

EXPLORING THE LIVED EXPERIENCES OF PATIENTS WITH NASO JEJUNAL TUBE ADMITTED AT PRIVATE TERTIARY CARE HOSPITAL, KHYBER PAKHTUNKHWA

Fahad Ur Rehman¹, Bakhtyar Ali Shah², Hassan Raza³, Muhammad Anwar^{*4}, Sumaira Bibi⁵

^{1, *4,5}Department of Nursing District Headquarter Hospital Timergara Dir lowers, Pakistan

²Institute of Nursing Sciences Khyber Medical University, Peshawar, Pakistan

³Nursing Officer Department of Nursing District Headquarter Hospital Parachinar Kurram, Pakistan

^{*4}m.anwar.ma528@gmail.com

Corresponding Author: *

Muhammad Anwar

DOI: <https://doi.org/10.5281/zenodo.17745222>

Received
08 October 2025

Accepted
16 November 2025

Published
28 November 2025

ABSTRACT

Introduction:

A nasojejunal tube is a small tube that is inserted through the nose and into the small intestine to feed people who cannot consume enough food to meet their nutritional needs. Although nasojejunal tube benefits to the patients but it is also associated with complications and problems.

Objective:

The aim of the study was to explore the experiences of patients with nasojejunaltube.

Methodology:

This was a Phenomenological qualitative study carried out in ShaukatKhanum Memorial Cancer Hospital and Research Centers (SKMCH&RC), Peshawar KP. Data was collected from overall 15 participants following data saturation. Those patients whose age is equal to or more than 18 year old and less than 70 year and feeding through Naso Jejunal Tube were included in the study. Similarly, those patients who are unable to vocalize and unable to give written informed consent were excluded from the study. The data was collected after the approval of Graduate Study Committee, Academic Studies & Research Board and Ethical Review. Data collection permission was also granted from the hospital and consents were granted from all the participants. Data was analyzed using thematic analysis.

Results:

Fear, nasojejunal tube associated problems, activity intolerance and psychological consequences were four themes generated in the study.

Conclusion: This study found that NJ tube patients have varied experiences. Patients feared NJ tube occlusion, displacement, infection, and worst feeling. Patients also reported anxiety, confusion, insomnia, and irritability. NJ tube patients complained nasal irritation, bloody vomiting, belly discomfort, diarrhea, and trouble in everyday life.

Keywords: Naso-jejunal tube, Experiences, Enteral Tube, Gastric Tube

INTRODUCTION

In recent years, there has been a statistically significant increase in the number of people around the world suffering from dysphagia. People with neurological disorders and various cancers are among those who are unable to eat orally or cannot meet their nutritional needs while recovering from their illness (1,2). These patients with dysphagia are frequently treated with home enteral tube feeding, a life-sustaining therapy (3). The number of persons getting enteral tube feeding has increased substantially in recent years due to a shift in care delivery from acute to community care settings during the past few decades (4). According to the literature, nasogastric tubes (NGTs), Naso-jejunal tube" (NJ tube) and percutaneous endoscopic gastrostomy (PEG) procedures are frequently used to provide nutritional support (5).

A narrow, soft tube called a "Naso-jejunal tube" (NJ tube) runs from the nose through the stomach and ends in the jejunum, a portion of the small intestine (6). Naso-jejunal is indicated in a variety of situations. The main indication is when gastric feeding is regarded to be an unsatisfactory method of nourishment, indications for use includes delayed stomach emptying, such as gastroparesis, changed anatomy, chronic vomiting, esophageal atresia, Pancreatitis, Pancreatic Cancer, malignancy, as well as dysphagia caused by neuromuscular disorders or trauma (7-9).

In patients with obstructing tumors of the distal esophagus in 65 patients (32.3%) and in patients with gastric outlet obstruction in 72 patients (35.8%), the NJ tube was used to establish enteral feeding (10). Moreover, NJ tube feeding is associated with a variety of complications. Among these complications the most common are postoperative pancreatic fistula (12%), delayed gastric emptying (34%), postoperative hemorrhage (14%) and wound infection (16%) (11). Some of the other complications of NJ tube are reinsertion (26.9%), unintentional dislodgement (15%), and blockage (10.0%) (10).

