



A Descriptive Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Practice of Nasogastric Tube Feeding to Adult Patient among I Year, BSc. Nursing students

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Abstract: *Aim and objectives:* To assess the knowledge on Nasogastric tube feeding among selected I Year BSc nursing students.

Methodology: Descriptive Research Design was adopted in order to assess the knowledge regarding specific procedure of Nasogastric tube insertion and feeding, safe techniques.

The dependent variable was individual knowledge on methods of inserting tube, Independent variable was administration of tube feeding.

The study was conducted for selected I Year B.Sc. nursing students at Ganga College of nursing in Coimbatore. The sample size consisted of 100 students (who fulfilled the inclusion and exclusion criteria).

I year B.Sc. Nursing students were included in the study. All other Nursing batch students are excluded from the study, selected by a convenient sampling technique.

Result : This study is aimed to assess the level of knowledge regarding Nasogastric tube feeding procedure and prevention of complication among selected I, year B.Sc. Nursing students .and also to teach the methods of confirming correct placement of the tube, and proper care to prevent the infection and aspiration while administering feed Among selected 100 BSc nursing I year students 40% of students were having moderate knowledge (51-74%), 10 % of students were having inadequate knowledge ($\leq 50\%$), 50% of students were having adequate knowledge regarding Nasogastric tube feeding

Conclusion: The study was aimed to enhance their knowledge on Nasogastric tube feeding, and also make them to gain knowledge about procedures, techniques, methods to find out the proper placement of tube, position, different types and size ,color of NG tube, immediate management, Do's and Dont's, importance of personal productive equipment, This study has important implications, to prevent the risk of infection and complication, and to enhance the selected nursing students knowledge in administration of feeding through NG tube, maintenance of intake and out put, prevention of infection and complication.

Key Words: Nasogastric tube insertion, feeding procedure, technique of confirming placement of position, prevention of infection and complication.

1. INTRODUCTION:

The nasogastric tube inserts a thin plastic or nylon catheter/tube through the nose. It reaches the stomach to feed patients who cannot eat or swallow. The use of a nasogastric tube to deliver food, provide nutrition, and remove gastric content. The placement of an NG tube, called nasogastric intubation, can be uncomfortable but is usually not painful. When used to deliver liquid nutrition, the procedure is often referred to as "tube feeding." People are unable to tolerate solid foods



by mouth, so an NG tube might be used to give nutrients via liquid nutrition. It can also be used to give medications in some situations. The two primary purposes of the nasogastric tube are short-term tube feeding for medication administration and gastric suctioning. Nasogastric tube feeding ensures proper nutrition and helps to maintain health. Nasogastric tube feeding is widely preferred for parenteral nutrition in adults to reach the person who ensures (1)(2)

Nasogastric feeding is commonly encountered in older patients above 65 years and is also used for dysphagia and malnutrition patients (4).

Reasons for using an NG tube include administering nutrients and medication, removing liquids or air from the stomach, administering contrast to the stomach for X-rays, and protecting the bowel after surgery. Before feeding, we have to ensure the correct placement of the tube.

Inserting the tube of length measuring from the tip of the nose to the earlobe and the xiphoid process will ensure that the distal end reaches the stomach. (3)(5)

Patients and their caregivers are important team players in the effective management of nasogastric tube feeding. The practitioner should encourage patients and their caregivers to be active participants in their care and develop an effective plan of care that is consistent with the patient's goals. The recommendations focus on implementation of nasogastric tube feeding monitoring and management of nasogastric tube feeding management of complications. (7)(8)

Enteral feeding is indicated for patients with a functional gastrointestinal tract, whereas parenteral feeding is more commonly used for patients with a nonfunctional gastrointestinal tract. In general, enteral nutrition is preferred to parenteral nutrition as it is more physiological, simpler, cheaper, and less complicated (14).

1.1 STATEMENT OF THE PROBLEM

“A Descriptive Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge and Practice of Nasogastric Tube Feeding to Adult Patient among I Year, BSc. Nursing students”

1.2 OBJECTIVES OF THE STUDY

- To assess the knowledge and practice regarding nasogastric tube feeding among nursing students
- To evaluate the effectiveness of the structured teaching program regarding nasogastric tube feeding among nursing students
- To associate the selected demographic variables with different mean levels of knowledge scores regarding procedure and prevention of complications among first-year B.Sc. nursing students at selected college in Coimbatore.

2. MATERIALS AND METHODS:

Descriptive Research design was adopted in order to assess the knowledge regarding Nasogastric tube feeding procedure and prevention of infection and complication among selected I, year B.Sc. Nursing students .

The sample size consisted of 100 I year B.Sc. Nursing students present studying at Ganga College of nursing, in Coimbatore.

(Who fulfil the inclusion and exclusion criteria) selected by convenient sampling technique.

