

# International Journal of Midwifery and Nursing Practice

E-ISSN: 2663-0435 P-ISSN: 2663-0427 www.nursingpractice.net IJMNP 2020; 3(2): 01-04 Received: 04-05-2020 Accepted: 06-06-2020

#### Privadarsini A

Department of Child Health Nursing, Saveetha College of Nursing, SIMATS, Thandalam, Chennai, Tamil Nadu, India.

#### Velavutham P

Department of Child Health Nursing, Saveetha College of Nursing, SIMATS, Thandalam, Chennai, Tamil Nadu, India.

## A Study to assess the prevalence and complication nasogastric tube feeding among NG tube patient admitted in Saveetha Medical College and Hospital, Thandalam

## Priyadarsini A and Velayutham P

#### Abstract

The use of nasogatric tubes (NGTs) is ubiquitous, and clinicians often take their placement, function, and maintenance for granted. NGTs are used for gastrointestinal decompression, enteral feeding, medication administration, naso-biliary drainage, and specialized indications such as upper gastrointestinal bleeding. So the present study aims to assess the complication, of nasogastric tube patient associated with NG feeding in Saveetha medical college and Hospital. A quantative approach with non-experimental research design was adopted to conduct the study among 50 nasogastric tube patients who were selected by Non- probability purposive sampling technique. Semi-structured interview method was used to collect the demographic data and also using a semi-structured questionnaire to assess the complication of nasogastric tube feeding associated with NG feeding in Saveetha medical college and Hospital. The results of the study shows that among 50 samples proves that 22(44%) had mild complication, 18(36%) had moderately complication and 10(20%) had severe complication regarding nasogastric tube feeding associated with nasogastric tube feeding and that the mean score of complication is 1-5 had mild complication, 6-10 had moderately complication, 11-15 had severe complication.

Keywords: nasogastric tube feeding, nasogastric tube, complication.

## Introduction

Nasogastric tube: A cylinder that is gone through the nose and down through the nasopharynx and throat into the stomach. Condensed as NG tube. It is an adaptable cylinder made of elastic or plastic, and it has bidirectional potential. It very well may be utilized to eliminate the substance of the stomach, including air, to decompress the stomach, or to eliminate little strong items and liquid, for example, poison, from the stomach. A NG cylinder can likewise be utilized to place substances into the stomach, thus it might be utilized to put supplements straightforwardly into the stomach when a patient can't take food or drink by mouth. (World Health Organization).

The presence of inconveniences was resolved through day by day clinical survey what's more, evaluation of patients' liquid parity diagrams. Gastroparesis was resolved by the presence of suctioned stomach substance in the wake of taking care of. Obstruction was characterized as the necessity of at any rate one purgative to help with entrail opening, while the runs was characterized as the entry of free stools more than two times every day. The presence of electrolyte anomalies in the wake of taking care of was resolved through customary survey of regularly mentioned blood tests. Yearning pneumonia was determined clinically to have the presence of fever, dyspnea, or purulent sputum and transcendent right-sided changes on the chest radiograph. The essential result of inpatient mortality was resolved through direct perception by the scientist who was based on the ward all through the investigation time frame, just as by confirmation through clinic electronic affirmations records. Length of remain was resolved through the ward confirmations book and checked through the electronic confirmations records.

'Grains over veins the intestinal plot can impact the result of criticallyill patients w1x. It is the biggest lymphoid organ in the body. Enteral taking care of builds blood stream to the gut and keeps up mucosal respectability, safeguards the enterocyte gut-blood guard boundary, lessens movement of microbes and improves its function as a resistant organ. Invulnerable improving weight control plans containing glutamine seem to lessen the expansion in mucosal porousness and furthermore have calming impacts. Enteral sustenance likewise

Corresponding Author:
Priyadarsini A
Department of Child Health
Nursing, Saveetha College of
Nursing, SIMATS,
Thandalam, Chennai, Tamil
Nadu, India.

forestalls decay of the intestinal villi and improves substrate use. These elements make enteral taking care of a fundamental segment in recuperation from ailment, and has priority over parenteral sustenance. The nasogastric tube has frequently been either the subject of court fights characterizing the moral right of a patient to bite the dust w2x without this 'life-sparing or dragging out' tube or as an instrument featuring clinical blunders w3x. The honest looking nasogastric taking care of cylinder can be a wellspring of interest when a sudden entanglement emerges. There is a component of 'visual deficiency' to the typical addition method. We present the proof base for boosting its wellbeing.

