

Reviewer's report

Title: Reduction of Clostridium Difficile and vancomycin-resistant Enterococcus contamination of environmental surfaces after an intervention to improve cleaning methods

Version: 1 Date: 31 January 2007

Reviewer: Markus Dettenkofer

Reviewer's report:

General

The results of the work presented fit to the evidence that special attention should be given to proper environmental cleaning and disinfection in case of resistant or emerging pathogens.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

The term 'cleaning' should be used when detergents only are applied. In other cases (use of a disinfectant or a combination of detergent/disinfectant) the term 'disinfection' is more adequate.
A key question is whether the remarkable improvement in environmental decontamination achieved with the intervention did mostly depend on the adequate performance or on the use of chlorine bleach instead of a low level disinfectant. It is likely that adequate performance is much more important (this is also indicated by the authors' statement in the Background section on page 4, last sentence). This should be discussed. In case of VRE the use of approved low level disinfectants instead of the environmentally problematic chlorine is sufficient.
Spraying of disinfectants should be avoided whenever possible for patient and healthcare-worker safety reasons; instead, meticulous wiping with a soaked cloth is regularly more efficient (physical removal of dirt and microorganisms). This should be discussed.

Abstract, next to last sentence: "... disinfection by research staff" (add "staff")

Methods, last sentence of Setting section: Indicate the composition of the product mentioned (Super HDQ Neutral)

Methods, Pre-intervention ... section, page 6: "The sites cultured ..., toilet ..." Indicate whether the toilet seat was cultured.

Results, page 11, 2nd sentence: Were staff complaints related to the use of chlorine assessed ?

Figure 1: The numbers of the rooms assessed should be indicated

Discretionary Revisions (which the author can choose to ignore)

Discussion: Study limitations are listed properly.

To assess the impact of the intervention on infection rates would be most interesting. With respect to this topic the authors could discuss their findings in the background of the review published by our group in 2004 (Dettenkofer M et al. Does disinfection of environmental surfaces influence nosocomial infection rates? A systematic review. Am J Infect Control 2004;32:84-9)

What next?: Accept after minor essential revisions

Level of interest: An article of limited interest

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'