We read with great interest the letter by Silvestri and collaborators in response to our review article on VAP. As the authors emphasize, the use of selective digestive decontamination (SDD) and selective oropharyngeal decontamination (SOD) is strongly supported by the literature. However, we feel it is necessary to be cautious in fully recommending this intervention for two reasons: (i) meta-analyses and systematic reviews lack the precision to delineate potential negative or harmful consequences of an intervention, and (ii) we question the generalizability of the data to a global community with diverse population characteristics. For these reasons, our article suggests that SDD has a “modest” effect.

We believe that the most recently published meta-analysis of multiple intervention strategies for prevention of hospital-acquired pneumonia supports our position. This meta-analysis again confirms that only SDD among all the interventions used in the prevention of hospital acquired pneumonia, significantly decreases the rate of mortality compared with controls \([n=10,227]; \text{risk ratio (RR)} 0.84; 95\% \text{confidence interval (95\% CI)} 0.76-0.92; \text{P}<0.001\). However, careful review of the 30 randomized controlled trials included in the mortality assessment in this study, reveals that 24 studies did not reach a significant result supporting the survival benefit. The six studies that showed a significant decrease in mortality were performed in countries or hospitals with a prevalence rate of multidrug resistant organisms (MDRO) inferior or absent to many hospitals systems around the world, although baseline rates of MDRO are not regularly reported in the studies included in the mortality outcome of the mentioned meta-analysis. Therefore, the literature has not yet definitively answered the questions: (i) will SDD reduce mortality in places with high or moderate baseline prevalence of MDROs?, and (ii) will SDD protect accurately for the development of MDRO emergence in ICUs with moderate or high baseline prevalent vancomycin-resistant enterococcus (VRE) or methicillin resistant \emph{Staphylococcus aureus} (MRSA)?

Additionally, we believe that the question of whether SDD may cause harm has also not been definitively answered. Multiple studies, including one by the authors of the letter, report an increase in MRSA associated with SDD. This finding is particularly notable in the context of the recent study by Magill, et al. which reports that in 184 ICUs in the US, \emph{Clostridium difficile} and MRSA are the two most important pathogens causing healthcare associated infections. The antimicrobials utilized in the SDD do not cover MRSA or VRE, but may cause antimicrobial pressure due to the use of second or third generation cephalosporins. Finally, a real concern for the medical community in India is how the New Delhi metallo-\beta-lactamase 1 (NDM-1) in \emph{Pseudomonas aeruginosa} will behave when exposed to SDD therapy?
Clearly, the magnitude of applying an intervention that has been shown to increase the rate of MDROs or that has not been tested in high prevalent MDRO ICUs is a matter of concern. Therefore, we conclude that the decision to apply an intervention such as SDD to patients in an ICU, goes beyond the baseline reading and understanding of the current results published in the medical literature. In this particular case, a strict knowledge of the ecology with standardized surveillance programmes is critical before generalized application of the results of this intervention to the global community.

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