

# Green respiratory healthcare: need for proportionality

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The Montreal Protocol on Substances That Deplete the Ozone Layer was an example of an amazing international collaboration that has already led to improvements in the ozone layer, although the full effects will not be seen for decades. As part of the process, large numbers of medical aerosols were reformulated such that chlorofluorocarbons were replaced as propellants in pressurised metered dose inhalers (pMDIs) by new hydrofluoroalkane (HFA) propellants. This involved a massive commitment by the pharmaceutical industry to ensure that those with respiratory ill health continued to receive their medication in familiar but improved inhalers. However, these HFA propellants have a global warming effect, and this has led specialist societies and health service leaders to more recently call for prescribers and patients to consider switching from pMDIs to inhaler devices without propellants, although many patients will still need a pMDI for use in an emergency.<sup>1</sup> Others have recently additionally drawn attention to the benefits of using small-volume HFA 134a pMDIs or those containing lower global warming propellants.<sup>2</sup> An article in this issue of *Thorax*<sup>3</sup> shows how the environmental burden of pMDIs could be reduced if England, for example, changed to a level of dry powder inhaler use, compared with pMDI use, equivalent to that in Sweden. Information such as this is helpful to inform decision making; however, we do need to see these issues in context.

Non-compliance/adherence in long-term medical conditions is a massive problem with significant effects on morbidity, mortality and health service usage in those with asthma and chronic obstructive pulmonary disease.<sup>4,5</sup> Suboptimal communication between patients and health professionals plays a major part in this.<sup>6</sup> Telling patients they need to change their inhaler 'for the environment' may well please some but could unsettle an even bigger number who already are suspicious the 'drugs'

are dangerous, or they will become dependent on them. Trying to assist this process by suggesting that changing the inhaler might be as beneficial as moving to a plant-based diet may help, but the reality is that a dramatic reduction in air travel, or having less children or new forms of energy production could make a change of inhalers almost inconsequential. While every little helps, as the late Professor Sir David Mackay wrote in his superb book *Sustainable Energy—without the Hot Air*,<sup>7</sup> some actions like switching off the phone charger when not in use can be equivalent to baling out the Titanic with a teaspoon. Switching off the phone charger for 1 day is equivalent to 1 s of car driving. We are seeing here material which might drive policy, which might unsettle a significant respiratory population and stigmatise patients when a modicum of actions elsewhere might make any such risk less necessary. By all means, heed advice to consider changing patients to less environmentally damaging inhalers, but let us do so within a wider context. Doctors overfocus on the prescription, but offering the prescription in a shared decision-making manner, coupled with appropriate personalised motivation and self-management support, along with the eliciting of patients fears, concerns and expectations, is essential if we are to enhance compliance. With regard to the environment, are the same physicians who are endorsing policy statements about switching inhalers offering telephone consultations to avoid unnecessary travel, avoiding use of unnecessary one-use plastic disposables, rigorously separating medical waste from household-type waste to avoid unnecessary incineration, avoiding use of nebulisers, switching off the air conditioning in the endoscopy unit at weekends, and walking or cycling to work or sharing a car trip with a colleague? Did we really need to fly to respiratory conferences in the USA and Europe last year?

The science is okay in Janson *et al*'s paper, the motive good but clearly commercial. In clinical practice we must maintain proportionality and reduce the unnecessary potential wobbling of a highly morbid population by being

equally or even more active in other areas of sustainable respiratory healthcare. Green respiratory healthcare is an issue for us all to address and planned actions must be cognisant of all that we do. Inhaler propellants may have a global warming effect but we must not allow ourselves to be so inhaler or prescription centric that we overlook the other immense possibilities for reducing the damaging effect of healthcare on the environment. Only when we have considered all the other issues should we also address the question of inhaler switching and in this process we must not stigmatise or unsettle an already highly morbid population.

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