How should health professionals take action against climate change?

BMA report outlines the problems, but falls short in providing solutions Newsewsews, p 740

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"The scientific evidence is now overwhelming: climate change is a serious global threat, and it demands an urgent global response." This was the unequivocal message of the Stern report, published by HM Treasury last year.1 The time for debate is over—at least about whether climate change is potentially catastrophic and caused by human activity. But who should act and how? This week, the BMA Board of Science publish their report Health Professionals—Taking Action on Climate Change.2 It outlines the basic facts and figures and points to copious sources of further information.

The report endorses Stern's conclusion that, "urgent action is needed now at an individual, organizational, political and global level." It summarises evidence about cause and effect, then considers the health implications. A diagram (from the Lancet) points to floods, storms, and other forms of environmental damage leading to "impaired nutrition, health, survival."

Turning to how the effects of climate change can be reduced, the report says that the government's sustainable development strategy, Securing the Future, must be implemented.3 Another diagram, from the International Panel on Climate Change (IPCC), lists "key mitigation technologies and practices that are currently commercially available" and those expected to be on tap by 2030. So how can a service be developed for this growing and diverse group of patients? The UK government has recently launched a new initiative that explores methods of followup for (adult) survivors of cancer.7 Also, the National Institute for Health and Clinical Excellence has recently published guidelines on improving outcomes in children and young people with cancer, which identified several important key points.8

The first is the need for information. A summary of the surgery, chemotherapy, and radiotherapy received—which is kept by the patient but can also be provided to the primary healthcare team—is key to understanding the late effects of treatment. The second is the need for a special-ist multidisciplinary team with expertise in the late effects of treatment. This team might include an endocrinologist, psychologist, and specialist nurse. The third is the need for a key worker—who can be immediately accessed at any time—to be allocated to each patient. The key worker would be part of the multidisciplinary team, but the individual may change as the patient's needs change over time.

The move towards risk stratification of patients proposed in the previous review published in the BMJ remains appropriate but has not yet been universally implemented. Patients who are at high risk of late effects-for example, those who have received cranial radiotherapy, anthracyclines, or a bone marrow transplant—will require ongoing observation by skilled clinicians with an interest in the specific problems that these patients face. However, some patients may not need this service and other models for alternative follow-up have been proposed. For patients who are at low risk of late effects, a succinct accessible summary of the patient's previous treatment with a plan for any necessary investigations and likely late effects could be the solution. This could be managed by primary care doctors, providing they have access to expertise at the treatment centre. Other patients who may need closer surveillance may benefit from ongoing contact with a specialist nurse who could refer them back to the multidisciplinary team if necessary. Only those with the highest risk of late effects should probably be brought back regularly to the clinic.

These models could also be extended to adults who have survived cancer, but further research is required to identify the extent of the problem, the need for support of both physical and psychological needs, and indeed the views of survivors, about which little is known.9 10 Although many patients will benefit from ongoing followup others must be allowed to move on—to leave the clinical setting and put the experience of cancer behind them. If we keep calling patients back to the clinic some may never believe they have been cured.

Wallace HWB, Blacklay A, Eiser C, Davies H, Hawkins M, Levitt GA, et al. 1 Developing strategies for long term follow-up of survivors of childhood cancer.

Robison LL, Mertens AC, Boice JD, Breslow NE, Donaldson SS, Green 2 DM, et al. Study design and cohort characteristics of the childhood cancer survivor study: a multi-institutional collaborative project. Med Pediatr Oncol 2002;38:229-39.

Hawkins MM, Lancashire ER, Winter DL, Frobisher C, Reulen RC, Taylor 3 AJ, et al. The British childhood cancer survivor study: objectives, methods, population structure, response rates and initial descriptive information. Pediatr Blood Cancer 2007 Sep 11.

Oeffinger KC, Mertens AC, Sklar CA, Kawashima T, Hudson MM, 4 Meadows AT, et al; Childhood Cancer Survivor Study. Chronic health conditions in adult survivors of childhood cancer. N Engl J Med 2006;355:1572-82. Geenen MM, Cardous-Ubbink MC, Kremer LC, van den Bos C, 5 van der Pal HJ, Heinen RC, et al. Medical assessment of adverse health outcomes in long-term survivors of childhood cancer. JAMA 2007;297:2705-15.

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Deniz K, O'Mahony S, Ross G, Purushotham A. Breast cancer in women 6 after treatment for Hodgkin's disease. Lancet Oncol 2003;4:207-14.