Participants talked about how enteral feeding tubes and NJ tube feeding impose limitations on regular activities. Despite these limitations, participants understood the relevance of the enteral feeding tube, particularly its function in

ensuring their survival and the necessity of their participation in decision-making. Participants discussed coping strategies for overcoming the challenges of enteral feeding (12). According to the findings of a number of studies, patients are more likely to experience symptoms of burden such as feeling tired and unwell, as well as having physical or psychological issues like anxiety and depression (13).

The perspectives of patients who have undergone naso jejunal feeding were analyzed via the lens of a qualitative research project. Negative experience, new role: adapting to lifestyle (participating in decision-making, being responsible for everything, adjusting own life to naso-jejunal feeding), perceived benefit of caregiving (personal growth, development of positive attitudes and achievements), and expectations were the four main themes that emerged from the research (expectations from continuity health system services, expectations from social support) (14).

The basic purpose of the study is to explore the lived experiences of patients NJ tube. Multiple qualitative studies have examined solely the use of percutaneous endoscopic gastrostomy (PEG), but experiences of patients who are treated with Naso jejunal Tube are neglected by the researchers. This study will help us by identifying the coping techniques for dealing with the challenges of feeding and surviving of the Naso jejunal tube patients.

Methodology:

A phenomenological qualitative study carried out. Data was collected in Shaukat Khanum Memorial Cancer Hospital and Research Centers (SKMCH&RC), Peshawar KP. The study was completed in a limited period of six months. Sample size for this study was based on achieving data saturation point. Therefore, a sample of 15 was taken.

Those patients whose age was equal to or more than 18 year old and less than 70 year and feeding through Naso Jejunal Tube were included in the study. The data were collected after the approval of Graduate Study Committee (GSC), Academic Studies & Research Board (AS&RB) and Ethical Review (ERB). A written informed consent was

obtained from the participants. The data were collected via following structured study guide

through interviews. Thematic analysis was used to analyze the data.

Results:

Socio-demographic profile of the participants was assessed. The majority of the participants were from the age group of 20 to 30 years followed by less than 20, 31 to 40 and more than 40 years

(20% each). Similarly, the majority (73%) of the participants was male and 33.3% of the participants were educated to matric level. Most (73.3%) of the participants were belonging to joint family (Table 1).

Table 1: Socio-Demographic profile of the participants, n=15

Items	Frequency	Percentages
Age of the participants		
Less than 20 Years	3	20
20 to 30 Years	6	40
31 to 40 Years	3	20
More than 40 Years	3	20
Gender of the participants		
Male	11	73.3
Female	4	26.6
Education Status of the Participants		
Illiterate	2	13.3
Primary	3	20
Matric	5	33.3
Secondary	3	20
Graduate and Above	2	13.3
Family Type of the Participants		
Joint	11	73.3
Nuclear	4	26.6

Thematic analysis:

Thematic analysis was carried out after review the data again and again. Overall, 98 codes were extracted from the data. The codes were arranged in a way to extract sixteen categories. All these

categories were arranged to extract four themes. These themes were “Fear”, “Self-Care deficit”, “Psychological problems” and “Associated problems” (Figure 1).

