

inevitably unreliable, but that does not mean that the *total* numbers of malaria deaths are correspondingly unreliable.<sup>4</sup> The main question is whether the overall proportion of deaths ascribed to malaria was at least approximately correct. The case series described by your correspondents do not directly address this; most are hospital-based (and therefore underestimate the relative importance of malaria as a cause of death in untreated patients) and, importantly, none includes a representative sample of all deaths. Hence, although N K Shah and colleagues suggest a case-fatality rate of only 0.1–0.3% for *P falciparum*, the true risk of death in rural untreated individuals with fever due to *P falciparum* could well be an order of magnitude higher.

Our study provides substantial evidence that malaria causes far more deaths in rural India than had previously been estimated by indirect methods; it also shows that there are even larger numbers of avoidable rural deaths from acute febrile illnesses other than malaria.

We declare that we have no conflicts of interest.

Vinod P Sharma, \*Prabhat Jha, Neeraj Dhingra, Raju M Jotkar, Richard Peto  
jhap@smh.ca

Centre for Rural Development and Technology, Indian Institute of Technology, New Delhi, India (VPS); Centre for Global Health Research (CGHR), Dalla Lana School of Public Health, University of Toronto, ON M5B 2C5, Canada (PJ, RMJ); National AIDS Control Organization, New Delhi, India (ND); St John's Research Institute, Bangalore, India (RMJ); and Clinical Trial Service Unit & Epidemiological Studies Unit (CTSU), University of Oxford, Oxford, UK (RP)

- 1 National Institute of Malaria Research & National Vector Borne Disease Control Programme. In-depth review on malaria for National Vector Borne Disease Control Programme. New Delhi: National Institute of Malaria Research & National Vector Borne Disease Control Programme, 2007.
- 2 Registrar General of India, Centre for Global Health Research. Causes of death in India, 2001–2003, sample registration system. New Delhi: Government of India, 2009.
- 3 Dhingra N, Jha P, Sharma VP, et al, for the Million Death Study Collaborators. Adult and child malaria mortality in India: a nationally representative mortality survey. *Lancet* 2010; **376**: 1768–74.

- 4 Maude GH, Ross DA. The effect of different sensitivity, specificity and cause-specific mortality fractions on the estimation of differences in cause-specific mortality rates in children from studies using verbal autopsies. *Int J Epidemiol* 1997; **26**: 1097–106.

## Doctors talk climate change—students take action

Ian Roberts and Robin Stott (Nov 27, p 1801)<sup>1</sup> call for collective action from health professionals against the causes of climate change. Students can have a vital role in the debate on the effects of climate change on health.

The International Federation of Medical Students' Associations (IFMSA) represents more than 1.2 million medical students from more than 100 countries. Climate change is a key policy focus of the federation, which pursues meaningful political action in the national and international arenas. Students have developed intensive workshops on climate change and health. Run all over the world, these aim to empower more students with the skills needed for meaningful action. Attendees are encouraged to lead by personal example and influence the institutions where we study and work to reduce emissions. In Australia, for example, educational videos and posters cover the hospital common rooms, announcing a "Code green emergency".<sup>2</sup>

On the national scene, medical students urge ministers of health to discuss the health-related effects of climate change with their environment and energy ministers. In the UK, for example, medical students have targeted the general public through a petition and their politicians by marching in front of Parliament.<sup>3</sup>

On the basis of our experiences, we urge the following:

(1) Climate change and its effect on health should be included in students'

core medical curricula.<sup>4</sup> Future doctors should become familiar with the scientific evidence and be comfortable with their role in society as public health advocates.

(2) Health professionals as individuals and their representative organisations must lobby their local and national authorities to reduce emissions. The Climate and Health Council can have a mediating role in this process.

(3) Human health should be on the agenda of the international negotiations in the upcoming UN 17th Conference of Parties in Durban, South Africa, so as to achieve a fair, ambitious, and legally binding global treaty.

If we ignore the initial symptoms of climate change, the effects on health become greater. If we fail to adapt to climate change adequately, we as future physicians will be the first to cope with the catastrophic consequences.

We declare that we have no conflicts of interest.

\*Robbert J Duvivier, Nick R Watts, Silva Rukavina, C J Kaduru  
robberduvivier@gmail.com

International Federation of Medical Students' Associations, PO Box 63, 01212 Ferney-Voltaire, France

- 1 Roberts I, Stott R. Doctors and climate change. *Lancet* 2010; **376**: 1801–02.
- 2 Australian Medical Students' Association. Code green: AMSA's climate change policy. <http://www.amsa.org.au/climate> (accessed Feb 21, 2011).
- 3 Medsin. Healthy Planet has three key aims. <http://www.medsin.org/campaigns/healthyplanet> (accessed Feb 21, 2011).
- 4 IFMSA, EMSA, Hilgers J, De Roos P. European core curriculum: the students' perspective, Bristol, UK, 10 July 2006. *Med Teach* 2007; **29**: 270–75.