The tool consists of two parts

A) Data collection tool

B) Awareness Promotion / Safe technique / live demonstration

A) The data collection tool was self- structured Questionnaire, consists of knowledge assisted questions, about Nasogastric tube insertion methods, indication, and complication.

Scoring key: About knowledge on Nasogastric tube insertion methods.

Correct answer	1
Wrong answer	0



Scoring interpretation:

Scores	Level of Knowledge
≤50%	Inadequate Knowledge
51-74%	Moderately adequate knowledge
75-100%	Adequate knowledge

B) Awareness Promotion / Safe technique by slide presentation / video showed 15 minutes/ live demonstration

- Safe inserting techniques
- Causes of infection
- Reason for aspiration
- Importance of following principles
- Techniques to find out the proper placement of tube position
- Method of administer the liquid food through Ng tube

2.1. Ethical Consideration:

The formal administrative approval was obtained from the Ganga College of Nursing Ethical committee and approval from dean cum principal of Ganga College of nursing, The researcher has followed the fundamental ethical principle like the right to freedom from the harm and discomfort, respect to human dignity. The researcher gave freedom to all the participants to decide voluntarily whether to participate in the study or withdraw from the study and rights to ask questions at any-time during the study period. The investigator has maintained the study participant privacy throughout the study.

2.2. Statistical Analysis

Demographic variables were described by using descriptive statistics one way ANOVA / Unpaired test was used to analyse the knowledge regarding safe techniques on NG tube feeding.

3. Result:

This study is aimed to assess the level of knowledge regarding Nasogastric tube feeding procedure and prevention of infection and complication among selected I, year B.Sc. Nursing students .and also to teach the methods of confirming correct placement of the tube, and proper care to prevent the infection and aspiration while administering feed Among selected 100 BSc nursing I year students 40% of students were having moderate knowledge (51-74%), 10 % of students were having inadequate knowledge (≤50%),50% of students were having adequate knowledge regarding Nasogastric tube feeding .

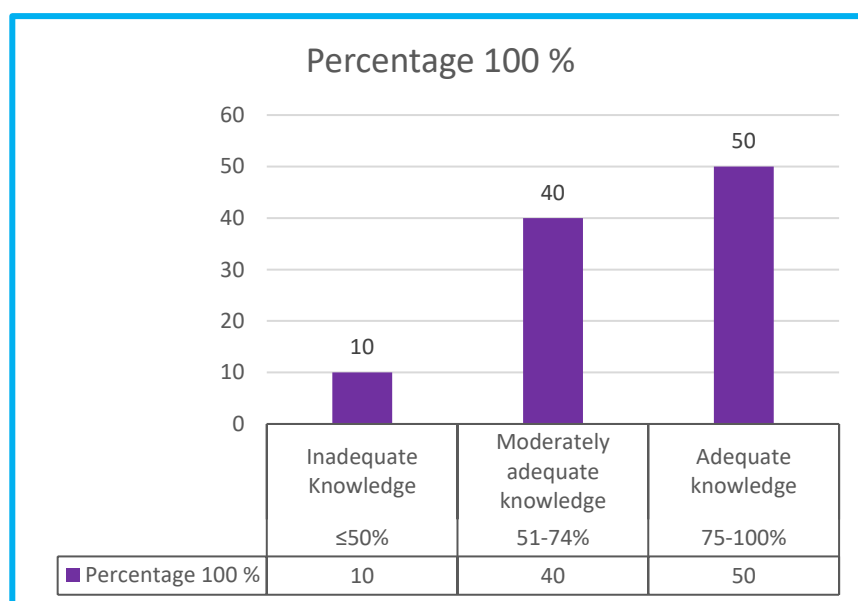


Figure: 1 Percentage distribution of knowledge on Nasogastric tube feeding



4. DISCUSSION :

The study finding showed that an intervention administered for the same day states that there will be effective difference on their knowledge regarding Nasogastric tube feeding.

5. LIMITATIONS : Difficult to get sample at same day/ time.

6. CONCLUSION:

The study was aimed to enhance their knowledge on Nasogastric tube feeding, and also make them to gain knowledge about procedures, techniques, methods to find out the proper placement of tube position, different types and size, color of NG tube, immediate management, Do's and Don't's, importance of personal productive equipment. This study has important implications, to prevent the risk of infection and complication, and to enhance the selected nursing students knowledge in administration of feeding through NG tube, maintenance of intake and output, prevention of infection and complication.

AUTHOR CONTRIBUTION STATEMENT

Conceived and designed this study let the overall research proceed and provided critical revision to the manuscript, responsible for methodology and writing of the result and discussion, selection of the study conducted literature review, contributed to the survey design, Dean Cum Principal Dr. Esther Rakel assisted in final editing and ensured that relevant ethical considerations were addressed throughout this study.

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