EDITORIAL

The opioid crisis in the USA

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When it comes to prescribing by dentists in the UK, our immediate thoughts in recent times have jumped to antibiotic stewardship, so the opioid crisis in the USA may have passed most of us by. Yet it is a growing public health emergency. The crisis has its roots in the 1990s, when pharmaceutical companies reassured the medical community that patients would not become addicted to opioid pain relievers, and healthcare providers were incentivised to prescribe opioids for chronic pain. Increased prescribing led to widespread misuse of prescription and non-prescription opioids before it became clear that these medications could indeed be highly addictive. Between 1999 and 2017, the number of opioid-related deaths per year increased six-fold; in total nearly 218,000 people have died in the US from prescription opioid related overdoses with the number of deaths per year, six times higher in 2017 than in 1999.¹ In 2017, it is estimated that 11.4 million people were misusing prescription opioids with 46 dying each day from overdoses involving prescription opioids.¹

With better understanding of the addictive nature of opioids, doctors, insurance companies, and US states have attempted to restrict opioid prescriptions. To circumvent this, persons who misuse opioids have participated in 'doctor shopping' for different sources of prescription opioids and, in some cases, turning to illicit drug supplies.

In the US, dentists are second only to family physicians in the number of opioids prescribed.^{2,3} Dentists are also the leading source of opioids for children aged 10 to 19, accounting for 31% of all opioid prescriptions in this age group.³ Studies show that dentists prescribe opioids in greater quantities, at higher strength, and for longer periods than are necessary to control dental pain.³ Unsurprisingly, more than half of opioids prescribed following tooth extraction remain unused.⁴ This releases an

estimated 100 million opioid pills a year that can be diverted to other purposes creating a huge potential for opioid misuse.⁴

A study just published in *JAMA Network Open*,⁵ compared opioid prescribing by dentists in the United States and England. In the US 22.3% of all dental prescriptions were for opioids compared to just 0.6% of English dental prescriptions. This equated to 35⁴ prescriptions

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/1000 of the US population compared with 0.5/1000 of the English population or 58.2 prescriptions per US dental provider compared with 1² prescription per English dental provider. The only opioid prescribed by dentists in England was dihydrocodeine. The vast majority of analgesic prescriptions by dentists in England were for non-steroidal anti-inflammatory drugs (NSAIDs) or paracetamol.

These differences are huge despite similar patterns of dental attendance and no significant differences in oral health quality indicators.⁵ In the US, dentists prescribe opioids, often very potent opioids, in preference to NSAIDs. While in England and most other parts of the world, dentists overwhelmingly prescribe NSAIDs in preference to opioids. The use of NSAIDs and paracetamol for dental pain management in the UK is due in part to the Dental Practitioners Formulary that restricts opioid prescribing to dihydrocodeine.⁶ In addition, practice guidelines promote NSAIDs for dental pain management,^{6,7} and both undergraduate and postgraduate dental education emphasise evidence-based dental practices. A recent overview of systematic reviews of analgesic

medications used in the management of acute dental pain, covering 460 studies and over 58,000 individuals, concluded that NSAIDs, either alone or in combination with acetaminophen, were equal or superior to opioid-containing medications. In addition, opioids and opioid medication combinations were associated with higher rates of acute adverse events.⁸ It would appear that the good sense of

the UK dental profession, and its adherence to evidence-based dentistry, have helped us provide the best care for our patients at the same time as avoiding the difficulties faced by our colleagues in the US. ■

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DOI: 10.1038/s41415-019-0420-6