Nasogastric tube taking care of is shown when momentary healthful help is required. As the nasogastric course impedance insignificantly with oral capacity, it very well may be utilized to enhance oral admission. The cylinder utilized ought to be restricted in width and adaptable. Cylinders that have a wide distance across are ineffectively endured as they are un agreeable, can cause pressure rot in the nose and oropharynx and may empower sphincter ineptitude, consequently expanding gastric reflux and goal. The medical caretaker may need to perform nasogastric tube for some cases, for example, (oral malignancy, stroke and other gastrointestinal malady). Gastric intubation's is done to give nourishment, medicine, or both to perform gastric decompression. Case of various kind of gastric intubations include: - nasogastric tube (go through the nose into stomach by means of throat), or gastric cylinder (go through the mouth into stomach) and nasoenteric intubation (tube go through the nose throat and stomach to the small digestive system). The nasal course is the favored course for passing a cylinder when the customer nose is unblemished and liberated from injury.

## **Methods and Materials**

Quantitative approach was adopted in this study and research design Non experimental observational study was used to assess the complications of Nasogastric tube feeding among nasogastric tube patient. 50 samples were selected by using a purposive sampling technique. The sample size of the study was 50 patients in Intensive Care Unit and surgical ward with Naso Gastric tube feeding. Non-probability, convenient sampling technique was used to select patients with NG tube feeding. Inclusive Criteria for Clients within the age group of all years, Conscious patients, Both male and female clients with nasogastric tube feeding. Exclusive Criteria for Clients who arecritically ill. Unconscious patients. Clients who are not willing to participate. The data collection period was done with prior permission from the Saveetha Medical College and Hospital and ethical clearance was obtained from the institution. The purpose of the study was explained to the samples and written informed consent was obtained from them.

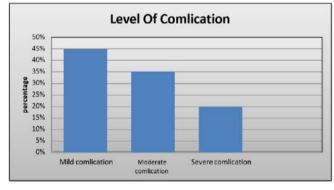
The demographic data were collected using a Semistructured interview questionnaire, and Clients who satisfy the inclusion criteria are asked to fill the questionnaire. It includes section b, Pearson's correlation coefficient was used to assess the level of complication regarding nasogastric tube feeding amongnsamples. Chi square was used to association of level of complication regarding nasogastric tube patient associated with NG feedin among samples with their selected demographic variables.

#### Results and Discussion

Section A: Results revealed that frequency and distribution of demographic variables among nasogastric tube patient saveetha medical college and hospital. Out of 50 samples regarding age 10(20%) of respondents are in the group of below 20 years, 12(24%) of respondents are in the group of 21-40 years, 13(26%) of respondents are in the group of 41-60 years, 15(30%) of respondents are in the group of above 60 years. According to the sex, 27(54%) of respondents are male and 23(46%) of respondents are female. According to the Religion, 22(44%) of samples are Hindu, 16(32%) of samples are Christian, 12(24%) of samples are Muslim. According to the residential area of samples, 38(76%) of respondents are from urban area and 12(22%) of respondents from rural area. According to the marital status, 33(66%) of respondents are married, 13(26%) of respondents are unmarried and 4(8%) of respondents are widow. According to the types of family, 32(64%) of samples are belongs to nuclear family, 18(36%) of samples belongs joint family. According to the Household ownership, 28(56%) of samples are having own house, 22(44%) of samples are having rented house.

**Section B:** Table 1: Frequency and percentage distribution of level of complication among nasogastric patient in saveetha medical college and hospital.

Out of 50 samples, 22(44%) members had mild complication, 18(36%) members had Moderate complication, 10(20%) members had severe complication for naso gastric tube feeding.



**Fig:** Bar diagram showing level of comlication among nasogastric patient during nasogastric feeding in saveetha medical college and hospital.

**Table 1:** Distribution of mean and standard deviation of level of comlication among nasogastric patient in saveetha medical college and hospital.

S.No	Level of Complication	Mean	Standar Deviation	Mean Percentage
1	Mild complication	2.95	1.33	13.43
2	Moderate complication	7.78	1.43	43.17
3	Severe complication	12.8	1.54	128

**Table 2:** Distribution of mean, standard deviation and p value of level of naso gastric tube feeding complication among nasogastric patient in saveetha medical college and hospital.

Level of Complication	Mean	Standard Deviation		
Statistical value	6.66	4.0386		

 Table 3: Association between the level of nasogastric tube feeding comlication with selected socio demographic variables.

