Introduction of Chlorhexidine One-Step Applicator Improves the Efficiency and Staff Satisfaction on Central Venous Catheter Site Dressing in ICU

Wong SW, Leung CK, Cheung SH, Fu CW, Louie LH, Wong CK
Intensive Care Unit, North District Hospital, Hong Kong

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Introduction
To reduce the rate of catheter associated bloodstream infection, it is recommended that central venous catheter (CVC) site dressing should be changed every 7 days. Traditionally, CVC site dressing was cleansed with a bottle of 2% Chlorhexidine Gluconate in 70% Isopropyl alcohol solution and a disposable sterile dressing set in our unit. Chlorhexidine One-Step applicator was newly introduced for CVC site dressing in 2017. Training sessions organized by training and development nursing team members were arranged to all nursing staff before implementation of this applicator. The skills of using this applicator have been demonstrated and all nursing staff has re-demonstrated those skills at the end of training sessions. Without collecting different consumables or preparing the dressing set for CVC site dressing, this applicator is more convenient when compared with the traditional method. Therefore, it is expected to improve the efficiency of CVC site dressing procedure. An evaluation will now be conducted.

Objectives
- To promote the use of applicator in our unit for performing CVC site dressing
- To assess the improvement on the efficiency and staff satisfaction on the applicator compared with the traditional method

Methodology
- Outcome performances of two methods were assessed (e.g. procedure time, consumables used, complications associated with the procedure).
- Clinical supervision was carried out to assess nurses’ compliance.
- Staff satisfaction survey on traditional and new methods was conducted after the clinical supervision period.

Result
- The newly introduced applicator has been out-performed the traditional method including shorter procedure time (2 minutes vs 5 minutes), less wastage, lower cost and lower chance of contamination.
- 100% staff was using the new applicator to perform CVC site dressing and all staff used the applicators correctly during clinical supervision.
- 100% nursing staff commented in the staff satisfaction survey that the applicator has shortened their nursing time spent on CVC site dressing. 100% of them expressed that they preferred using this applicator to traditional method.
- To conclude, the Chlorhexidine One-step applicator was shown to be more efficient than the tradition method for CVC site dressing, and was well accepted by ICU nurse after training.