

Title:

The Effect of Improving Nurses' Skill of Port-A-Care

Jian-Bin Ciou, BSN

Department of Nursing, Chi Mei Medical Center, Tainan City 710, Taiwan (R.O.C.), Taiwan

Chi-Hui Chuang, MS

Department of Nursing, Chi Mei Medical Center, Tainan, Taiwan

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References:

Ku, Y.H., Kuo, P.H., Tsai, Y.F., Huang, W.T., Lin, M.H., & Tsao, C.J. (2009). Port-A-Cath implantation using percutaneous puncture without guidance. *Annals of Surgical Oncology*, 16(3), 729-734.

Abstract Summary:

Review of charts was adopted to explore the patient's characteristics and related factors of the port-a adverse events. Then literature review and three checklists suggested by experts were built and used to examine nurse's capability of port-A care. Researchers continued to follow-up for 6 months.

Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
Explore the root cause of port-a adverse events	Improper dressing, and incorrect sterilization way.
Investigate the effective interventions for improving port-a adverse events that caused by human factors.	Nurses self-reported that they lacked for the knowledge of port-A cares.

Abstract Text:**Purpose of the project**

In the treatment of cancer patients in order to be able to receive chemotherapy, antibiotics, total parenteral nutrition or infusion of blood products such as treatment, the chemotherapy drugs (especially blistering chemotherapy drugs), must be administered via a portal and a catheter (Port-A) in order to avoid vein injury. Patients with cancer were a high risk population of port-A line slippage, obstruction, infection, may cause patients to re-placed port-A in the operating room. And did the extra antibiotic treatment, prolong the length of stay. The purpose of this project was to investigate the effect of improving the nurses complete rate of the port-A care at a surgical ward in a medical center of southern Taiwan.

Methods

There were three phases to understand the knowledge and skills of nurses. In phase I, the review of charts was adopted to explore the patient's characteristics and related factors of the port-a adverse events. In phase II, literature review and three checklists suggested by experts were built and used to examine nurse's capability of port-A care. There were totally three interventions for the study. In phase III,

researchers continued to follow-up for 6 months. The trend curve was used to analyze the difference between pre and post interventions.

Results

Totally 16 nurses and 262 patients were included in this project. The completion rate of port-A nursing care is only 20%. The causes of port-a adverse events included the improper dressing (64.6%), incorrect sterilization way(3.1%). 42% nurses self-reported that they lacked for the knowledge of port-A cares. 44% nurses were deficient in the skill for the port-A care. After the interventions involved, the completion rate of port-A nursing care increased from 20% to 100%.

Conclusions

By using on-job training, the practice of teaching aids, the development of clinical care guidelines could reduce the rate of port-a adverse events.