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Patrick M. Honore PhD
Elsa da Palma Afonso MSc
Stijn Blot PhD*

^a Intensive Care Unit Department, Faculty of Medicine of the
Université Libre de Bruxelles, Brugmann University Hospital, Brussels,
Belgium

^b Department of Internal Medicine and Pediatrics, Ghent University,
Ghent, Belgium

^c Senior Lecturer, School of Nursing and Midwifery, Anglia Ruskin
University, Cambridge, UK

* Address correspondence to S. Blot, PhD, Ghent University, Campus
UZ Gent, Corneel Heymanslaan 10, 9000 Ghent, Belgium.
E-mail address: stijn.blot@UGent.be (S. Blot).

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Customizing the indication of chlorhexidine mouthwash for critically ill patients: A reply letter to Honore P.M. and colleagues



Dear Editor,

We read with great interest the comments performed by Honore and colleagues¹ about our recently published article addressing the impact of a dental care intervention on the in-hospital mortality of critically ill patients.² We do agree with them that there is now enough evidence for not routinely using oral topical chlorhexidine

among hospitalized patients, for the purpose of preventing health-care-associated infections.^{3–5} Unfortunately, in Brazil, chlorhexidine mouthwashes are still largely used, especially in the intensive care setting, despite all the evidence of its negative impact on mortality.

On the other hand, our results point in the direction that chlorhexidine topical cautious application may do more good than harm to a specific subset of critical patients. We are talking here about people with intra-oral infectious diseases, such as deep caries, oral abscesses, or periodontal disease, for example. In most of these cases, the oral microbiome has long been deeply compromised, and, therefore, the negative impact of using chlorhexidine on that would be offset by its positive impact on controlling the oral infection and inflammation. Among our last study population, chlorhexidine was used in approximately one-third of all oral hygiene procedures (723/2136) performed by dentists. In such cases, dentists managed to focus the antiseptic application on the source(s) of infection, rather than generally applying it in the whole oral cavity.

If we do parallel thinking with systemic antibiotic use, similar outcomes are found. We mean, if adequate antibiotics are prescribed to patients with a treatable infectious disease, a clear clinical benefit is produced in most cases. However, when prophylactic antibiotics are prescribed for long periods of time, superinfections with *C. difficile*, yeasts, and multidrug-resistant microorganisms frequently arise, and no clinical benefit is obtained for the patient.^{6,7}

So, in conclusion, our perception goes in the direction that “one size does not fit all”, and a customized approach is the best way to go when considering the use of chlorhexidine mouthwash among critically ill patients.

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Wanessa Teixeira Bellissimo-Rodrigues, DDS, PhD

Mayra Gonçalves Meneguetti, RN, PhD

Anibal Basile-Filho, MD, PhD

Fernando Bellissimo-Rodrigues, MD, PhD*

^a Department of Social Medicine, Ribeirão Preto Medical School,
University of São Paulo. Ribeirão Preto, São Paulo, Brazil

^b *Department of Fundamental Nursing, Ribeirão Preto Nursing School, University of São Paulo, Ribeirão Preto, São Paulo, Brazil*

^c *Intensive Care Medicine Division, Department of Surgery and Anatomy, Ribeirão Preto Medical School, University of São Paulo, Ribeirão Preto, São Paulo, Brazil*

* Address correspondence to Fernando Bellissimo-Rodrigues, Departamento de Medicina Social, Faculdade de Medicina de Ribeirão Preto (USP), Campus Universitário, s/n, Monte Alegre. CEP: 14048-900. Ribeirão Preto, São Paulo, Brazil. E-mail address: fbellissimo@usp.br (F. Bellissimo-Rodrigues).

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