

Letter to the editor: Preventing nosocomial MRSA infections by screening

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Citation style for this article:

Verbrugh HA. Letter to the editor: Preventing nosocomial MRSA infections by screening. *Euro Surveill.* 2014;19(37):pii=20901. Available online: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20901>

Article submitted on 07 September 2014 / published on 18 September 2014

To the editor:

The systematic literature analysis and review by R Köck et al. [1] on targeted preventive measures to limit infections by methicillin-resistant *Staphylococcus aureus* (MRSA) is well done but surprisingly did not include the single most extensive intervention published to date, i.e. the Veterans Affairs (VA) initiative to combat MRSA in their acute care hospitals in the United States [2]. The introduction in the summer of 2007 of active screening, followed by contact isolation of positive patients, led to an impressive 62% decrease in MRSA infection in their intensive care units (ICUs) and a 45% reduction in non-ICU wards by the end of 2010. These reductions in MRSA infection rates were sustained and even reached 72% for ICU's and 65% for non-ICU's by June 2012 [3]. Nation-wide, virtually all (150/153) VA hospitals participated in this effort and millions of patients were screened, far surpassing the combined experiences of all studies that were included in the Köck review. Of note, such rapid positive effects of active MRSA surveillance and contact isolation are concordant with the predictions previously made by Bootsma et al. from their complex modelling of the MRSA epidemiology in acute care hospitals [4]. Interestingly, the same intervention was applied to all the 133 VA long term care facilities in 2009 and this led to a 36% reduction in MRSA infections in these facilities by the end of 2012 [5]. In that latter intervention, 12.9 million resident days were monitored.

The first evaluation of the VA initiative was mentioned by Köck et al., but only briefly in the discussion section of their review (reference 99 in their paper), but it remains to be explained why the VA initiative's experience was not included in the body of the review and presented in the Tables. The fact that the VA initiative was not primarily designed as a study but as a real-life intervention does not make it irrelevant for this review. The intervention was well executed (with very high compliance rates), closely monitored and did have pre- and post-intervention phases. As stated by Köck et al., very few randomised controlled trials have been done on MRSA control, and most data included in their Tables were derived from similar quasi-experimental

observational studies [1]. As the Review is now, the readership may fail to learn about the highly instructive VA MRSA prevention initiative.

Conflict of interest

None declared.

References

1. Köck R, Becker K, Cookson B, van Gemert-Pijnen JE, Harbarth S, Kluytmans J, et al. Systematic literature analysis and review of targeted preventive measures to limit healthcare-associated infections by methicillin-resistant *Staphylococcus aureus*. *Euro Surveill.* 2014;19(29):pii=20860.
2. Jain R, Kralovic SM, Evans ME, Ambrose M, Simbartl LA, Obrosky DS, et al. Veterans Affairs initiative to prevent methicillin-resistant *Staphylococcus aureus* infections. *N Engl J Med.* 2011;364(15):1419-30. <http://dx.doi.org/10.1056/NEJMoa1007474>
3. Evans ME, Kralovic SM, Simbartl LA, Freyberg RW, Obrosky DS, Rosell GA, et al. Veterans Affairs methicillin-resistant *Staphylococcus aureus* prevention initiative associated with a sustained reduction in transmissions and health care-associated infections. *Am J Infect Control.* 2013;41(11):1093-5. <http://dx.doi.org/10.1016/j.ajic.2013.04.015>
4. Bootsma Mc, Diekman O, Bonten MJ. Controlling methicillin-resistant *Staphylococcus aureus*: quantifying the effects of interventions and of rapid diagnostic testing. *Proc Natl Acad Sci USA.* 2006;103(14):5620-5. <http://dx.doi.org/10.1073/pnas.0510077103>
5. Evans ME, Kralovic SM, Simbartl LA, Freyberg RW, Obrosky DS, Rosell GA, et al. Nationwide reduction of health care-associated methicillin-resistant *Staphylococcus aureus* infections in Veterans Affairs long-term care facilities. *Am J Infect Control.* 2014;42(1):60-2. <http://dx.doi.org/10.1016/j.ajic.2013.06.004>