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3-E (Empower, Engage, Educate) to build hand hygiene culture
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Introduction
Hand Hygiene by using alcohol hand rub has been extensively promoted in our hospital since 2008. We had adopted all elements of the WHO multimodal promotion strategy of Hand hygiene including preparing resources, obtained baseline compliance rate, formal kick-off ceremony and serials education program, continued monitoring and feedback. We also developed ongoing action plan for promoting hand hygiene every year. The compliance rate had risen from 21% in 2008 to 76% in 2012. However, we found the compliance rate have reached the plateau during the period from 2012 to 2014 (76%, 73% and 74%).

Objectives
1. To empower, engage, educate and train up Infection Control Link Nurse (ICLN) in Hand Hygiene promotion and supervision. 2. To recruit an ICLN from each ward and unit and appoint them as observer in hand hygiene practices. 3. To reinforce hand hygiene compliance and enhance safety culture.

Methodology
The observation period had been divided into two parts: part 1 in 2014 and part 2 in 2015. 20 ICLNs had been recruited as hand hygiene observers. Introduction to hand hygiene observation had been provided by ICN. ICN provided orientation and coaching on the day of observation to every observer till ICLNs were able to perform observation independently. ICLNs had been assigned to observe wards except their own ward in order to avoid bias. Each observation session last for 30 minutes.
ICLN self-respond questionnaire was used to evaluation the programme afterward. ICT would than collected the duly completed questionnaires and performed data analysis. The first and final report had already been presented to the Hospital Infection Control Committee; whereas staff forum and individual ward report has been sent to relevant department's operation management for scrutiny.

**Result**

i) There is no significant variation (75.9% vs 74.1% P=0.320) between hand hygiene compliance rate in the first part of hand hygiene observation and the observation performed by ICN in previous quarter before the study.  

ii) The total number of hand hygiene opportunities observed by ICLN were 1262 (Part 1) and 1248 (Part 2) respectively.  

iii) The overall hand hygiene compliance rates had been significantly improved from 75.9% to 80.3% (P=0.007) in all staff groups.  

iv) All of the 20 ICLNs had completed the evaluation questionnaires. All ICLNs had better understanding on the five moments of hand hygiene opportunities. 18 staff members (90%) have more understand on glove using practice. More than 30% of ICLN increase their hand hygiene frequency and 50% of ICLN use more alcohol hand rub for hand hygiene. Also, all participated ICLNs were found to have better understand on hand hygiene practice of other staff. Most of the ICLNs have better understanding of the reasons of missing hand hygiene (90%), more understanding of the daily operation of other wards and the importance of hand hygiene (95%).