Enhancing Hand Hygiene Compliance in Acute Care Setting: An Application of the Theory of Planned Behavior
Chiu KB, Lai CT, Wong MK
2C Ward, Department of Medical & Geriatric, United Christian Hospital

Keywords:
Hand Hygiene
Theory of planned behavior

Introduction
The compliance of healthcare workers (HCWs) to hand hygiene guidelines are low despite infection control measures are in place. Most HCWs are aware of the rationale of hand hygiene (HH), still the motivation of HCWs adherence to guidelines are unsatisfactory. A recent hospital-wide audit quarterly report on hand hygiene compliance rate of an acute ward had dropped from 70.7% (2Q15) to 57.8% (3Q15). An evidenced-based hand hygiene improvement program was developed and implemented with the Theory of Planned Behavior (TPB) as guiding framework to fill this service gap. The program aims to strengthen HCWs' attitude, subjective norm and perceived behavioral control in order to enhance the intention to perform.

Objectives
To evaluate the hand hygiene compliance rate of healthcare providers.

Methodology
A series of interventions were conducted aiming to enhance ward staff's intention on performing better hand hygiene compliance. 1. Reinforce the importance of performing hand hygiene (increase positive attitude). 2. Paste hand hygiene audit results and set target-increase motivation and outcome expectation. 3. Inviting different ranks staff to take photos for making hand hygiene promotion posters (built up positive image and create atmosphere on hand hygiene promotion). 4. Intra-ward HH audit was conducted at least 7 cases per day. The audit form was recorded as named format. 5. Apart from nursing staff, supporting staff (HCAs) are also trained and invited as auditors in daily ward hand hygiene audit (increase self-efficacy and peer pressure).

Result
For ward level, 197 peer audits were performed. Observations covered 76 nurses, 29 physicians, 63 HCAs and 29 other health-care workers (including physiotherapist, occupational therapists, speech therapists, phlebotomist, social workers, supporting staffs) working in the unit. The overall return rate of peer audit was 91%. The compliance rate on HH guideline was 89.6% for physician, 97.3% for nurse, 95.2% for HCAs and 86.2% for other health-care workers. No staff was identified for cumulative
non-compliance in HH. For hospital-wide level, the average hand hygiene compliance rate in the quarterly report on HH performed by the ICNT had raised from 66% to 91%. The result proved that people's behavior is influenced by their attitude, motivation and confidence in their ability to perform that behavior. Besides, creating peer pressure, increasing knowledge of the role of hand hygiene may lead to the desired outcome.