# UPFRONT

deaths, the American Medical Association have suggested a range of public health policies to tackle this emerging epidemic. A key suggestion being proposed is an outright ban of e-cigs which are not FDA approved.<sup>3</sup> As healthcare professionals we should be aware of current guidance on their use, potential benefits and risks.

We are hoping in this letter to highlight the potential risks of e-cig 'explosions' and the consequences of such events. Within the last six months alone we have seen several cases of orofacial trauma due to exploding e-cigs within OMFS and acute oral surgery settings. Injuries included multiple extra-oral and intra-oral hard and soft tissue injuries which has led to facial scarring and loss of tooth structure.

It is acknowledged that e-cigs are rechargeable electrical appliances and so an inherent risk of explosion and fire is possible. We wonder how often the current readership discuss the possible risks and consequences of such occurrences with their patients on a day to day basis.

We feel the use of e-cigs are an important tool to be used in smoking cessation and with evidence suggesting it is 95% less harmful than smoking<sup>1</sup> dental professionals should have insight on the benefits of their use. We have, however, a duty to protect patients and help inform their oral and overarching healthcare decisions and due to this we feel it is pertinent to highlight the small but present risk of 'explosion' during our smoking cessation sessions with patients.

M. Dingle, A. Travers, Liverpool, UK

#### References

- NHS Smoke Free. E-cigarettes/vapes. Updated 2019. Available at: https://www.nhs.uk/smokefree/help-andadvice/e-cigarettes (accessed 27 October 2019).
- Public Health England. Vaping in England: an evidence update February 2019. 27 February 2019. Available at: https://www.gov.uk/government/publications/vapingin-england-an-evidence-update-february-2019 (accessed 21 January 2020).
- American Medical Association. Berg S. AMA: Stop sales of e-cigarettes that lack FDA approval. 20 November 2019. Available at: https://www.ama-assn. org/delivering-care/public-health/ama-stop-sales-ecigarettes-lack-fda-approval (accessed 21 January 2020). https://doi.org/10.1038/s41415-020-1267-6

# Oral medicine

## Diabetic ketoacidosis

Sir, SGLT2 inhibitors are used to treat diabetes. They inhibit sodium-glucose transport protein 2, preventing glucose resorption in the kidneys, and lowering blood sugar.<sup>1,2</sup> These drugs increase the risk of diabetic ketoacidosis (DKA), which can be a life-threatening condition. This manifests as nausea, abdominal pain, tachypnoea, fatigue. and ketotic breath.<sup>3</sup> DKA is usually associated with very high blood glucose levels.

DKA is said to affect one in a thousand individuals taking SGLT2 inhibitors, but the real incidence may be higher, given the tendencies to misdiagnosis and underreporting. The risk of DKA in all diabetic patients is increased in fasting, dehydration, acute illness or following surgery,<sup>3,4</sup> and so healthcare professionals working in secondary care must remain vigilant to this risk of SGLT2 treatment.<sup>2</sup> Diagnosis is more difficult as the DKA can exist with near-normal blood glucose levels. Once diagnosed, management involves insulin therapy, fluid replacement and electrolyte correction.<sup>4</sup>

Dental surgeons working in hospitals may not yet be aware of the NICE guidance recommending that these drugs are discontinued during admissions to hospital for acute serious illnesses or major surgery.<sup>3</sup> *F. Chasma, Liverpool, G. Cousin, Blackburn, UK* 

#### References

- National Institute for Health and Care Excellence. Empagliflozin. Available at: https://bnf.nice.org.uk/drug/ empagliflozin.html (accessed 20 November 2019).
- Ray G M, Rodriguez C, Schulman S M, Sarangarm P, Bardack M, Bouchonville M F. Empagliflozin-induced diabetic ketoacidosis unmasking a type 1 diabetes diagnosis. *Clin Pract Cases Emerg Med* 2019; 3: 140–143.
- Medicines and Healthcare products Regulatory Agency. SGLT2 inhibitors: updated advice on the risk of diabetic ketoacidosis. 18 April 2016. Available at: https://www. gov.uk/drug-safety-update/sglt2-inhibitors-updatedadvice-on-the-risk-of-diabetic-ketoacidosis (accessed 22 January 2020).
- Anthony S, Dixit D. Understanding SGLT2 inhibitors' diabetic ketoacidosis risk. *Pharmacy Times* 16 August 2016. Available at: https://www.pharmacytimes. com/contributor/deepail-dixit-pharmd-bcps/2016/08/ understanding-sglt2-inhibitors-diabetic-ketoacidosis-risk (accessed 21 January 2020).

https://doi.org/10.1038/s41415-020-1268-5

# Dental public health

### Aggrieved of Jeddah

Sir, as an aggrieved public health dentist, I would like to express my concerns over the fading speciality of dental public health. According to Wikipedia it is a speciality that deals with prevention of oral diseases and promotion of oral health but with growing dental practice across the globe, prevention of oral diseases and promotion of oral health has become the norm.<sup>1</sup> As a public heath dentist, it is my primary duty to educate the masses and other clinicians to practise preventive strategies. I am required to instruct and encourage other dental specialities to have a preventive approach to oral diseases, however, if all the other specialities adopt this utopian strategy I have no other option than to stand aside as a mere spectator.

Almost all the public health dentists I know are attached to teaching institutes, for instance in the Indian subcontinent they view themselves as teachers or referral units.<sup>2</sup> They participate in oral health camps all over the country and instead of providing oral health prevention or treatment, they end up 'referring' the patients to their respective dental schools and thus increasing the school's patient quota (patent requirement mandated by the dental governing body).2 In a recent study assessing the inclination of undergraduate students towards public health dentistry, Naidu et al. state that only one third (35%) of them had a positive attitude towards the speciality.3 This attitude could be viewed as a direct testament to the demise or waning of the speciality in the region. Now is the time to act. A failproof strategy has to be devised and mobilised before this speciality becomes an entity of the distant past.

Increasing the prospects of this speciality beyond teaching or providing health promotion tactics is one way. The dental public health workforce can be employed at research centres. It should be mandated that every research establishment in a country (including the pharmaceutical corporations) should have an oral health division manned completely by public health dentists. All the primary healthcare centres or rural health centres in a country should have a team of exclusively public health dentists. Every country should have an efficient School Oral Health Programme as mandated by the World Health Organisation (WHO).4 Thus, prompt action should be taken before this already diminishing speciality is no more.

F. Taha, Jeddah, Saudi Arabia

#### References

- Birch S, Bridgman C, Brocklehurst P *et al.* Prevention in practice – a summary. *BMC Oral Health* 2015; **15 Suppl** 1: S12. doi: 10.1186/1472-6831-15-S1-S12.
- Gambhir R S, Kaur A, Singh A, Sandhu A R S, Dhaliwal A P S. Dental public health in India: an insight. J Family Med Prim Care 2016; 5: 747–751.
- Naidu G M, Prasad G M, Kandregula C R, Babburi S, Kvnr P. Choosing public health dentistry as a career: a crosssectional study. J Clin Diagn Res 2014; 8: 199–202.
- Centers for Disease Control and Prevention (CDC). Impact of targeted, school-based dental sealant programs in reducing racial and economic disparities in sealant prevalence among schoolchildren--Ohio, 1998-1999. MMWR Morb Mortal Wkly Rep 2001; 50: 736–738.

https://doi.org/10.1038/s41415-020-1269-4