S.No	Demographic variable	Mild Complication		Moderate comlication		Severe comlication		Chi square values
		F	%	F	%	f	%	
1	Age Below 20 years 21-40 years	2 8	4% 16%	3 6	6% 12%	1 2	2% 4%	X2=4.7234 Df=6 P=0.57974
	41-60 years	9	18%	7	14%	3	6%	NS
	Above 60 years	3	6%	2	4%	4	8%	
2	Sex Male	12	24%	8	16%	7	14%	X2=1.69488 Df=2 P=0.4285
	Female	10	20%	10	20%	3	6%	NS
3	Religion Hindu	11	22%	10	20%	7	14%	X2=2.1032 Df=4 P=0.71679
	Christian	9	18%	5	10%	2	4%	NS
	Muslim	2	4%	3	6%	1	2%	
4	Residential area Urban	14	28%	11	22%	7	14%	X2=0.2227 Df=2 P=0.8946
	Rural	8	16%	7	14%	3	6%	NS*
5	Married status Married	6	12%	12	24%	5	10%	X2=13.5335 Df=4
	Unmarried	15	30%	4	8%	2	4%	P=0.008943
	Widow	1	2%	2	4%	3	6%	S*
6	Type of family Nuclear family	20	40%	14	28%	9	18%	X2=1.5839 Df=2 P=0.45295
	Joint family	2	4%	4	8%	1	2%	NS
7	Householdownership Own house	18	36%	16	32%	6	12%	X2=3.4343 Df=2 P=0.17957
	Rented house	4	8%	2	4%	4	8%	NS

\*p=0.008943, S=significant, N.S= non significant

Table 3: Shows that marital status of demographic variable shows statistically significant association with the level of nasogatric tube comlication for nasogastric feeding at p<0.008943 and the other demographic variables had not shown statistically significant association with level of nasogastric tube feeding complication.

#### Conclusion

This study proves that Assessment of complication, nasogastric tube patient among NG patient.

#### Acknowledgement

We would like to extend our gratitude to the authorities of Saveetha College of Nursing and Saveetha Medical College and Hosital.

### **Authour's Contribution**

All the authors actively participated in the work of the study. All authors read and approved the final manuscript.

## **Conflicts of Interest**

The authors declare no conflicts of interest.

#### References

- 1. Metheny NA. Preventing respiratory complications of tube feedings: evidence-based practice. Am J Crit Care 2006;15(4):360-9.
- 2. Ni M, Priest O, Phillips LD *et al*. Risks of using bedside tests to verify nasogastric tube position in adult patients. EMJ Gastroenterol 2014;3:49-56.
- 3. American Association of Critical-Care Nurses. AACN Practice Alert: Initial and ongoing verification of feeding tube placement in adults. Crit Care Nurse 2016;36(2):e8-e13.
- 4. Giantsou E, Gunning KJ. Blindly inserted nasogastric

- feeding tubes and thoracic complications in intensive care. Health 2010;2(10):1135-41.
- 5. Ozer S, Benumof JL. Oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus. Anesthesiology 1999;91(1):137-43.
- 6. Illias AM, Hui YL, Lin CC *et al.* A comparison of nasogastric tube insertion techniques without using other instruments in anesthetized and intubated patients. Ann Saudi Med 2013;33(5):476-81.
- 7. Flager N, Ball A. Easier nasogastric tube insertion. Anaesthesia 2004;59(2):197.
- 8. Bankhead R, Boullata J, Brantley S, Corkins M, Guenter P, Krenitsky J *et al.* and the A.S.P.E.N. Board of Directors. (2009). A.S.P.E.N. Enteral Nutrition Practice Recommendations. Journal of Parenteral and Enteral Nutrition Online. First published on January 27, 2009 as doi 10.1177/0148607108330314. [ASPEN, 2009].
- 9. Metheny NA. Minimizing respiratory complications of nasoenteric tube feedings: State of the science. Heart & Lung, 1993;22(3):213-223.
- 10. Metheny NA, Stewart BJ. Testing feeding tube placement during continuous tube feedings. Applied Nursing Research 2002;15(4):254-258.
- 11. Metheny NA, Schallom M, Edwards S. Effect of Gastrointestinal motility and feeding tube site on aspiration risk in critically ill patients: A review. Heart & Lung: The Journal of Acute & Critical Care, 2004;33(3):131-145.
- American Association of Critical-Care Nurses. AACN Practice Alert: Initial and ongoing verification of feeding tube placement in adults. Crit Care Nurse 2016;36(2):e8e13
- 13. Giantsou E, Gunning KJ. Blindly inserted nasogastric feeding tubes and thoracic complications in intensive

- care. Health 2010;2(10):1135-41.
- 14. Ozer S, Benumof JL. Oro- and nasogastric tube passage in intubated patients: fiberoptic description of where they go at the laryngeal level and how to make them enter the esophagus. Anesthesiology 1999;91(1):137-43.