviation) x (Mean - standard deviation) = Average
   - Mean - standard deviation = Poor

For 30 items on knowledge, a score of ‘1’ was awarded to the correct response, while a score of ‘0’ was awarded to the incorrect response.

**RESULTS**

Majority of the staff nurses were female (62%), and (38%) were male, 52% staff nurses belonged to the age group between 20 - 25 years and 56% staff nurses were B.Sc. (N). Majority of the staff nurses have 0-5 years of work experience that is (86%). More than 5 year is (12%), 24.99% of the staff nurses got information through continuing education, 20% through books, 16.2% through workshops and 20% through mass media and others.

Table 1 revealed distribution of staff nurses with gender, age, education, work, experience, and source of information. Majority of the staff nurses were female 62%, and 38% were male, 52% staff nurses belonged to the age group between 20 -25 years and 56% staff nurses were B.Sc. (N). Majority of the staff nurses have 0-5 years of work experience that is (86%). More than 5 year is (12%), 24.99% of the staff nurses got information through continuing education, 20% through books, 16.2% through workshops and 20% through mass media and others.

**DISCUSSION**

Tracheostomy Care is a major health issue in various parts of the world. The number of patients with tracheostomy is increasing in both developed and developing countries. Many times the patients die due to lack of knowledge of nurses about tracheostomy Care.

Thus the main aim of the study is to assess the knowledge, regarding the tracheostomy care among the Staff nurses.

In the connection with the above, descriptive study was undertaken with the aim purpose of assessing the level of knowledge regarding tracheostomy care among the staff nurses. To achieve the set of the study, 50 staff nurses were studied. Such was the selection that the maximum of staff nurses were distributed on different sample characteristics as follows.

Table 1 revealed distribution of staff nurses with gender, age, education, work, experience, and source of information. Majority of the staff nurses were female 62%, and 38% were male, 52% staff nurses belonged to the age group between 20 -25 years and 56% staff nurses were B.Sc. (N). Majority of the staff nurses have 0-5 years of work experience that is (86%). More than 5 year is (12%), 24.99% of the staff nurses got information through continuing education, 20% through books, 16.2% through workshops and 20% through mass media and others.

**KNOWLEDGE**

To achieve the objectives of this study, the staff nurses were assessed on the knowledge about tracheostomy care among the staff nurses.

Table 2 represents the distribution of knowledge. The knowledge was distributed with the mean of 13.8, mode of 14, median of 14 and standard deviation of 3.52 and the range is 14

Table 3 reveals that majority of the staff nurses 26(52%) had average knowledge and the remaining 16(32%) had good knowledge and 8(16%) had poor knowledge regarding tracheostomy care.
CONCLUSION
Based on the analysis of the findings the following interference was drawn. There was evident increase in the knowledge of scores in all the areas included in the study, after giving information about tracheostomy care. Thus it was proved that simple information booklet was effective teaching method for creating awareness regarding tracheostomy care among the staff nurses working at Selected Hospital Lucknow.

LIMITATIONS
1. The present study was limited to cims hospital
2. The present study was limited to only 50 staff nurses working in ICU'S.
3. No broad generalization could be made due to small size of the samples.

RECOMMENDATIONS
1. Similar study on large and wider sample for longer period of time would be more pertinent in making broad generalization.
2. A descriptive study can be conducted on knowledge regarding tracheostomy care.
   An experimental study can be undertaken using a control group for effective comparison of the result.

RESULTS
Majority of the staff nurses 26(52%) had average knowledge and the remaining 16(32%) had good knowledge and 8(16%) had poor knowledge regarding tracheostomy care.

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