Safe Nasogastric Tube (NGT) Insertion and Care: How to Facilitate Frontline Staff to Implement the Standard Nursing Practice?

Leung CYM(1), Ng ML(1), Lau MK(1), Chan MK(1), Ng LKM(1), Yu HY(1), Hiu KL(1), Chan(1)

(1)Department of Surgery, Ruttonjee and Tang Shiu Kin Hospital

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Introduction
Nasogastric tube (NGT) insertion is common for stomach decompression or gastric content collection for patients with gastrointestinal problem in surgical wards. Misplacement of NGT would lead to pneumothorax or aspiration, the consequences could be fatal (Durai et al., 2009). Standardized protocols for NGT insertion and verification are followed to ensure the safety (Hospital Authority Head Office, 2016), however, there is risk if there is insufficient on-going good care for patients with NGT. Therefore, it’s important to strengthen nurses’ safety practice on NGT care and make accurate documentation in order to promote patients’ safety.

Objectives
1. To update the nursing care standard of NGT insertion in Surgical ward. 2. To strengthen nurses' knowledge and skill in NGT insertion. 3. To enhance patient care with NGT insertion.

Methodology
Phase 1: A “Reference Guide for NGT insertion for in-patient” was designed (see file attached). It provided details and comparison of different types of NGT, graphics and description of methods on proper NGT measurement. Nurses are encouraged to refer to it every time before NGT insertion. The nursing record of “patient care summary” was redesigned to facilitate front line nurses to maintain an accurate documentation on NGT insertion. Phase 2: Education talk was tailor made to all nurses to explain the current newly implemented measures, consolidate their nursing knowledge and update the standard care of NGT with slide show. Then post-program audit on NGT insertion and questionnaires on NGT care knowledge of nurses were conducted to compare the effectiveness of the program.

Result
Pre-program audit NGT insertion record by concurrent and retrospective method. In addition, a set of knowledge test and questionnaire on NGT care from front line nurses were conducted. The audit content was designed based on the standardized...
protocol for NGT insertion released by HAHO The Goal is to improve the compliance rate of standard NGT insertion procedure and the nurse knowledge related to NGT insertion. Total 30 numbers of pre and post program knowledge test and questionnaires from nurses were collected. 20 samples for pre and post program audit were collected. Comparing results between pre- and post-program, in both surgical wards, the mean score of knowledge test from front line nurse was increased from 64% to 84% (Table 1). There was significant improvement in nurse knowledge about the complications of NGT insertion, the correctness rate increased by 51% after the education talk. The overall compliance rate of performance audit of NGT insertion in A8 and B8 ward increased from 76% to 94% (Table 2). Moreover, 94% of staff agreed that the new designed “patient care summary” can improve time efficiency and enhance the legibility of documentation. All staff agreed that the “Reference guide for NGT insertion for in-patient” can facilitate the procedure of NGT insertion.