Use of built-in silver disposable curtain in reducing transmission of nosocomial pathogens in renal unit

Ho HS, Kwan KLA, Cho HY, Chow CCV, Mo KLS, Lao WC
Department of Medicine, Pamela Youde Nethersole Eastern Hospital

Keywords:
built-in silver disposable curtain
reduce transmission of nosocomial pathogens

Introduction
Infection control is a major issue in a renal unit. Curtains act as a medium in transmission of nosocomial pathogen. Healthcare personnel, patients and carers contact the curtains in ward. Pathogens are transferred from one user to the next one. Patients with end stage renal disease are immuno-compromized and they are susceptible to infection. Frequent laundering efficiently removes pathogens, but increases facility operating costs. Staff needs to change curtains regularly and impose occupational risk of fall. The use of disposable curtain can be effective in reducing transmission of nosocomial pathogens, operation costs and enhancing occupational health.

Objectives
To evaluate the effectiveness of using Marlux built-in silver disposable curtain in reducing transmission of nosocomial pathogens in MRSA Hemodialysis Area

Methodology
From 14 February 2014 to 31 August 2014, Ten Marlux built-in silver disposable curtains which provided effective protection against bacteria 24 hours a day were used in MRSA Hemodialysis Area. The curtains were routinely replaced every 2 months or immediately if they were soiled with blood or body fluid. The date of use was written down on the space provided on the curtains for easy reference. Microbiological samples were taken from the MRSA Hemodialysis Area for surveillance on 2 July 2014. Two were taken from the high touch area of disposable curtains, four from the hemodialysis machine panels, two from bedside rails and two from chest tables before the day of routine changing the disposable curtain.

Result
There was no MRSA bacteria isolated from the disposable curtains, hemodialysis
machine panels, chest tables and bedside rails. No patient got transmission of nosocomial pathogens from the Marlux built-in silver disposable curtains during the study period. Conclusions: The Marlux built-in silver disposable curtain is effective in reducing cross-transmission of nosocomial pathogens to patients on hemodialysis in MRSA Hemodialysis Area. It only needs to be replaced every two months. It decreases the operation costs of laundering and labor. It saves HKD 340 for each replacement of disposable curtains. It is also saved 26 hours manpower for the replacement. Workload of staff is reduced and the risk of fall is minimized, enhancing occupational health.