

## Reasons for Lack of an Ideal Disinfectant after Dental Treatments

**Authors :** Ilma Robo, Saimir Heta, Rialda Xhizdari, Kers Kapaj

**Abstract :** Background: The ideal disinfectant for surfaces, instruments, air, skin, both in dentistry and in the fields of medicine, does not exist. This is for the sole reason that all the characteristics of the ideal disinfectant cannot be contained in one; these are the characteristics that if one of them is emphasized, it will conflict with the other. A disinfectant must be stable, not be affected by changes in the environmental conditions where it stands, which means that it should not be affected by an increase in temperature or an increase in the humidity of the environment. Both of these elements contradict the other element of the idea of an ideal disinfectant, as they disrupt the solubility ratios of the base substance of the disinfectant versus the diluent. Material and methods: The study aims to extract the constant of each disinfectant/antiseptic used during dental disinfection protocols, accompanied by the side effects of the surface of the skin or mucosa where it is applied in the role of antiseptic. In the end, attempts were made to draw conclusions about the best possible combination for disinfectants after a dental procedure, based on the data extracted from the basic literature required during the development of the pharmacology module, as a module in the formation of a dentist, against data published in the literature. Results: The sensitivity of the disinfectant to changes in the atmospheric conditions of the environment where it is kept is a known fact. The care against this element is always accompanied by the advice on the application of the specific disinfectant, in order to have the desired clinical result. The constants of disinfectants according to the classification based on the data collected and presented are for alcohols 70-120, glycols 0.2, aldehydes 30-200, phenols 15-60, acids 100, povidone iodine halogens 5-75, hypochlorous acid halogens 150, sodium hypochlorite halogens 30-35, oxidants 18-60, metals 0.2-10. The part of halogens should be singled out, where specific results were obtained according to the representatives of this class, since it is these representatives that find scope for clinical application in dentistry. Conclusions: The search for the "ideal", in the conditions where its defining criteria are also established, not only for disinfectants but also for any medication or pharmaceutical product, is an ongoing search, without any definitive results. In this mine of data in the published literature if there is something fixed, calculable, such as the specific constant for disinfectants, the search for the ideal is more concrete. During the disinfection protocols, different disinfectants are applied since the field of action is different, including water, air, aspiration devices, tools, disinfectants used in full accordance with the production indications.

**Keywords :** disinfectant, constant, ideal, side effects

**Conference Title :** ICDMP 2023 : International Conference on Dental Medicine and Periodontology

**Conference Location :** London, United Kingdom

**Conference Dates :** December 11-12, 2023