A Simulation Training to Enhance Staff Hand Hygiene Compliance in Clinical Practice

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Introduction
Hand hygiene is the most important intervention for preventing hospital acquired infections. Compliance and knowledge on hand hygiene of nursing and supporting staff is important as they are the main health care providers and key persons to reduce and prevent these infections.

Objectives
(1) to promote correct and safe practice of hand hygiene in inpatient settings; (2) to strengthen staff knowledge on the five moments of hand hygiene; (3) to enhance staff hand hygiene compliance in clinical practice.

Methodology
A pre and post observational survey on the seven steps and five moments of hand hygiene were done with the implementation of simulation training. All nursing and supporting staff from Department of Geriatrics was randomly selected as intervention and control group for comparison. Pre and post questionnaire was performed in assessing staff’s knowledge on the five moments of hand hygiene in the simulation training. Outcome measures included (1) correct hand hygiene technique, (2) knowledge gain on five moments of hand hygiene, and (3) increased hand hygiene compliance in clinical practice after simulation training.

Result
For the pre-training period, 63 nurses and 42 supporting staffs in the Department of Geriatrics were being observed for the five moments and seven steps in hand hygiene. The hand hygiene simulation training took place from December 2015 to January 2016. The interventional group consisted of 35 nurses and 18 supporting staff. The average median score of the nursing and supporting staff knowledge test was increased by 17.9% and 22.2%% respectively. The preliminary general post compliance rate was increased by 47%. Majority of the staff, with more than 85% of nurses and 90% of supporting staff, agreed and were satisfied with the simulation training. 95% of all participants believed that the training was practical in enhancing hand hygiene compliance in workplace.

Conclusions: The simulation training was effective in
enhancing staff knowledge on five moment of hand hygiene in clinical practice. The increase in knowledge would boost the staff compliance and adhere to the correct and safe practice in inpatient services.