

Dear Editor

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I refer to your editorial in the SADJ April 2022 77(3), and wish to highlight the need of the dental profession to take heed of rising antimicrobial resistance rates, and to focus on modifying their prescribing practices in an effort to mitigate this global crisis.

To understand and contribute to antibiotic stewardship, it is important that dental practitioners, including dental students, have the necessary knowledge of correct antibiotic prescribing guidelines and antimicrobial resistance. The overuse and misuse of antibiotics have contributed to the rise of antimicrobial resistance worldwide, with dentistry playing a part in the rise of antimicrobial resistance globally.

As a result of incorrect and overuse of antibiotics, many of these antimicrobial agents have become ineffective against simple infections.¹ When managing pain and swelling in dentistry, the correct diagnosis and eradication of oral infection forms an essential part of the dental treatment plan and the use of antibiotics should be limited as most dental infections respond well to clinical operative intervention.^{2,3}

Dental outpatient antibiotic prescriptions and hospital inpatient prescriptions account for the most commonly prescribed medications, with dentists accountable for about 10% of all antibiotics prescribed globally.⁴ Prescription of antibiotics in a dental setting for therapeutic and prophylactic measures is determined by specific clinical criteria. The guidelines and criteria for antibiotic prescribing in dentistry is explicitly stated in various guidelines published globally.^{5,6}

Recent studies have assessed students' knowledge, attitudes and compliance to antibiotic prescribing guidelines and habits. Many of these studies have highlighted that although a large portion of students correctly prescribed according to antibiotic guidelines followed at their dental school, there was also a significant portion of dental students' knowledge that was inadequate. This highlighted the need of curriculum redesign.^{7,8,9}

In South Africa, there is very little evidence about how the dental curricula fulfil antibiotic prescribing and antibiotic stewardship. The reality is that a dental student may

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Swarovski Fountain, Innsbruck, Austria
The Swarovski Fountain is the mouth of a grass-covered head which is the front of the crystal-themed museum called Swarovski Kristallwelten (Crystal Worlds). It belongs to the Swarovski company and it houses exhibitions related to their crystals. Despite its inner "material wealth", if humans could emulate this fountain by spreading words and deeds of crystalline purity, we may all live together in a greener, and more harmonious manner.

never receive additional training on antibiotic stewardship following graduation, so it is imperative that appropriate undergraduate training be conducted.

The dental profession has a responsibility to contemplate the consequences of their antibiotic prescribing choices, as the effect on both the patient and community carries a risk. The dental profession (including dental students) in South Africa can play a valuable role in antibiotic stewardship by prescribing antibiotics judiciously and appropriately and ultimately contribute to decreasing antimicrobial resistance rates and preserving the effectiveness of antibiotics for future generations.

Could it be time to evaluate the undergraduate curriculum to ensure competency amongst dental practitioners when it comes to antibiotic prescribing guidelines?

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