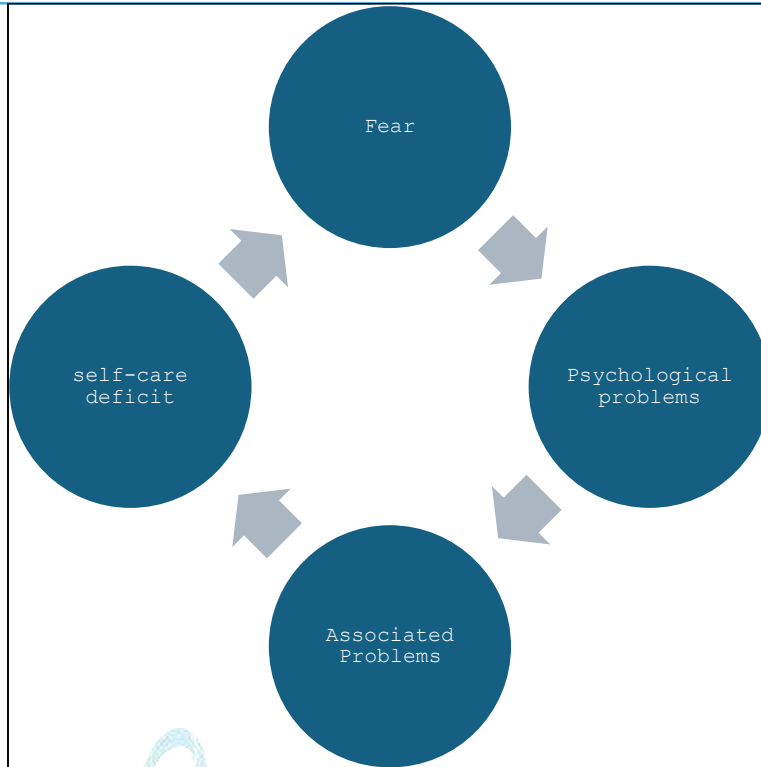


Figure 1: Smart Art depicting extracted themes of the study

Theme 1: Fear: The first generated theme of the study was “Fear”. This theme was generated from several categories such as “Blockage of the tube”, “Risk of Infection”, “Tube displacement” and “Worst Feeling” (Figure 2).

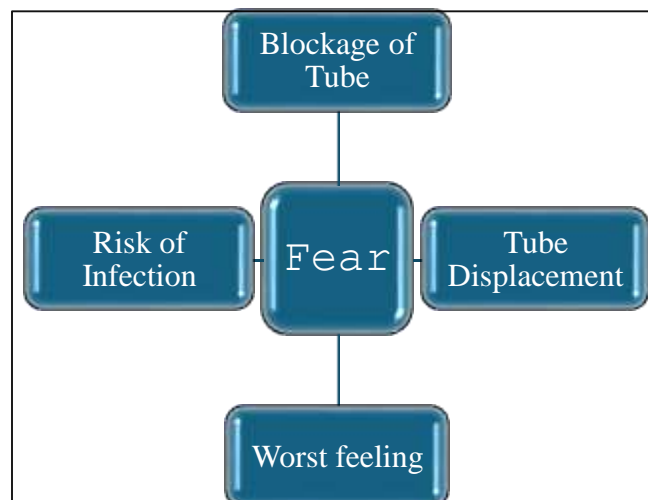


Figure 2: Smart art depicting categories and codes for the theme “Fear”

Theme 2: Psychological Problems: The second theme was psychological problems. The theme was

extracted from several categories such as “Anxiety”, “Confused”, “Lack of Sleep” and “Irritability” (Figure 3).

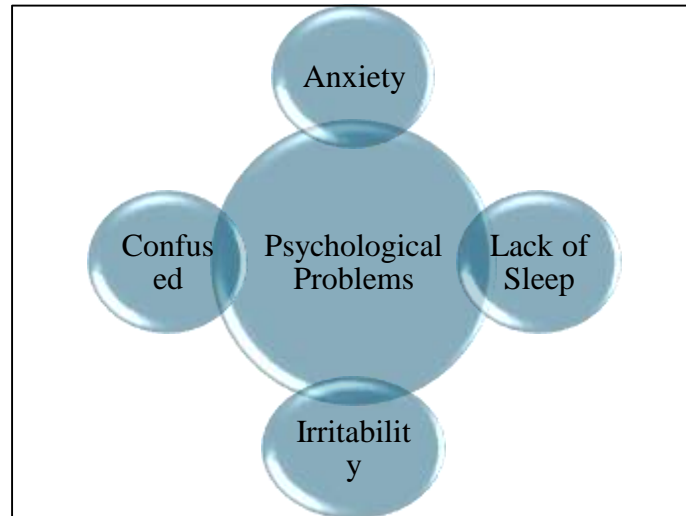


Figure 3: Smart art depicting categories and codes for the theme “Psychological Problems”

Theme 3: Associated Problems: The third generated theme was Tube related Problems. The

theme was generated from several themes such as “Nasal Irritation”, “Bloody Vomiting”, “Diarrhea” and “Abdominal Pain” (Figure 4)

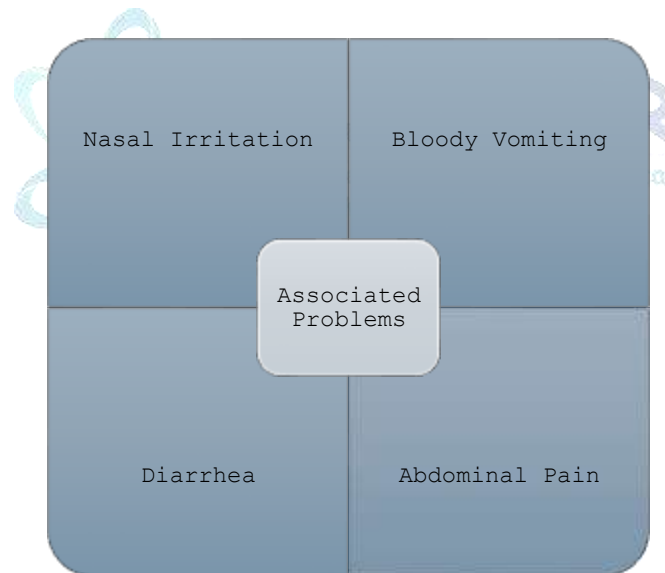


Figure 4: Smart art depicting categories and codes for the theme “Associated Problems”

