

Comment on: Occurrence of Vancomycin-Resistant *Staphylococcus aureus* (VRSA) in Clinical and Community Isolates with in the University of Port Harcourt



Hasan Cenk Mirza*

Department of Medical Microbiology, Başkent University, Faculty of Medicine, Turkey

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***Corresponding author:** Hasan Cenk Mirza, Department of Medical Microbiology, Başkent University, Faculty of Medicine, 06790, Ankara, Turkey

Keywords: Vancomycin, *S. aureus*, Resistance, Vancomycin-resistant *S. aureus*, VRSA, MIC

Abbreviations: EUCAST: European Committee on Antimicrobial Susceptibility Testing; VRSA: Vancomycin-Resistant *Staphylococcus aureus*; CLSI: Clinical and Laboratory Standards Institute

Sir,

I read with interest the article entitled 'Occurrence of Vancomycin-Resistant *Staphylococcus aureus* (VRSA) in clinical and community isolates within the university of Port Harcourt' [1]. The authors wanted to determine the prevalence of vancomycin-resistant *S. aureus* (VRSA) among 40 isolates of *S. aureus*. The authors used vancomycin disk diffusion method for the determination of VRSA. However, disk diffusion method is not reliable and should not be used for the determination of vancomycin resistance in *S. aureus* as well as coagulase negative staphylococci. Isolates of VRSA can be detected by vancomycin MIC testing [2].

Clinical and Laboratory Standards Institute (CLSI) has defined vancomycin MIC breakpoints for *S. aureus* as ≤ 2 $\mu\text{g}/\text{mL}$ (susceptible), 4-8 $\mu\text{g}/\text{mL}$ (intermediate) and ≥ 16 $\mu\text{g}/\text{mL}$ (resistant) [2]. The disk diffusion method with vancomycin was removed from the CLSI documents in 2009 because this method failed to distinguish vancomycin-susceptible strains from strains with vancomycin MIC of 4 to 16 $\mu\text{g}/\text{mL}$ [3]. Also, European Committee on Antimicrobial Susceptibility Testing (EUCAST) does not recommend the use of disk diffusion method with vancomycin for staphylococci [4].

Isolates of VRSA are very rarely described worldwide [5,6]. The authors have not found any isolates of VRSA in their study [1].

There is a high probability of absence of VRSA among the isolates, but vancomycin MICs of all isolates should be determined to make a final decision.

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