This project aimed to promote evidence-based practice in the management of peripherally inserted central venous catheters (PICCs) in pediatric and adult patients in an intensive care unit (ICU)” Oliveira et al (2018).

Abstract:

OBJECTIVE: This project aimed to promote evidence-based practice in the management of peripherally inserted central venous catheters (PICCs) in pediatric and adult patients in an intensive care unit (ICU).

INTRODUCTION: A PICC provides secure vascular access to medication, blood and nutrition administration. However, their use in the ICU is limited. Gaps in training and education in the use of these catheters are barriers to improving practice and safety.

METHODS: The project was conducted in an ICU of a cardiology teaching hospital in São Paulo, Brazil. The Joanna Briggs Institute Practical Application of Clinical Evidence System and Getting Research into Practice audit tools were used. A baseline audit of the management of PICCs in pediatric and adult patients was conducted, with a sample size of 22 patients and 180 nursing staff. After an educational program, a follow-up audit involving 14 patients and 180 nursing staff was conducted using the same audit criteria.

RESULTS: The baseline audit indicated that PICC management concerning flushing had poor
compliance of 2-20%. The results of the criteria related to the change in administration sets, including secondary sets and add-on devices, had better results, with moderate (65%) to high (100%) compliance. The follow-up audit showed improvement in all 10 criteria. Criteria related to flushing achieved 83% to 89% compliance; criteria related to dressing and change of administration sets achieved 100% compliance.

CONCLUSIONS: Increased compliance with evidence-based best practices was achieved in all assessed audit criteria. The criteria that reached the highest compliance with best practice recommendations were related to the prevention of bloodstream infection and loss of the PICC due to obstruction. Future audits are planned to ensure sustainability.

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