Effectiveness of betadine vs normal saline in catheter care for prevention of catheter associated urinary tract Infection

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Abstract

Introduction: Healthcare associated infection (HAI) occurs worldwide and affects both developed and developing countries. Urinary tract infection is one of the common HAI. These infections can result in sepsis, prolonged hospitalization, additional hospital costs and morbidity. Methods: A quasi-experimental study was conducted on 40 patients fulfilling the inclusion criteria or requiring daily catheter care and, are divided into two groups with indwelling catheter. Purposive sampling technique was used for selecting the sample. Data were collected from the subjects using observational checklist and pain scale. From the first day of catheterization, catheter care was given once daily with normal saline solution to one group and betadine solution to another group. The subjects were observed for the effectiveness of solutions used for the catheter care based on the infection criteria checklist until seven days. Altogether seven observations were done to assess the effectiveness of the solutions for each subject. Results: The findings revealed that in normal saline group 85% (17 patients) were found to be effective whereas, 15% (3 patients) were found to be not effective and, in the betadine group 100% (20 patients) were found to be effective. There was no significant difference in the effectiveness of normal saline and betadine in preventing CAUTI (t (38) = .27 at 0.05 level of significance). Conclusion: Normal saline solution and betadine are both effective in prevention of catheter associated urinary tract infection. Nurses can give catheter care to the patients with indwelling catheter with the solutions.

Key words: Catheter Associated Urinary Tract Infection (CAUTI), Normal Saline, Betadine, Indwelling catheter, Patients.