Theme 4: self-care deficit: The fourth generated theme was Self-Care deficit. This theme was

generated from categories such as “Feeding”, “Hygiene”, “Tube Care” and “Routine Activities” (Figure 5).

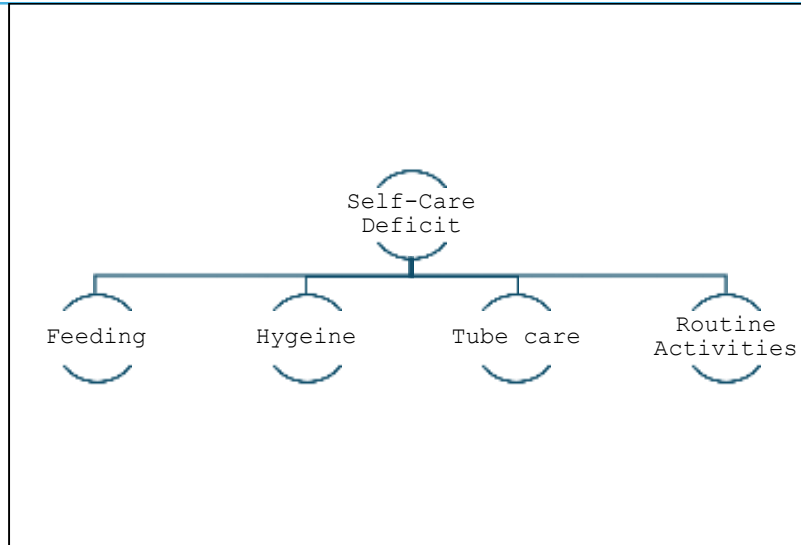


Figure 5: Smart art depicting categories and codes for the theme “Self-Care Deficit”

Discussion:

In this study the patients reported fear that was due to the blockage, displacement, risk of infection and worst feeling due to the NJ tube. The findings of the current study were supported by another study and reported that patients on tube feeding experiencing of fear due to a variety of issues such as wrong feeding, kinking of tube and displacement of tube (15).

Displacement and blockage of the different tube feeding such as NJ tube and NG tube is common in patients. Blockage and displacement of the tube was reported in 2 to 35% patients (16,17). Similarly, infection is also a concerning issue which lead to fear among the patients as reported in the current study. Supporting the finding of the current study, studies reported that infection was reported among 31% of the patients on tube feeding (18–20).

In this study, one of the themes was Psychological Problems. Anxiety, Confused, Lack of Sleep and Irritability was frequently reported among the patients due to NJ tube. Supporting the findings of the current study a study reported that psychological complications are more common among the patients with NJ tube (21). Stress was reported among 27% of the patients with NJ tube feeding (22).

Similar to the current findings, studies reported that tube feeding disturb the patients sleep and the patients experienced irritability (23,24). The sleep

disturbance and irritability is due to the irritability and time schedule of the feeding (25). That is the reason that the patients experience psychological complications with NJ tube.

Similarly, some associated problems along with the NJ tube were reported among the patients. The associated problems were nasal irritation, bloody vomiting, abdomen discomfort, diarrhea and vomiting. The findings of a previous study were similar to the findings of the current investigation, and both studies showed that despite the benefits of enteral tube feeding and its widespread use, some patients have difficulties as a result of the treatment (26).

According to the research, common routes of enteral access include naso-enteral tubes, gastrostomies, and jejunostomies. On the other hand, complications can be broken down into four main groups: mechanical, such as tube blockage or removal; gastrointestinal, such as diarrhea; infectious, such as aspiration pneumonia; and metabolic, such as re-feeding syndrome and hyperglycemia. Although the nature and frequency of issues that can arise from tube feeding can vary significantly depending on the access route that is used, gastrointestinal complications are invariably the most common. The risks of complications that are associated with enteral tube feeding can be mitigated by strictly adhering to the guidelines that have been

established, including those that pertain to the composition of the food, the administration rate, the portion size, the temperature of the food, and the supervision of the patient (27,28).

