November 9, 2017

Editor

International Journal of Infection Control

Dear Editor,

Enclosed please find our manuscript entitled “**Analysis of the role of** **copper impregnated composite hard surfaces, bed linens and patient gowns** **in reducing *Clostridium difficile* and Multi Drug Resistant Organism healthcare-associated infection rates using a multi facility analysis within a healthcare system**”.

The prevalence of “health-care associated infections” (HAIs), especially those caused by antibiotic resistant bacteria, is increasing alarming worldwide. Despite the introduction of rigorous infection control measures in most major medical centers, it is clear that the current modalities to reduce HAIs are not sufficient. The cost of the infections and the countermeasures is astronomical and estimated to cost the health care system billions of dollars annually. Thus, any additional modality shown to effectively reduce HAIs should be examined carefully.

The concept that potent self-disinfecting soft and hard surfaces, in direct or indirect contact with patients, can significantly contribute to reduction of HAIs, is gaining recognition. A recent study (Sifri CD, Burke GH, Enfield KB. Reduced health care-associated infections in an acute care community hospital using a combination of self-disinfecting copper-impregnated composite hard surfaces and linens. *Am J Infect Control* 2016; **44**: 1565-1571) reported that using self-disinfecting copper oxide-containing linens and composite hard surfaces in a 204 bed acute care hospital belonging to Sentara Healthcare system, resulted in significant reductions of HAIs due to Multi Drug Resistant Organisms (MDROs) or *Clostridium difficile* relative to the baseline period before the introduction of the copper-impregnated products.

The current manuscript analysed potential confounders that may have affected the described results, specifically the role of new construction and of the introduction of Det Norse Veritas Managing Infection Risk (DNV MIR) certification, by undertaking a retrospective multi facility analysis within the Sentara Healthcare system. Our analysis found that the new construction and the DNV MIR were not significant confounders. Our study supports the conclusions of Sifri et al and others, that introducing potent self-disinfecting soft and hard surfaces, in direct or indirect contact with patients, can significantly contribute to reduction of HAIs and should be an additional measure to protect patients from HAIs.

All authors have seen and agreed to the submitted paper. The material is original, unpublished and has not been simultaneously submitted elsewhere. At the time of the study, author Burke was an officer of Sentara Healthcare, receiving no fees, funds, or other forms of compensation from non-employer sources, subsequently retiring in April 2017. At the time of the drafting of this manuscript, he is employed by EOS-surfaces, one of the manufacturers of the surfaces evaluated. Author Butler has no conflict of interest. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

We sincerely hope that you will find this manuscript suitable for publication in International Journal for Infection Control.

Sincerely,

Gene H Burke, MD., and Jacqueline P Butler, MLT (ASCP), CIC.

Emails: genehburke@gmail.com and jpbutler@sentara.com.