MINIMIZING COMPLICATIONS RELATED TO PERIPHERAL INTRAVENOUS CANNULATION IN NEONATES

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Introduction

Peripheral intravenous catheters (PIVC) is commonly used for IV drugs and fluid administration in hospitals, yet it would lead to potential complications. The complications are, however, preventable with proficient nursing care. There were incidents reported that the baby’s hand was cut by scissors during the procedure of PIVC removal in Kwong Wah Hospital NICU. In view of the above injuries, the importance of reviewing and establishing a standardized nursing guideline on PIVC was identified.

Objective

Develop a standard nursing practice to prevent complications or injuries associated with PIVC and to reduce the impact of fine motor development in childhood.

Methodology

A set of questionnaires that included 6 questions related to knowledge and 8 questions related to nursing practice, was used in the pretest and posttest.

The revised nursing practice and updated guidelines of PIVC was published in Paediatric Nursing Care Newsletter (PNC) which provides updated clinical practice and informations in the KWH Paediatric Department website monthly. Return demonstration was performed individually within a time phase.

Three modifications practice was demonstrated in a small group. It involved
1. keep the web space between thumb and index finger free if the splint put on the hand.
2. use the new strapping materials which can be easy and straight bi-directional tear.
3. fold an edge at the end of Transpore when strap the splint on the involved joint.

Results and Outcomes:

Since all the nursing staff in KWH neonatal unit was compulsory to read the PNC and perform the return demonstration individually, the compliance rate was 100%. A total of 63 nurses completed the pretest questionnaire. 42 posttest samples were received which implies a response rate of approximately 67%. It was revealed that nurses’ knowledge obviously improved after the program. In addition, nurses’ awareness of avoiding the use of scissors when removing splints was significantly raised. The majority of nurses agree to have a standardized method for strapping and removing splints after this study.

Since the launch of this study, there was no report of further injuries associated with PIVC. It is believed that this training program would help to raise nurse awareness and reduce incidents related to PIVC in the future.