Among the themes in this study, one of the themes was self-care deficit. The patients reported that they experience difficulties in their own daily life activities such as tube care, feeding, hygiene and daily work. These findings were supported by literature and the studies reported that patients with tube feeding experience problems during daily life activities (29). Similarly, patients with NJ tube feeding experience poor quality of life and patients experience problems while performing daily life activities such as bathing, feeding and caring of the tube (15,30,31).

Conclusion:

The findings of this study concluded that the patients with NJ tube experiencing a verity of experiences. The patients reported fear that was due to the blockage, displacement, risk of infection and worst feeling due to the NJ tube. Besides, Psychological Problems such as Anxiety, Confused, Lack of Sleep and Irritability was frequently reported among the patients. The associated problems were nasal irritation, bloody vomiting, abdomen discomfort, diarrhea and vomiting and difficulty in daily life activities were reported by the patients with NJ tube.

References:

1. Green SM, Townsend K, Jarrett N, Fader M. The experiences and support needs of people living at home with an enteral tube: a qualitative interview study. *J Hum Nutr Diet Off J Br Diet Assoc.* 2019 Oct;32(5):646–58.
2. Ojo O, Adegboye ARA, Ojo OO, Wang X, Brooke J. An Evaluation of the Nutritional Value and Physical Properties of Blenderised Enteral Nutrition Formula: A Systematic Review and Meta-Analysis. *Nutrients* [Internet]. 2020 Jun;12(6):E1840. Available from: <https://europepmc.org/articles/PMC7353256>
3. Volkert D, Berner YN, Berry E, Cederholm T, Bertrand PC, Milne A, et al. ESPEN guidelines on enteral nutrition: geriatrics. *Clin Nutr.* 2016;25(2):330–60.
4. Wong A, Banks MD, Bauer JD. A Survey of Home Enteral Nutrition Practices and Reimbursement in the Asia Pacific Region. *Nutrients.* 2018 Feb;10(2).
5. Folwarski M, Kłęk S, Zoubek-Wójcik A, Szafranski W, Bartoszevska L, Figura K, et al. Home enteral nutrition in adults—nationwide multicenter survey. *Nutrients.* 2020;12(7):2087.
6. Dutta AK, Goel A, Kirubakaran R, Chacko A, Tharyan P. Nasogastric versus nasojejunal tube feeding for severe acute pancreatitis. *Cochrane Database Syst Rev.* 2020;(3):123–32.
7. Rollins H. Nasojejunal tube feeding in children: knowledge and practice. *Br J Community Nurs.* 2018;23(Sup7):S7–12.
8. Walton H, Watson E. P283 Retrospective audit of morbidity and mortality following PEG vs RIG insertion in NHS Lothian. *BMJ.* 2021;A187.2-A188.
9. Kathrani A. Enteral Feeding Tubes. *Small Anim Surg Emergencies.* 2022;251–61.
10. Tan JH, Sivadurai G, Tan HCL, Tan YR, Jahit S, Hans Alexander M. A novel method of nasojejunal feeding and gastric decompression using a double lumen silicone tube for upper gastrointestinal obstruction. *Surg Laparosc Endosc Percutan Tech.* 2020;30(2):106–10.
11. Gerritsen A, Besselink MG, Cieslak KP, Vriens MR, Steenhagen E, van Hillegersberg R, et al. Efficacy and complications of nasojejunal, jejunostomy and parenteral feeding after pancreaticoduodenectomy. *J Gastrointest Surg Off J Soc Surg Aliment Tract.* 2012 Jun;16(6):1144–51.
12. Williams GF, White H, Sen M, Prestwich RJD. Patients' experience of enteral feeding following (chemo) radiotherapy for head and neck cancer: A qualitative study. *Clin Nutr.* 2019 Jun;38(3):1382–9.