## Health benefits of policies to mitigate climate change

The Comment on health co-benefits of policies to tackle climate change (Nov 27, p 1802)<sup>1</sup> is timely in reinforcing points made in earlier publications in *The Lancet*. It is also an encouraging example of how academies, through their

For the IFMSA website see <http://www.ifmsa.org/>



Reuters

networks, are becoming active in communicating evidence to inform international policy making.

Academies of science in their network the European Academies Science Advisory Council (EASAC) have also recently focused on issues associated with climate change, in this case collating evidence for some of the direct effects on health.<sup>2</sup> EASAC documented changes in the European incidence and distribution of human and animal infectious diseases, particularly vector-borne, which might already be attributable to climate change, and identified priorities for future surveillance, research, and disease control.

Developments in Europe are part of much larger global challenges: health systems and policy makers worldwide need to be prepared for the possible emergence of new threats from infectious disease as well as the expansion of diseases already present. Even though the evidence base is fragmented and other determinants of change in ecosystems and in human, animal host, vector, and microbial behaviour must be taken into account, quantification of these effects is increasingly important as a basis for assessing the direct benefits expected to be delivered by mitigation strategies alongside the co-benefits.

EASAC, like the InterAcademy Medical Panel, supports the growing role of academies in the medical and scientific communities to raise awareness about the relevance of health issues in wider policy debates. Although substantial problems exist, their causes can be understood and, collectively, we have the capability to affect the situation.

We declare that we have no conflicts of interest.

\*Robin Fears, Volker ter Meulen  
robinfears@aol.com

EASAC, German National Academy of Sciences Leopoldina, 06108 Halle (Saale), Germany

- 1 Ganten D, Haines A, Souhami R. Health co-benefits of policies to tackle climate change. *Lancet* 2010; **376**: 1802–804.

- 2 European Academies Science Advisory Council. Climate change and infectious diseases in Europe. [http://www.easac.eu/fileadmin/PDF\\_s/reports\\_statements/Climate\\_change\\_and\\_infectious\\_diseases\\_in\\_Europe.pdf](http://www.easac.eu/fileadmin/PDF_s/reports_statements/Climate_change_and_infectious_diseases_in_Europe.pdf) (accessed Nov 30, 2010).

As an organisation of graduate students in medicine, environment, engineering, public health, and the basic sciences united by our interests in global health, we applaud *The Lancet's* efforts in publicising the health effects of climate change.<sup>1,2</sup>

As representatives of a younger generation schooled in the era of climate change research and discovery, we believe that climate change's relation with health is self-evident. Yet few of our mentors are discussing it and few medical journals (or other journals) publish with consistency on this issue that is sure to shape so many of our careers. The more that health professionals understand about climate change and health now, the easier it will be to adapt to and mitigate against these changes in the future. Thank you authors, and thank you *The Lancet*.

We declare that we have no conflicts of interest.

Duke University Global Health  
Working Group  
timothy.bouley@duke.edu

Duke University, Durham, NC 27701, USA

- 1 Ganten D, Haines A, Souhami R. Health co-benefits of policies to tackle climate change. *Lancet* 2010; **376**: 1802–804.
- 2 Roberts I, Stott R. Doctors and climate change. *Lancet* 2010; **376**: 1801–02.

## The role of business in public health

In his Correspondence (Jan 8, p 121),<sup>1</sup> the UK's Secretary of State for Health, Andrew Lansley, argues that your Editorial<sup>2</sup> had misleadingly implied that his policy is unduly subordinated to the agenda of the food and drinks industry. His claim is, however, difficult to reconcile with the text of his earlier policy document *A Healthier Nation*.<sup>3</sup>

In that document, Lansley and colleagues indicated that they would introduce no further regulations to control the food and drink industries, but instead would pursue only voluntary agreements. The implication of that approach was to grant the food and drink industry a veto over any policy initiatives. The analysis provided by your Editorial was therefore entirely legitimate.

I declare that I have no conflicts of interest.

Erik Millstone  
e.p.millstone@sussex.ac.uk

Science and Technology Policy Research, Freeman Centre, University of Sussex, Brighton BN1 9QE, UK

- 1 Lansley A. The role of business in public health. *Lancet* 2011; **377**: 121.
- 2 The Lancet. McPolicy: bringing you the Big Mac society. *Lancet* 2010; **376**: 1800.
- 3 Conservative Party. A healthier nation: policy green paper no. 12. [http://www.conservatives.com/News/News\\_stories/2010/01/A\\_Healthier\\_Nation.aspx](http://www.conservatives.com/News/News_stories/2010/01/A_Healthier_Nation.aspx) (accessed Feb 15, 2011).

## Department of Error

Grover A, Citro B. India: access to affordable drugs and the right to health. *Lancet* 2011—The order, numbering, and details of some of the references in this Comment (March 19) were incorrect. The online version has been corrected as of March 18, 2011; the printed Comment has also been corrected.

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