A bundle of care to enhance infection control at TB isolation ward
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Introduction
Clostridium difficile (CD) diarrhea is a common hospital acquired infection. It is transmitted through contact with humans or objects harbouring these bacteria. Human infection with CD can range from asymptomatic carriers to severe diarrhea and even fatal. At TB isolation ward of Department of TB and Chest (DTBC), since most of the patients are having anti-TB treatment which includes at least 2-3 antibiotics, the bowel normal flora is suppressed resulting in overgrowth of CD causing symptoms, eg diarrhoea. CD contains spores making it very hard to be eradicated. In 2011-13, there were several episodes of clostridium difficile acquired diarrhea (CDAD) outbreaks at theTB ward. In this regard, a bundle of infection control measures, including early alert mechanism, hand hygiene audit and enhanced environmental decontamination were implemented

Objectives
-To promote patient safety  -To enhance infection control  -To arouse staff's alertness on early onset of CD clustering.  -To enhance staff's compliance on hand hygiene

Methodology
1.Early Alert Mechanism on diarrhea was set up An in-house alert system was set up. Nurses will survey all the patients at the TB ward daily. If clustering of diarrhea is noted, all frontline staff will be alerted and the senior managers will be notified by using a designated form. Enhanced infection control measures will be done accordingly.  2.Monthly hand hygiene audit to all staff Monthly audit on hand hygiene on the 5 moments by NO/APNs to all staff. The audit results are reported to department meeting quarterly.  3.Enhanced environmental decontamination ICN and hospital foreman were invited to share a talk on environmental decontamination to the supporting staff. Poster was designed to alert the supporting staff on the “High Touch Areas” in clinical setting. Series of interactive training with peer review was conducted. Florescent assessment paint was used to facilitate teaching and learning.
Result
1. Hand Hygiene audit: The overall compliance rate increased from 79.7% in 2013 to 96.34 and 97.2% in 2014 and 2015 respectively. 2. Staff is more aware of CDAD and will initiate infection control measures once clustering observed. 3. The incidence of CDAD was well controlled after the implementation of the program, no outbreak in 2014 and 2015. 4. Staff is more aware of the importance of environmental decontamination and the cleaning skill. 5. Staff expressed positive feedback on the environmental decontamination training. The use of fluorescent assessment paint makes non-visible to visible, adding fun to the training.