13. Kruchko D, Shah N, Broy C, Silas D. Percutaneous endoscopic jejunostomy tube placement for treatment of severe hyperemesis gravidarum in pregnancy. *J Investig Med high impact case reports*. 2020;8:2324709620975954.
14. Xue M, Zhai X, Liu S, Xu N, Han J, Zhou M. The experience of family caregivers of patients receiving home nasogastric tube feeding in China: A descriptive qualitative study. *J Hum Nutr Diet*. 2022;35(1):14-22.
15. Sánchez-Sánchez E, Ruano-Álvarez MA, Díaz-Jiménez J, Díaz AJ, Ordonez FJ. Enteral Nutrition by Nasogastric Tube in Adult Patients under Palliative Care: A Systematic Review. *Nutrients* [Internet]. 2021;13(5). Available from: <https://www.mdpi.com/2072-6643/13/5/1562>
16. Gimenes FRE, Pereira MCA, Prado PR Do, Carvalho REFL De, Koepp J, Freitas LM De, et al. Nasogastric/Nasoenteric tube-related incidents in hospitalised patients: A study protocol of a multicentre prospective cohort study. *BMJ Open*. 2019;9(7):1-7.
17. Hsu CY, Lai J-N, Kung W-M, Hung C-H, Yip H-T, Chang Y-C, et al. Nationwide Prevalence and Outcomes of Long-Term Nasogastric Tube Placement in Adults. *Nutrients* [Internet]. 2022;14(9). Available from: <https://www.mdpi.com/2072-6643/14/9/1748>
18. Vinayagamorthy K, Pentapati KC, Prakash H. Epidemiology of *Saccharomyces* fungemia: A systematic review. *Med Mycol* [Internet]. 2023;61(2). Available from: <https://doi.org/10.1093/mmy/myad014>
19. Williams SL, Popowics NM, Tadesse DG, Poindexter BB, Merhar SL. Tube feeding outcomes of infants in a Level IV NICU. *J Perinatol* [Internet]. 2019;39(10):1406-10. Available from: <https://doi.org/10.1038/s41372-019-0449-z>
20. McGrath KH, Hardikar W. Gastrostomy tube use in children with cancer. *Pediatr Blood Cancer*. 2019;66(7):1-7.
21. Chuang S-T, Yen Y-H, Hsu H, Lai M-W, Hung Y-F, Tsai S-W. Predictive Factors for Nasogastric Tube Removal in Post-Stroke Patients. *Medicina (B Aires)* [Internet]. 2023;59(2):199-204. Available from: <https://www.mdpi.com/1648-9144/59/2/368>
22. Wang Z-Y, Chen J-M, Ni G-X. Effect of an indwelling nasogastric tube on swallowing function in elderly post-stroke dysphagia patients with long-term nasal feeding. *BMC Neurol*. 2019;19(1):1-7.
23. Sunderram J, Sofou S, Kamisoglu K, Karantza V, Androulakis IP. Time-restricted feeding and the realignment of biological rhythms: Translational opportunities and challenges. *J Transl Med* [Internet]. 2018;12(1):1-9. Available from: *Journal of Translational Medicine*
24. Chauhan D, Varma S, Dani M, Fertleman MB, Koizia LJ. Nasogastric Tube Feeding in Older Patients: A Review of Current Practice and Challenges Faced. Kostka T, editor. *Curr Gerontol Geriatr Res* [Internet]. 2021;2021:6650675. Available from: <https://doi.org/10.1155/2021/6650675>
25. Fuller SJ, Thomson S, Tan J. Nasogastric tube feeding under restraint: practical guidance for children's nurses. *Nurs Child Young People*. 2023;35(2).
26. Falcoski P, Philpot U, Tan J, Hudson LD, Fuller SJ. Nasogastric tube feeding in line with new dietetic guidelines for the treatment of anorexia nervosa in a specialist children and adolescent inpatient unit: a case series. *J Hum Nutr Diet*. 2021;34(1):33-41.
27. Blumenstein I, Shastri YM, Stein J. Gastroenteric tube feeding: Techniques, problems and solutions. *World J Gastroenterol*. 2018;20(26):8505-24.

28. Kells M, Kelly-Weeder S. Nasogastric tube feeding for individuals with anorexia nervosa: an integrative review. *J Am Psychiatr Nurses Assoc.* 2019;22(6):449-68.
29. Pendharkar SA, Plank LD, Windsor JA, Petrov MS. Quality of Life in a Randomized Trial of Nasogastric Tube Feeding in Acute Pancreatitis. *JPEN J Parenter Enteral Nutr.* 2016 Jul;40(5):693-8.
30. Best C. Caring for the patient with a nasogastric tube. *Nurs Stand.* 2021;20(3):59-67.
31. Burns SM, Martin M, Robbins V, Friday T, Coffindaffer M, Burns SC, et al. Comparison of nasogastric tube securing methods and tube types in medical intensive care patients. *Am J Crit Care.* 2019;4(3):198-203.

