

Global governance is a key part of the solution to antimicrobial resistance (response to Gravatt)

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Dear Editor—we thank Dr Gravatt (<http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2016/vol-129-no-1447-16-december-2016/7116>), responding to our 28 October editorial,¹ and fully agree there is an urgent need for more local, New Zealand-specific action on antimicrobial resistance (AMR). Our response is otherwise two-fold.

Firstly, global efforts and local/national efforts to address AMR are not mutually exclusive, and can be pursued in parallel. While global governance can seem unwieldy and take many years, it has delivered many major health and environmental successes:

- In infectious disease control—the complete global eradication of smallpox² and the cattle disease, rinderpest;³
- The near eradication globally of polio⁴ and Guinea worm;⁵
- A greatly enhanced global approach to assessment, reporting and responding to emerging infectious disease and related threats through the International Health Regulations 2005;⁶
- A successful global tobacco control treaty (the Framework Convention on Tobacco Control);⁷
- A highly successful treaty for control of chlorofluorocarbons threatening the ozone layer (the Montreal Protocol);⁸
- Relatively successful treaties to control nuclear weapons proliferation (Treaty on the Non-Proliferation of Nuclear Weapons), to ban nuclear weapons testing (Comprehensive Nuclear-Test-Ban Treaty), to ban both chemical and biological weapons and to ban cluster bombs/landmines;

- Limited but significant international progress on climate change (eg, the Paris Agreement of 2015).

The anti-globalisation sentiment referred to by Dr Gravatt is probably more nuanced than suggested. Opposition to the Trans-pacific Partnership Agreement (TPPA), for example, was based on opposition to a particular form of globalisation that required ceding of sovereignty to trans-national corporate interests, rather than a repudiation of all forms of global governance as such.^{9,10} In parallel with rising nationalism in some states, there is also a strong public sentiment that international agreements on issues like climate change are essential.¹¹ In an intensively integrated global economy, the need for international cooperation and coordination to address global health issues is greater than ever.

Secondly, antimicrobial stewardship is just one aspect of the AMR problem. The other, arguably more important aspect in our globalised world is the transmission of resistant organisms across international borders and into communities and healthcare settings as a result of travel, immigration and displacement.¹² This means that as well as national stewardship programmes, we need a national response plan to address specific AMR threats. This is analogous to response plans for emerging transmissible diseases such as Ebola and pandemic influenza (ie, plans that involve active surveillance coupled with targeted public health interventions).

We thank Dr Gravatt and the *Journal* for enabling this discussion, and welcome further comments on the important issue of controlling AMR.¹

Competing interests:

Scott Metcalfe and Peter Murray continue to be writing in their private capacities, but are also PHARMAC employees; views expressed, or not expressed, do not necessarily represent those of PHARMAC.

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REFERENCES:

1. Metcalfe S, Baker MG, Freeman J, Wilson N, Murray P. Combating antimicrobial resistance demands nation-wide action and global governance. *N Z Med J*. 2016; 129(1444):8–14. <http://www.nzma.org.nz/journal/read-the-journal/all-issues/2010-2019/2016/vol-129-no-1444-28-october-2016/7042>
2. Henderson DA. Principles and lessons from the smallpox eradication programme. *Bull World Health Organ* 1987; 65:535–46.
3. Njeumi F, Taylor W, Diallo A, Miyagishima K, Pastoret PP, et al. The long journey: a brief review of the eradication of rinderpest. *Rev Sci Tech* 2012; 31:729–46.
4. Gentile A, Abate H. A new challenge for the world: the eradication of polio. *Arch Argent Pediatr* 2016; 114:557–62.
5. Hopkins DR, Ruiz-Tiben E, Eberhard ML, Roy SL, Weiss AJ. Progress Toward Global Eradication of Dracunculiasis -January 2015-June 2016. *MMWR* 2016; 65:1112–16.
6. Baker M, Forsyth A. The new International Health Regulations: A revolutionary change in global health security. *NZ Med J* 2007; 120:U2872
7. Burki TK. WHO Framework Convention on Tobacco Control conference. *Lancet Oncology* 2014; 15:e588.
8. Andersen SO, Halberstadt ML, Borgford-Parnell N. Stratospheric ozone, global warming, and the principle of unintended consequences—an ongoing science and policy success story. *J Air Waste Manag Assoc* 2013; 63:607–47.
9. Keating G, Freeman J, Macmillan A, Neuwelt P, Monasterio E. TPPA should not be adopted without a full, independent health assessment. *N Z Med J*. 2016; 129(1430):7–13.
10. Thow AM, Gleeson DH, Friel S. What doctors should know about the Trans-Pacific Partnership Agreement. *Med J Aust*. 2015; 202(4):165–6. <http://www.mja.com.au/journal/2015/202/4/what-doctors-should-know-about-trans-pacific-partnership-agreement>
11. Hundreds Of Thousands Turn Out For People's Climate March In New York City. *Huffington Post* 09/21/2014 http://www.huffingtonpost.com/2014/09/21/peoples-climate-march_n_5857902.html
12. van der Bij AK, Pitout JD. The role of international travel in the worldwide spread of multiresistant Enterobacteriaceae. *J Antimicrob Chemother*. 2012; 67(9):2090–100.