

## Letters to the editor

### OVERVIEW

Please submit letters for the editor's consideration within three weeks of receipt of *Clinical Medicine*. Letters should ideally be limited to 350 words, and sent by email to: [clinicalmedicine@rcplondon.ac.uk](mailto:clinicalmedicine@rcplondon.ac.uk)

### A review of the health effects of smoking shisha

Editor – We read with interest the review on the health effects of smoking shisha (*Clin Med* 2015;15:263–66): an important and under-appreciated topic. We wish to highlight the development of chronic obstructive pulmonary disease (COPD) as a further important long-term consequence of shisha smoking on the respiratory system.

Persistent airway inflammation may lead to poorly reversible airflow obstruction (COPD), chronic sputum production (chronic bronchitis) and breakdown of the alveolar membranes (emphysema). The most important aetiological factors are cigarette smoke and biomass exposure. Like cigarette smoke, shisha smoke can act as the necessary inflammatory stimulus and there is a misconception that water 'filters' the smoke.

In support of this, a Lebanese study estimating the national COPD burden found it to be twice as prevalent in exclusive shisha smokers compared to non-smokers.<sup>1</sup> COPD prevalence was significantly positively correlated with number of water-pipe years. Among the subjects with the greatest exposure, those with 40 water-pipe years, there was a 37.2% prevalence of COPD.<sup>1</sup> The BREATHE study was a large cross-sectional study surveying 62,000 people in eleven Middle-Eastern countries. Data were collected on respiratory symptoms and smoking. A significant association was observed between chronic bronchitis and shisha use (corrected for concurrent cigarette use).<sup>2</sup> Elsewhere it has been shown that there is a strong dose-relationship between shisha smoke exposure and prevalence of chronic bronchitis.<sup>3</sup> In Chinese water-pipe smokers (a variant on the Middle-Eastern pipe where the tobacco is lit directly instead of using coals) the rate of radiologically diagnosed emphysema was higher than in cigarette smokers or non-smokers.<sup>4</sup>

These clinical data are supported by animal models: chronic airway inflammation with eventual airflow limitation typical of COPD has been demonstrated using water-pipe smoke in mice. Mice exposed to shisha smoke for 30 minutes per day for five days develop neutrophilic inflammation of their airways and an increase in tumor necrosis factor-alpha and interleukin-6 present in broncho-alveolar lavage fluid.<sup>5</sup>

As COPD is set to become the third leading cause of death worldwide by 2020<sup>6</sup> it is essential for all physicians to recognise shisha smoking as an increasingly important cause of COPD, to ask about shisha exposure, and to warn patients of the risks to their health including COPD. ■

LEWIS BUSS

Medical student, UCL Respiratory, University College London, London, UK

JOHN R HURST

Reader in respiratory medicine, UCL Respiratory, University College London, London, UK

### References

- 1 Waked M, Khayat G, Salameh P. Chronic obstructive pulmonary disease prevalence in Lebanon: a cross-sectional descriptive study. *Clin Epidemiol* 2011;3:315–23.
- 2 Tageldin MA, Nafti S, Khan JA *et al*. Distribution of COPD-related symptoms in the Middle East and North Africa: Results of the BREATHE study. *Respir Med* 2012;106 Suppl 2:S25–32.
- 3 Waked M, Salameh P, Aoun Z. Water-pipe (narguile) smokers in Lebanon: a pilot study. *East Mediterr Health J* 2009;15:432–42.
- 4 She J, Yang P, Wang Y *et al*. Chinese water-pipe smoking and the risk of COPD. *Chest* 2014;146:924–31.
- 5 Khabour OF, Alzoubi KH, Bani-Ahmad M *et al*. Acute exposure to waterpipe tobacco smoke induces changes in the oxidative and inflammatory markers in mouse lung. *Inhal Toxicol* 2012;24:667–75.
- 6 Murray CJ, Lopez AD. Mortality by cause for eight regions of the world: Global Burden of Disease Study. *Lancet* 1997;349:1269–76.

### A national support service

Editor – Your editorial (*Clin Med* 2015;15:219–20) covers two points about the health of doctors; the first from the report *Work and wellbeing in the NHS; why staff health matters to patient care*<sup>1</sup> highlights that working in the NHS at present is extremely challenging, and some doctors are suffering ill health as a consequence of the demands placed upon them. The report unfortunately does not mention the Royal College of Physicians (RCP) and Faculty accreditation scheme for occupational health services, Safe, Effective, Quality Occupational Health Service (SEQOHS; [www.seqohs.org](http://www.seqohs.org)). The Boorman Report called for access to quality-assured occupational health services, and SEQOHS accredited occupational health services bring higher confidence in the efficacy of interventions. The actions identified in the report are very sensible and occupational physicians welcome them.

The second point in the editorial mentions the recent General Medical Council (GMC) report *Doctors who commit suicide while under GMC fitness to practise investigations*.<sup>2</sup> The report relates the significant challenges some doctors present when they are unwell. It is well known that some doctors ignore, or minimise symptoms, and are reluctant to seek help from their normal medical advisers and seek informal advice from colleagues.