Review of: "The Global Impact on Health of Dental Infections and Antibiotic Resistance:A mini Reveiw"

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Potential competing interests: No potential competing interests to declare.

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Title: ***The Global Impact on Health of Dental Infections and Antibiotic Resistance: A mini Review***

In this manuscript, a description of the issue of antibiotic resistance in dentistry, originated from the overuse and misuse of antibiotics to treat caries and periodontitis, has been reported. The authors have highlighted the urgent need to face the important problem of antibiotic resistance and the importance to diffuse the knowledge of hygienic practices to be respected and conducted with regularity, aimed to improve dental health and reduce the occurrence of caries and periodontitis. In the meantime, recommendations for a correct use of antibiotics, avoiding overuse and misuse, have been evidenced in this manuscript. Genera and species of bacteria evidencing antibiotic resistance and frequently recovered associated with caries and periodontitis phenomena have been highlighted in the manuscript.

This mini-review contains important suggestions and recommendations, clearly indicating the right concepts and useful attitudes to adopt for better oral health in communities, paying great attention and raising awareness of the serious problem of antibiotic resistance and the need for the correct use of antibiotics.

A Conclusions section could be included in the manuscript to add final evaluations and insights for future research.

Revisions

In the text of the manuscript: ‘streptococci’, ‘cocci’, ‘staphylococci’, ‘fusobacteria’: these names must not be shown in italics, as they are not in a foreign language and do not indicate taxonomic categories;

Page 2, line 18: ‘… infections, especially those caused by bacterial …’ change to ‘… infections, specifically those caused by bacterial …’;

Page 4 lines 18-20: ‘Facultative anaerobes belong to the*viridans* group *streptococci* and the *anginosus* group *streptococci* are commonly implicated in dental abscess. The *viridans* group *streptococci* includes mitis group, *oralis* group, *salivarius* group, *sanguinis* group, and the *mutans* group. [28] The *anginosus* group (formerly referred to as “*Streptococcus milleri*” or *S. anginosus*) has also been reported with varying degrees of accuracy.’ Change to: ‘Facultative anaerobes belong to the viridans **[Not in Italics]** group streptococci **[Not in Italics]** and the *S. anginosus* **[Add *S.* standing for *Streptococcus*, leave in Italics as it is]** group streptococci are commonly implicated in dental abscess. The viridans**[Not in Italics]** group

streptococci **[Not in Italics]** includes *S. mitis* **[Add *S.* standing for *Streptococcus*, leave in Italics as it is]** group, *S. oralis* **[as in the previous species name]** group, *S. salivarius* **[as in the previous species name]** group, *S. sanguinis* **[as in the previous species name]** group, and the *S. mutans* **[as in the previous species name]** group. [28] The *S. anginosus* **[as in the previous species name]** group (formerly referred to as "*Streptococcus milleri*" **[leave in Italics as it is]** or *S. anginosus* **[leave in Italics as it is]**) has also been reported with varying degrees of accuracy.'

Page 4 line 24: '… with figures ranging …' change 'figures' to 'values';

Reference 28 Krukiewicz K. Materials Science and Engineering: C, 105, 110041: It is not possible to find this article, please check;

Reference 29: in this article, the antibacterial behaviour of copper nanoparticles against*Escherichia coli* ATCC-15224, resulting in bacterial growth inhibition, was investigated. *Staphylococcus epidermidis* was not mentioned in the reference n. 29, as reported in the manuscript, please check;

Reference 31: It seems difficult to find this article, please check;

The References in the list need a general check.