Are you a regular passive smoker?

Perhaps one of the most important questions you can ask your patients right now is whether they are regular passive smokers. We routinely document the smoking behavior of patients as being 'current', 'previous', or 'never', but often neglect to take into account the smoking behavior of those around them. Physician knowledge of a patient's secondhand-smoke exposure not only enables more-accurate assessment of cardiovascular risk, but also provides the opportunity to pass on valuable information about the cardiovascular impact of passive smoking to the patient. This action could reduce the patient's exposure to secondhand smoke and (hopefully) prompt their friends and family to cut down on the amount they smoke.

Numerous studies over the past few years have demonstrated that exposure to secondhand smoke, even at low levels, can increase the risk of coronary heart disease by 25–30%. Indeed, the large amount of accumulating data on the impact of passive smoking on cardiovascular risk was reflected by the World Heart Federation's focus on the cardiovascular effects of tobacco, including the effects of second-hand smoke exposure, at the World Congress of Cardiology in June.

Many governments have recognized the health problems associated with passive smoking and have followed the WHO's recommendations for bans on smoking in public places. These population-wide interventions have had dramatic results on cardiovascular health. A meta-analysis published last year demonstrated that bans on smoking in public places in 10 locations throughout North America and Europe had resulted in an 8% reduction in the overall risk of acute myocardial infarction, with risk reducing by 14% for each year of observation after the implementation of the antismoking legislation (Meyers, D. G., *et al.* *J. Am. Coll. Cardiol.* **54**, 1249–1255; 2009). Another meta-analysis demonstrated a 17% reduction in the risk of acute myocardial infarction 12 months after the ban on smoking (Lightwood, J. M. & Glantz, S. A. *Circulation* **120**, 1373–1379; 2009). Among the studies included in the meta-analyses, those that provided data on the smoking status of patients showed larger reductions in cardiovascular risk in non smokers than in smokers, highlighting the impact of passive smoking.

However, although many in the general population are aware that active and passive smoking increase their risk of respiratory problems, few are aware of the disastrous effects that smoking and secondhand-smoke exposure can have on their cardiovascular health. A study on the impact of antismoking legislation in Canada demonstrated a 39% reduction in hospital admissions for cardiovascular conditions after introduction of a ban on smoking in restaurants,

which was larger than the 33% reduction in admissions for respiratory conditions (Naiman, A. *et al.* *CMAJ* **182**, 761–767; 2010). Passing on this type of information to patients is imperative.

Exposure to secondhand smoke in public places is only part of the problem. In a large European study of 135,233 'never smokers', published earlier this year, secondhand-smoke exposure at home was associated with a 38% increase in risk of death from cardiovascular disease (Gallo, V. *et al.* *Epidemiology* **21**, 207–214; 2010). The investigators found that this relationship was influenced by dose, and patients exposed to more than 1 h of secondhand smoke at home each day were twice as likely to die from cardiovascular disease than those not exposed. These findings highlight that, whilst noting whether a patient smokes and educating them on the associated risks is important, it is also essential to determine whether a patient is regularly exposed to secondhand smoke at home and to actively encourage them to talk to their friends and family to find ways to minimize this exposure. If household members aren't willing to quit smoking altogether, even simple behavioral modifications, such as agreeing not to smoke inside, could have major ramifications on the cardiovascular health of every individual in that household.

As Sidney Smith, President Elect of the World Heart Federation, highlighted at the World Congress of Cardiology in June, "getting people with heart disease to stop smoking and avoid exposure to secondhand smoke improves outcomes as much or more than any single medical treatment we can offer." Current guidelines recommend that clinicians regularly ask patients whether they smoke. The abundant available evidence clearly indicates that we must go a step further. Now is the time to start routinely asking your patients: "are you a regular passive smoker?"

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Competing interests
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