

A Study to Identify the Knowledge of Tracheostomy Care Among B.Sc. Nursing 3rd Year Students in Selected College of Nursing, Kolhapur in a View to Develop Nursing Care Protocol

Manjunath Beth

Ph.D. Scholar, JJTU, Rajasthan.

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Abstract: Background: Tracheostomy care and management are more and more necessary in both the intensive care setting and the general ward. It is, therefore, ever more important that trained nurses are equipped with the appropriate knowledge, skills, and support to meet the unique needs of each patient safely and competently. **Aims:** (i) To identify the knowledge of tracheostomy care among B.Sc. nursing 3rd year students. (ii) To prepare the nursing care protocol on tracheostomy care. **Methods:** The Non-probability purposive sampling technique was used for the study. The samples for the present study consisted of 60 B.Sc. nursing 3rd year students at selected college of Nursing, Kolhapur. **Results:** It shows the distribution of demographic variables of 3rd year B.Sc. nursing students. With regards to their age, the majority 38 (63.33%) of the 3rd year B.Sc. nursing students were 20-21 years, 18 (30%) were 22-23 years, 04 (6.67%) were 24 and above years. The majority of sources of information of students is 01 (0%) from Newspaper, 02 (13.34) from the Internet, 03 (25%) from Book. And other students are 04 (66.66) from Newspaper, Internet, and Book. The level of knowledge scores among 3rd year B.Sc. nursing students. The samples were having good knowledge 5 (8.33%) and 50 (83.33%) of them were having average knowledge, and 5 (8.33%) were having poor knowledge.

Keywords: Tracheostomy care, Nursing Students, Nursing College, Nursing Protocol.

Introduction

Health is the diagnosis, treatment, and prevention of disease, illness, injury, and other physical and mental impairments in humans. Health care is delivered by practitioners in medicine, dentistry, nursing, pharmacy, and allied health. Nurses care for patients continuously, 24 hours a day. They help patients to do what they would do for themselves if they could. Nurses take care of their patients, making sure that they can breathe properly, seeing that they get enough fluids and enough nourishment, helping them rest and sleep, making sure that they are comfortable, taking care of their need to eliminate wastes from the body, and helping them to avoid the harmful consequences of being immobile, like stiff joints and pressure sores. The nurse often makes independent decisions about the care the patient needs based on what the nurse knows about that person and the problems that may occur.¹ A tracheostomy is the formation of an opening into the trachea usually between the second and third rings of cartilage. Tracheostomy is indicated to facilitate weaning from mechanical ventilation by decreasing anatomical dead space, prevention/treatment of retained tracheobronchial secretions, chronic upper airway obstruction, and bypass acute upper airway obstruction.^{2,3} A tracheostomy is a surgically created opening in the trachea. A tracheostomy tube is placed in the incision to secure an airway and to prevent it from closing. Tracheostomy care is generally done every eight hours and involves cleaning around the incision, as well as replacing the inner cannula of the tracheostomy tube. After the site heals, the entire tracheostomy tube is replaced once or twice per week, depending on the physician's order.^{2,3}

The goals of tracheostomy care are to maintain the patency of the airway, prevent the breakdown of the skin surrounding the site, and prevent infection. Sterile technique should be used during the procedure. The tracheostomy consists of two parts. Inner cannula-The smaller tube that fits inside the tracheostomy tube, which can be removed quickly if it becomes obstructed. This is often used for patients who have copious secretions. Tracheostomy tube-An indwelling tube used to maintain patency of the tracheostomy. It can be made of metal (for long term use) or disposable plastic. The tube can be cuffed (a balloon is inflated to keep the tube in place) or uncuffed (air is allowed to flow freely around the tube). It can also be fenestrated, which allows the patient to speak.^{4,5}

Extra precautions should be taken when performing site care during the first few days after the tracheostomy is surgically created. The site is prone to bleeding and is sensitive to the movement of the tracheostomy tube. It is recommended that another health care professional securely hold the tube while site care is performed. Tracheostomy care should not be done while the patient is restless or agitated since this increases the chance that the tube may be pulled out and the airway lost.^{6,7} The nurse has the primary role in tracheostomy care, as he or she is responsible for doing it in the acute care setting. The respiratory therapist may assist the nurse during the procedure and respiratory assessment. Some patients may be sent home with a tracheostomy. In this case, the nurse and respiratory therapist are both responsible for teaching the patient and the family how to perform site care at home.⁸ Tracheostomy care and management are more and more necessary in both the intensive care setting and the general ward. It is, therefore, ever more important that trained nurses are equipped with the appropriate skills, knowledge, and support to meet the unique needs of each patient safely and competently.^{9,10} The nursing model or framework used should be creative, responsive, holistic, and individualized, based on sound knowledge under local policies. A recent tracheostomy nursing care audit indicated a need for further education to increase overall competency.

Methods

Given the nature of the problem under study and accomplish the objective of the study descriptive approach was found to appropriate to describe the knowledge of B.Sc. 3rd year nursing students about tracheostomy care. In the present study 60 samples were chosen from Dr. D.Y. Patil College of Nursing, Kadamwadi, Kolhapur, and Savitribai Phule College of Nursing Kolhapur. The tool consists of a structured knowledge questionnaire items the researcher himself collected data from the subjects on 24/03/2018 to 26/03/2018. This took 50 minutes. The data collected were recorded systematically on each subject and were organized in a way that facilitates computer entry and data analysis the collected data analyzed using descriptive statistics.

Results

Table 1. Findings related to Demographic variables B.Sc. (N) 3rd year nursing students (n=60)

S. No.	Demographic Variables	Frequency	Percentage (%)
1	Age in Years		
	a) 20-21	38	63.33
	b) 22-23	18	30
	c) 24 & Above	04	6.67
2	Sources of Information		
	a) Newspaper	00	00.0
	b) Internet	08	13.34
	c) Book	15	25.0
	d) All the above	37	61.66
3	Level of Knowledge		
	a) Very Good (34-44)	00	00.0
	b) Good (23-33)	05	8.33
	c) Average (12-22)	50	83.34
	d) Poor (1-11)	05	8.33

Table 1 shows the distribution of demographic variables of 3rd year B.Sc. nursing students. With regards to their age, the majority 38 (63.33%) of the 3rd year B.Sc. nursing students were 20-21 years, 18 (30%) were 22-23 years, 04 (6.67%) were 24 and above years.

Table 1 shows the majority of sources of information of students is 01 (0%) from Newspaper, 02 (13.34) from the Internet, 03 (25%) from Book. And other students are 37 (61.66) from Newspaper, Internet, and Book.

Table 1 shows the level of knowledge scores among B.Sc. 3rd year nursing students. The samples were having good knowledge 5 (8.33%) and 50 (83.33%) of them were having average knowledge, and 5 (8.33%) were having poor knowledge.

Conclusion

The findings revealed that, the samples were having good knowledge 5 (8.33%) and 50 (83.33%) of them were having average knowledge, and 5 (8.33%) were having poor knowledge. Based on findings, the investigator concluded that 3rd year B.Sc. nursing students have poor, average and good knowledge about tracheostomy care. Hence it is very important for providing educational information about tracheostomy care. Hence, it is necessary to improve the knowledge of 3rd year B.Sc. nursing students who have an average score.

Conflicts of interest

There are no conflicts of interest.

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