



NK3 – Evidence-Based Practice

NK3b: Provide one example, with supporting evidence, of clinical nurses' use of evidence-based practice to revise an existing practice within the organization.

Introduction

The Nursing Research Sub-Council at KFSHRC-J guides decision-making within Nursing Affairs for research and evidence-based practice (EBP) activities. Strong emphasis is placed on the establishment of an evidence-based culture and practice. To achieve this, nurses need to be actively engaged in the research process. Nurses also need to develop a culture of inquiry that encourages and supports nurses at all levels of the organization to develop skills and confidence to ask questions, make evidence-based informed decisions, innovate and build new nursing knowledge in response to the changing needs of the organization. KFSHRC-J uses the John Hopkins' approach and toolkit (with permission) for evaluating evidence for EBP reviews.

Example NK3b: Standardizing Safe Nursing Practice: Management of Nasojejunal Tubes in a General Pediatric Unit

Tube feeding is one of the many procedures clinical nurses perform in the care provision of the pediatric patient population. Post-pyloric (nasojejunal) enteral nutrition is a valuable alternative to parenteral nutrition in reducing the incidence of infectious complications and is cost-effective in children who have gastro-esophageal reflux with a risk of aspiration (Rollins 2018). Nasojejunoscopy tubes (NJT) were introduced in the Pediatrics unit in 2018 due to the change in the patient profile, which included more children needing this procedure. Nasogastric tube insertion and maintenance is a clinical nurse competency (called nurse privilege at KFSHRC-J) and consists of an x-ray placement confirmation, and is maintained by pH levels checks.

In January 2019, clinical nurse Jisha George, Dip.N RN, Pediatrics, raised a practice concern of NJT feeding as the current Nasogastric/Orogastric Tube Management Internal Policy and Procedure (IPP): NA-J-CL-04-010 did not include guidelines for NJT insertion, and maintenance, and other safety concerns, such as who will insert, how to measure for placement, confirmation and the proper care needed. NJTs were infrequently used in Pediatrics, and there was limited evidence available on which to base safe nursing practice and management, other than historical practice. **Evidence NK3b.1 Nasogastric/Orogastric Tube Management IPP: NA-J-CL-04-010**

In March 2019, the unit's Professional Development Team: Eman Jan, BSN RN , SN1, Jisha George, Dip.N, SN1, Cecile Fabian, BSN RN, SN1, Rowena Librea, BSN RN, SN1, Nurul Sidik, BSN RN, SN1, Rahaf Alturkistani, BSN RN, SN1, Kathleen AICabas, BSN RN, SN1, Ludy Catina, BSN RN, SN1 and Haya Khalaf, MSN RN, CPHQ, CPPS, Quality Coordinator from Nursing Practice and Research department undertook this practice concern and began searching for articles, journals, gathering information as part of the Journal Club to find best available evidence. On April 09, 2019 the Professional Development team gave an update during the Unit Council on the progress of their review.

The team leader of the EBP project Eman, clinical nurse, arranged a meeting with the multi-disciplinary team on April 17, 2019 (Hala Alansari, Clinical Dietitian; Khalid Noli, M.D., Consultant Pediatric Gastroenterologist; Zehour Alsabban M.D, Consultant Pediatric Radiologist, and Irfan Asra, M.D. Consultant, General Pediatrics) to address the special needs and concerns of complex pediatric patients requiring NJT placement with feeding. **Evidence NK3b.2 Unit Council Minutes of the April 9, 2019; Email invitation and to multidisciplinary team and EBP project updates.**

The table below demonstrates the clinical nurses involved with the EBP project.

Table NK3b.1: Participants in EBP Project: Standardizing Safe Nursing Practice: Management of NJTs in a General Pediatric Unit at KFSH&RC-J

| Name & Credentials | Position | Department |
|------------------------------------|--|--------------------------------|
| Eman Jan, BSN RN | Staff Nurse 1(SN1), Clinical Nurse Team Leader | Pediatrics |
| Jisha George, Dip.N RN | SN1, Clinical Nurse | Pediatrics |
| Cecile Fabian, BSN RN | SN1, Clinical Nurse | Pediatrics |
| Rowena Librea, BSN RN | SN1, Clinical Nurse | Pediatrics |
| Nurul Sidik, BSN RN | SN1, Clinical Nurse | Pediatrics |
| Rahaf Alturkistani, BSN RN | SN1, Clinical Nurse | Pediatrics |
| Kathleen AICabas, BSN RN | SN1, Clinical Nurse | Pediatrics |
| Ludy Catina, BSN RN | SN1, Clinical Nurse | Pediatrics |
| Haya Khalaf, MSN RN, CPHQ, CPPS | Nursing Quality Improvement Coordinator | Nurse Practice and Research |
| Zehour Alsabban M.D. | Consultant, Pediatric Radiologist | Radiology Department |
| Khalid Noli, M.D. | Consultant, Pediatric Gastroenterologist | Pediatrics Department |
| Irfan Asra, M.D. | Consultant, General Pediatrics | Pediatrics Department |

A systematic literature review was conducted using the adopted Johns Hopkins EBP Toolkit, which includes Evidence-Based Appraisal Tools (Research and Non-Research) focusing on improving safety and standardizing practices related to post-pyloric NJT management. MEDLINE, PubMed, and the Cochrane Library were searched for studies published in English between 2010 and 2019. **Evidence NK3B.3 John Hopkins Tool**

The team collaborated with Haya, Nursing Quality Coordinator, in reviewing evidence of best practice and revising CIPP-3789, *Nasogastric/Orogastric Tube Management* to include Nasojejunal Tube Management. In March 2020 the hospital Clinical Internal Policies and Procedure (CIPP) was updated and published in September 2020, to reflect the EBP findings:

- Changed Title to incorporate Nasojejunal Tubes i.e. *CIPP-3789 Nasogastric/Orogastric and **Nasojejunal** Tube Management*
- Clarified Nasogastric/Orogastric Tube Placement Confirmation Section
- Added Nasojejunal Tube (NJT) policies
- Updated References
- Added the following points to the Feeding Procedure Table:
 - If warming is required:
 - Only required amount of feeds may be put in warm (not boiling) water, for a maximum of 15 minutes. The whole container of feed should not be immersed completely in the warm water
 - Microwave should not be used for warming feeding

Evidence NK3b.4 CIPP-3789 Nasogastric/Orogastric and Nasojejunal Tube Management, 2020

The General Pediatric nurses caring for children with NJT have the Clinical Internal Policy and Procedure which guides the standardized practice among general pediatric nurses and promotes safe practice leading to excellent patient care delivery.

This EBP project was published in the *GRIP* Newsletter which shares research and best practice outcomes with the employee of the organization on October 2021. **Evidence NK3b.5 GRIP Newsletter Volume 5 Issue, Page 16, October 2021**

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The Royal Children's Hospital Melbourne Jejunal Feeding Guidelines with comprehensive evidence table.

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