Cancer Services Collaborative "Improvement Partnership." http://7 www.cancerimprovement.nhs.uk/.

National Institute for Health and Clinical Excellence. 8 Improving outcomes in children and young people with cancer. Guidance on cancer services. 2005. www.nice.org. uk/page.aspx?o=268841.

Zebrack BJ, Eshelman D, Hudson M, Mertens AC, Cotter KL Foster 9 BM, et al. Health care for childhood cancer survivors: insights and perspectives from a Delphi panel of young adult survivors of childhood cancer. Cancer 2004;100:843-50.

Earle EA, Davies H, Greenfield D, Ross R, Eiser C. Followup care for 10 childhood cancer survivors: a focus group analysis. Eur J Cancer 2005;41:2882-6.

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Next, carbon emissions and footprints are explained. In the United Kingdom, the average emission is equivalent to 10 tonnes of CO2 each person each year. Most personal emissions come from household energy consumption and travel, with a sizeable chunk associated with purchases of consumable goods. A sustainable individual footprint is 2 tonnes of CO2 each year. That means a staggering reduction of 8 tonnes per person.

So what solutions does the report propose? Several measures, it tells us, can reduce the amount of CO2 that we emit. These include carbon offsetting, carbon trading, and "contraction and convergence." Each solution is briefly explained, with references so that people can find out more. No effort is made to assess the relative merits of these very different strategies.

The report sets out what is being done globally, by the European Union and by the UK government to tackle climate change. It provides recommendations for health professionals. Measure your own carbon footprint; turn appliances off; improve ventilation and insulation; save water; reduce waste; buy fresh local produce; and cut down on meat, dairy products, and saturated fats. Avoid overly processed or packaged foods and bottled water. Use public transport, walk and cycle more, cut unnecessary flying and driving.

Of the NHS, the report says that—as the largest organisation in the UK, with an annual purchasing budget of more than £17bn (€21.5bn; \$34bn)—it must take urgent action to reduce its carbon footprint. It sets out examples of where such action might be taken—in building works and in managing energy, water, waste, and transport. It does not mention procurement, which accounts for the largest part of the NHS's carbon footprint. For health professionals who want to find out more, the report provides usefully referenced summaries of evidence. Hopefully, however, it will soon be followed by a more concerted effort to confront the heavily barbed challenges of climate change. It mentions, all too briefly, that climate change can affect mental health, and that measures to reduce greenhouse gases can help reduce the risk of cancer, heart disease, obesity, other chronic illnesses, and injuries caused by road traffic crashes. These are vital themes that must be paid closer attention by health professionals and policy makers. It sits on the fence about methods of carbon reduction, as though they were equivalent options. Yet carbon offsetting is a highly controversial way of compensating for carbon emissions, rather than reducing them. And contraction and convergence is a profoundly radical strategy for each person on the planet to arrive at equitable and sustainable per capita greenhouse gas emissions.4

The report offers no view on what should happen if NHS trusts fail to cut their massive direct and indirect emissions. It makes no suggestions about how trusts can make sure that their contractors give priority to mitigating climate change. It points out that health professionals "have a responsibility to highlight the public health risks of climate change as well as the numerous health benefits associated with more environmentally friendly economic activities and lifestyles." Yet it does not discuss where carbon reduction should stand in the hierarchy of clinical responsibilities. Nor does it suggest what health professionals should do if they find their government is dragging its feet-for example, in giving sufficient priority to its own sustainable development strategy. Here, surely, is the crux of the matter for the BMA. We have the science. We have something approaching consensus about the causes and scale of the problem. Now what is required, from one of the UK's most powerful trade associations that is well able to influence cabinet ministers and governments, is a sustained evidence based campaign to match the enormity of the risks to human health.

HM Treasury. 1 Stern review final report. 2007. www. hm-treasury.gov.uk/independent_reviews/stern_review_economics_climate_change/stern_review_report. cfm.

BMA Board of Science. 2 Health professionals—taking action on climate change. 2008. www.bma.org. Ministry of Justice. 3 Securing the future: proposals for the efficient and sustainable use of custody in England and Wales. 2007. www.justice.gov.uk/publications/ securing-the-future.htm.

Global Commons Institute. 4 Contraction and convergence. A global solution to a global problem. 2008. www.gci.org.uk/contconv/cc.html.