Antibiotic resistance in dentistry - 
ADA addresses the problem

World Antimicrobial Awareness Week (WAAW) starts tomorrow (November 18) and in recognition of this World Health Organization initiative, the Australian Dental Association (ADA) is shining a light on this issue which affects not only its 17,000 members but also other dentists and patients worldwide.

Dental prescriptions account for approximately 10% of the total number of antibiotic prescriptions every year around the world, and studies have demonstrated that when it comes to severe dental infections in Australia, 11% are resistant to penicillin, and 13% are resistant to multiple antibiotics which presents significant treatment challenges.

In recognition the ADA has signed the WHO’s international pledge to address the problem.

“The ADA has signed the international pledge to deal with the issue which results in 700,000 deaths worldwide annually from antimicrobial resistance across a range of health issues,” explains Dr Sue-Ching Yeoh, an Oral Medicine Specialist and Chair of the ADA’s Dental Therapeutics C’tee.

“It affects our profession because of the challenges dental clinicians face in treating these infections, and because penicillin-resistant dental infections are associated with longer stays in hospital.”

What does this mean for patients? “The most effective management of dental infection and toothache is treatment of the dental issue – whether it’s fillings, periodontal treatment for gum disease, root canal therapy or extraction.

“In most cases, antibiotics should only be used as an adjunct to these dental treatments, not as definitive management on their own, but as a device for stopping infection in tandem with dental procedures - otherwise it’s just a band aid measure.”

Dr Yeoh added that all prescribers, including dentists, have a responsibility to prescribe antibiotics judiciously and appropriately to minimise the contribution towards antibiotic resistance.

“The pledge we’ve signed indicates the ADA’s commitment to improving the use and prescription of antibiotics, to encourage the dental community to contribute to global efforts to tackle antibiotic resistance.

“Antimicrobial stewardship is of great concern to the profession and most dentists understand it’s something always to be acutely aware of when treating and prescribing. As a peak body, we need to keep addressing it as it is a significant issue for dentists.”

More follows....
Background:

What is the ADA doing to address the issue?

The ADA frequently runs Continuing Professional Development events such as lectures and webinars for its members about dental prescribing and management of dental infections.

It prioritises education of its member dentists, stressing that the best treatment for dental infection is usually a dental procedure (extraction, root canal therapy, periodontal procedures) rather than antibiotics, reinforcing the need for judicious use of oral antibiotics. Antibiotics are rarely the first line of treatment for an infected tooth.

There are, of course, some situations where antibiotics are appropriate particularly if the patient has a spreading infection, facial swelling, and systemic signs/symptoms (fever etc) but this does not tend to be the majority of cases.

Dentists should be using antibiotics as an adjunct to dental treatment, not as a replacement for appropriate dental treatment.

There are many factors that contribute to antibiotic resistance. The basic principle is that some bacteria can develop or evolve some mechanisms to protect themselves from the effects of antibiotics. When these antibiotics are used, these bacteria don’t die, but in surviving and subsequently reproducing, a new population of antibiotic-resistant bacteria are formed. This means that if they’re exposed to the same antibiotic again, the medication will be less effective in killing the bacteria, and therefore less effective in managing the infection.

There are many strains of bacteria that can develop resistance, and some that develop resistance to multiple drugs, known as multidrug resistance.

Ends.