Review of: "Nasal Carriage of Staphylococcus aureus and Antibiogram among Medical Undergraduate Students of a Private University in Ogun State, Nigeria"

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Potential competing interests: No potential competing interests to declare.

Staphylococcus aureus colonization represents a major risk of infection in humans. Particularly, medical students who have continuous hospital exposure may represent an important source for the transmission and spread of *S. aureus* within this healthcare setting. Thus, the monitoring of nasal colonization by *S. aureus* in this population is an important measure in programs to control *S. aureus* infections in hospitals.

The study of Alli and colleagues analyzed nasal colonization by*S. aureus* in medical students from a private university in Ogun State, Nigeria. Moreover, the antimicrobial susceptibility profile of the isolates were also evaluated. The present study reports a prevalence of 34% of the total number of students analyzed. Among colonized students, 61.8% were carriers of MRSA. Besides cefoxitin, high rate of vancomycin resistance was also observed (47.1%).

There are several issues that need to be clarified, as listed below. In addition, an important issue concerns the ethics of the study. Although the authors report that they informed the content of the study and requested the consent form for sample collection, no identification of an approval document with the Ethics Committee was added to the study.

-The introduction presents repetition of information.

-Some information is unnecessary in the methodology, while others are missing.

As the study involves students from a specific hospital, more information about the structure and operation should be reported. For example, how many beds, average attendance, geographic region served, specialties, etc. Also, what is the meaning of the level of study? (200, 300, 400, 500, 600?)

Why did the authors rely on the incidence of*S. aureus* colonization in food handlers to calculate the number of study participants?

A questionnaire was applied to the study participants. What data was collected?

According to the description, only catalase and coagulase tests were used as biochemical parameters for the identification of *S. aureus*?

The antimicrobial susceptibility profile was determined by the disk diffusion method. Only for vancomycin, the agar dilution method was performed? What concentrations of vancomycin were tested? The results indicate a high percentage of vancomycin-resistant isolates. Which reference strains were used as quality control of the tests?

The presentation of the classification of bacteria as sensitive, intermediate and resistant is not necessary. The cuttoff that was used must be added (CLSI, EUCAST, other?)

-Results

What is the relationship between nose hygiene and colonization by *S. aureus*?

What is the relationship between the use of antibiotics and the presence of skin wounds and colonization by *S. aureus*?

Table 5 and Figure 2 show the same results. One form of presentation is sufficient.

Figures 3, 4, 5, 6, and 7 are unnecessary.

-Discussion

The discussion is based on comparing the results obtained in the present study with those described in the literature.

However, the population of these studies differs from that analyzed by the authors.

-Conclusion

As the authors came to the conclusion that “a major associate risk factor is misuse of antibiotics” (Abstract and Conclusion)? Apparently, no analysis of the study leads to this conclusion.

-The English language must be revised.