An improvement program for environmental cleaning in a convalescent hospital (Cheshire Home Shatin, SCH)

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Introduction
Contamination of environmental surfaces in hospital plays an important role in transmission of multiple drug resistant organisms (MDRO). These pathogens are able to persist in the environment for long time. Ineffective cleaning may increase the risk of environmental transmission. Enhancing the knowledge of cleaners on environmental cleaning is important to improve the cleanliness of hospital environment, so as to reduce hospital-acquired infection. In SCH, both the cleaners and ward supporting staff are responsible for environmental cleaning in wards. However, there was lack of education to ward supporting staff about environmental cleaning. The job delineation of cleaners and ward supporting staff was not well defined. For quality improvement and enhancing patient safety, a program for standardizing colour coding system and cleaning practice in ward areas has been implemented.

Objectives
(1) To enhance the knowledge of ward supporting staff about environmental cleaning.
(2) To fully implement and standardize the colour coding system in ward areas and to clearly define the responsible staff for disinfection of specific equipment and environment in wards.

Methodology
Implementation of the program was divided into two phases: Phase 1 – staff education and Phase 2 – performance monitoring. The first phase was completed, in
which a working group formed by infection control nurse (ICN), ward managers and administrative service representatives had standardized the colour coding system and the cleaning practice in wards. Education talks on environmental cleaning and colour coding system with video demonstration on cleansing techniques were held for ward supporting staff. “Pre-talk” and “post-talk” knowledge assessment on cleaning standard was conducted taking reference from the HA guideline on Environmental Decontamination in Clinical Areas. Phase two will subsequently be implemented to monitor cleansing compliance. Daily cleaning performance and appropriate use of colour coded cleaning equipment in wards will be randomly assessed by ICN with the use of an observation survey form and UV light assessment with immediate feedback.

**Result**

Results: Fifty percent of ward supporting staff (n=34) had attended the education talks. The mean score of knowledge assessment on cleaning standard was significantly increased from the pre-talk 73.53% to post-talk 90.97% (p=.00, paired t-test).

Conclusion: Environmental cleaning knowledge of ward supporting staff, which is one of the basic component affecting their performance, was significantly enhanced through education. Therefore, staff education is indispensable in developing high standard environmental cleanliness in hospitals.