Guest editorial

Chronic obstructive pulmonary disease

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In 2004, the WHO estimated chronic obstructive pulmonary disease (COPD) to be the 4th leading cause of death worldwide1 and the 10th most prevalent cause of moderate and severe disability.²

This disease is characterised by an insidious onset, difficulty in diagnosis (at least in the early stages), and the availability of relatively few therapeutic options (the more efficacious and newer of which are prohibitively expensive for the vast majority of our population). The aetiology of COPD is tobacco smoke in most cases, a fatal habit so powerfully addictive that most sufferers never succeed in relinquishing it. Future predictions are that in 2015, tobacco will account for 10% of all deaths worldwide.3

The economic burden of COPD extends beyond the costs of medication. It includes premature death, hospitalisation for acute exacerbations, days off work, and the long-term medical and financial support required for those with significant lung function impairment. The social burden of COPD, estimated by DALYs (disability-adjusted life years), which take into account years of life lost due to premature death and years of life lived with disability (adjusted for the severity of disease), is predicted to account for the 5th leading cause of DALYs lost worldwide by 2020.4

Tobacco smoking is the largest preventable cause of morbidity and mortality worldwide. Not only is it the most important cause of COPD, but it is also associated with other respiratory disorders, cardiovascular disease and the development of a myriad of malignancies. That smoking also poses significant health risks to passive smokers (including children in the household) is now scientifically irrefutable.

This edition of CME serves to highlight this illness, its complications and extrapulmonary effects, to alert physicians to the clinical management options available, and to dispel the nihilistic attitude of yesteryear. The article by Dr Black provides a pragmatic approach to the diagnosis of COPD, an aspect still poorly performed by many health care workers. This initial step is crucial if we are to make any impact on this chronic disease. Dr Abdool-Gaffar provides a concise state-of-the-art summary of the currently available medications for COPD, as well as an update on newer drugs on the market, while Dr Smith highlights the concept of COPD representing a systemic

disease, a move away from the traditional tenet that this is a disease affecting only the lungs. This is followed by Professor Irusen and Dr Plekker addressing the non-pharmacological strategies recommended for patients with COPD, an oft-forgotten aspect of the holistic approach to the patient.

Professor Mer reports on the identification and management of acute exacerbations of COPD, a not infrequent complication and one which incurs a massive economic burden to health care. Professor Lalloo and Dr Ambaram draw attention to the lesser-recognised causes of COPD, particularly occupational and environmental exposures and tuberculosis, all of which are relevant to the South African context.

Dr Krige provides a practical approach for the physician faced with a COPD patient who wishes to travel by air. Professor Mpe discusses the indications and benefits of long-term domiciliary oxygen therapy, an expensive modality of treatment, but one that has been shown to improve quality of life in patients with end-stage COPD.

Finally, an issue usually and unfortunately relegated to anti-tobacco lobbyists, rather than to medical personnel, is that of preventive strategies for COPD. Smoking cessation should be a topic taught at all medical schools and raised at every medical consultation with a smoker. Billions of dollars are spent by pharmaceutical companies in the research and development of drugs for COPD, yet relatively little is spent on finding new methods of inducing patients to quit smoking and implementing smoking cessation programmes. Let us as doctors put as much effort into preventive medicine as into therapeutics. In so doing, we can save our patients from dying of asphyxia or one of the other complications of COPD.

- 1. The Top Ten Causes of Death. WHO fact sheet No. 310. Nov 2008. http:// www.who.int/mediacentre/factsheets/fs310_2008.pdf
- 2. The Global Burden of Disease: 2004 update. Part 3: Disease incidence, prevalence and disability. http://www.who.int/healthinfo/global_burden_ disease/GBD_report_2004update_part3.pdf
- Mathers CD, Loncar D. Projections of global mortality and burden of disease from 2002 to 2030. PLoS Med 3(11): e442. doi:10.1371/journal. pmed.0030442.
- Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease (updated 2008). http://www.goldcopd.org