Predicting factors potentially increasing practitioners' probability of prescribing for dental pain

An investigation into possible factors that may impact on the potential for inappropriate prescriptions of antibiotics: a survey of general dental practitioners' approach to treating adults with acute dental pain. *Br Dent J* 2021 https://doi.org/10.1038/s41415-021-3008-x

Emergency slots are usually a daily occurrence in a general dental practitioner's surgery day list. They may be friend or foe to the dentist, depending on the primary complaint of the patient, and the time allocated by reception. In many practices, the average urgent slot will be around 20 minutes; this is 20 minutes to take on the roles of active listener, clinical detective, treatment planner and pain reliever. These are skills most dentists will be proficient at, but to what standard can they be carried out under such time pressure, and what factors may tempt the use of the prescription pad?

Irreversible pulpitis and acute apical periodontitis are two common pulpal diseases likely to present in toothache slots. These two conditions were utilised by the authors of this paper as hypothetical clinical scenarios in their questionnaire that was distributed to GDPs to assess the likelihood of inappropriate antibiotic prescriptions. The results of the survey were analysed including possible factors influencing respondents' decisions to prescribe. The researchers suggested four factors that were linked with inappropriate prescriptions including: no postgraduate qualification; receiving a primary dental qualification outside of the UK; appointments of less than 20 minutes; and low confidence in achieving adequate local anaesthesia for the patient in question.

The remedy for some factors, such as appointment time, seems unassumingly obvious, however, we are all aware the ideal and reality differs very quickly. Prescribing is undoubtedly one of the quickest 'treatments' we can provide, and perhaps with only a few minutes left of the toothache slot, it may seem better than doing nothing. Education and indications are crucial here; it may be easier to give the answer you know is correct when answering hypothetical scenarios, in comparison to doing so with a patient in agony before you.

It is widely recognised that antibiotics do not cure toothache. With clear guidelines on antibiotic usage and prescribing in the dental setting, along with this not being an effective treatment option, why are we still reaching for the prescription pad? Interestingly, this study found a much lower rate of inappropriate prescribing than studies have previously, which is a credit to the dental community. Specific factors identified in this study may allow a more targeted approach to encouraging the GDP's role in antimicrobial stewardship.

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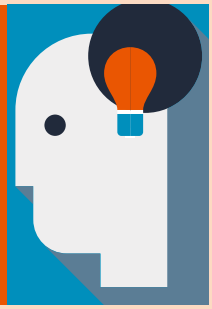

The more the topic of dental antibiotic stewardship is discussed, the better. While the world's populations are learning to exist with endemic, wily versions of SARS-CoV-2, the other slow-motion global pandemic of antibiotic resistance (AMR) poses challenges likened to climate change and global terrorism. Unless we all do what we can,[1] regardless of how futile our efforts may be perceived, treatments for infections will become ineffective and antimicrobial resistant infections will result in more deaths than from cancer.[2]

The researchers' well-designed clinical scenarios provide great examples in which a patient with acute dental pain would be best treated with a clinical intervention. The reasons why antibiotics are offered instead are now increasingly explored by active researchers. Awareness-raising, availability of excellent prescribing guidelines and advice in the UK, and the requirement by regulators implementing Health and Social Care legislation were, until March 2020, making significant prescribing improvements with the UK dentistry's appropriate prescribing bettered only by a few countries, notably in Scandinavia. The authors provide an excellent overview of contributing factors and some barriers to good antibiotic stewardship from the perspective of general dental practice.

It is not fair to say that all UK dentists have abandoned their properly informed prescribing principles during the last 14 very difficult months, but challenging restrictions on service provision and perverse contractual arrangements have not made it easy to act in the best interests of patients and society.[3] Dental antibiotic prescribing in England has significantly increased[4] highlighting the need for support for dental practices for properly funded time to manage scheduled and unscheduled urgent care needs. The evolving Wales GDS contractual model appreciates this.

The onus is largely on the individual dental prescriber to use antibiotics wisely and responsibly, and to enable engagement of patients in their valid consent.[5] The authors correctly highlight the differences in prescribing culture and behaviour between different countries as a significant issue. FDI's White Paper, *The essential role of the dental team in reducing antibiotic resistance*,[6] seeks to drive global awareness and encourage those interested to take the lead in stewardship activities.

References

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