

KEEPING IVs WORKING

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Keeping IVs working is the focus of a new Griffith University research program aimed at informing best practice in hospitals.

Supported by \$80,000 worth of grants from the university and medical technology company Becton Dickinson & Company (BD) the research is being undertaken at the Griffith Health Institute.

Venous cannulation via peripheral intravenous catheters (PVC) is the simplest, and most frequently used, method to administer drugs, fluids and blood products.

Researchers estimate up to 90% of patients in acute care hospitals need a peripheral intravenous catheter, with about 330 million sold in the United States (US) annually.¹⁻⁴

However, PVCs are associated with inherent complications which can be mechanical or infectious.

The National Centre of Research Excellence in Nursing's (NCREN) Dr Samantha Keogh, who is leading the research, said dislodgement, occlusion or infiltration accounted for about 30–40% of IV failures.⁵⁻⁹

“These failures have implications for patient comfort, course of treatment and health care costs,” Dr Keogh said.

She said maintaining catheter patency is vital and there have been a range of strategies to prevent PVC occlusion and infiltration.

These include optimising patency through either continuous infusion or intermittent flushes of saline or heparinised preparations and use of saline, heparin, antibiotic and/or ethanol locks.¹⁰⁻¹²

However Dr Keogh said there is little evidence to inform the best flushing practice, which this research aims to remedy.

“Studies on IV flushing conducted at NCREN so far have shown pre-filled flush syringes were associated with reduced preparation time, with a potential to reduce infection control risks and promote adherence to recommended practice,” she said.

“Our observational studies have also highlighted the wide variation in IV flushing practice and a diverse understanding of related infection control measures.”

As part of this research, NCREN is collaborating with the QNU to conduct a state-wide online survey of IV flushing practice amongst Queensland nurses mid year.

“This research is aimed at identifying gaps in knowledge and practice, highlighting quality and safety issues, with a view to conducting further trial research that will inform clinical practice,” Dr Keogh said. ■



Dr Samantha Keogh

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