



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

endorsement unmask another incoherency in Germany's international policy<sup>3,4</sup> regarding global health.

If Germany's commitment for global health is expected to go beyond engagement in the health sector, improved alignment of its international policies with respect to global governance for health<sup>5</sup> is urgently needed.

The existence and use of nuclear weapons fundamentally threatens human survival on the planet.<sup>2</sup> We therefore call on the new German Government to align their international policies with their commitment to global health, meaning to sign and implement the treaty and consequently to withdraw any nuclear weapons from German soil.

E-MS-S is a member of the Executive Board of the German section of the International Physicians for the Prevention of Nuclear War. KB declares no competing interests.

\*Kayvan Bozorgmehr,  
Eva-Maria Schwienhorst-Stich  
kayvan.bozorgmehr@med.uni-  
heidelberg.de

University Hospital of Heidelberg, Heidelberg 69120, Germany (KB); and International Physicians for the Prevention of Nuclear War/Medical Mission Institute, Wuerzburg, Germany (E-MS-S)

- 1 UN General Assembly. Treaty on the Prohibition of Nuclear Weapons. New York: United Nations, 2017. <http://undocs.org/A/CONF.229/2017/8> (accessed Dec 6, 2017).
- 2 Haines A, Helfand I. Treaty to prohibit nuclear weapons: towards safeguarding humanity. *Lancet* 2017; **390**: 1819–20.
- 3 Kickbusch I, Franz C, Holzscheiter A, et al. Germany's expanding role in global health. *Lancet* 2017; **390**: 898–912.
- 4 Bozorgmehr K, Bruchhausen W, Hein W, et al. Germany and global health: an unfinished agenda? *Lancet* 2013; **382**: 1702–03.
- 5 Kickbusch I, Szabo MMC. A new governance space for health. *Glob Health Action* 2014; **7**: 23507.

## Singapore should play a strong leadership role in global health

The regions of the Association of Southeast Asian Nations continue to face several health threats associated with infectious and chronic diseases,

ageing populations, and inadequate clean water and sanitation. Collective action is needed among the Asian countries to deal with these threats, and Singapore has much to offer in terms of knowledge and innovations.<sup>1</sup> In 2017, Singapore was ranked in the top position in progress towards the health-related UN Sustainable Development Goals<sup>2</sup> and in the Global Innovation Index 2017 (a metric among Asian countries).<sup>3</sup>

In what areas can Singapore contribute? First, in dealing with outbreaks of infectious disease. After the outbreak of severe acute respiratory syndrome in 2003 and, more recently, outbreaks of dengue, chikungunya, and Zika virus, Singapore has developed innovative technologies to control mosquito populations with wolbachia bacteria<sup>4</sup> and affordable, easy-to-use mosquito traps called Gravitraps. Singapore has also been very successful in raising awareness and engaging the public through campaigns such as the so-called Mozzie Wipeout Campaign and the Dengue Community Alert System.

Second, many of the more than 70% of deaths globally caused by chronic diseases such as cancer, diabetes, and heart disease are linked to smoking, and pose additional challenges in ageing populations. Singapore is often regarded to be a leading example of successful implementation and enforcement of the Framework Convention on Tobacco Control, an international legal treaty to curb use of tobacco globally. Singapore has implemented important policy innovations in raising prices or taxes of tobacco products, in tobacco packaging and labelling, and in strictly enforcing bans on promotion, advertising, and sponsorship of tobacco. Further, Singapore will reduce illicit trade of cigarettes and sales to minors by gradually increasing the legal age for tobacco sale from ages 18 to 21 between 2019 and 2021.

Third, many diseases are closely linked to lack of clean water and poor sanitation, as exemplified by the current

outbreak of cholera in Yemen with more than 1 million cases and more than 2000 deaths occurring as a result. WHO and UNICEF estimate that 2.1 billion people, mostly in developing countries, have no safe water at home. In this regard, Singapore's pioneering and highly successful NEWater<sup>5</sup> is a world leader in technology to produce high-grade, clean, and potable reclaimed water from treated used water.

In the spirit of the Association of Southeast Asian Nations, it is time for Singapore to assume a leadership role in the region and spread such mutually beneficial and much-needed ideas and innovations. How could it do this? Singapore could, for example, establish a Singapore International Development Agency, akin to the UK's Department for International Development, that would be tasked with spreading and sharing Singapore-led innovations to help countries in the region to solve their health problems. Improving the health of its neighbours will also clearly benefit Singapore in the longer term. To paraphrase John F Kennedy, it is time for Singapore to ask not what Singapore can do for itself but ask how the rest of the world can learn and benefit from Singapore.

I declare no competing interests.

Tikki Pang  
spptep@nus.edu.sg

Lee Kuan Yew School of Public Policy, National University of Singapore, Singapore 259772

- 1 Horton R. Offline: The post-American age. *Lancet* 2017; **390**: 1476.
- 2 GBD 2016 SDG Collaborators. Measuring progress and projecting attainment on the basis of past trends of the health-related Sustainable Development Goals in 188 countries: an analysis from the Global Burden of Disease Study 2016. *Lancet* 2017; **390**: 1423–59.
- 3 Dutta S, Lanvin B, Wunsch-Vincent S, for Cornell University, INSEAD, World Intellectual Property Organisation. The Global Innovation Index 2017: innovation feeding the world. 10th edn. 2017. [http://www.wipo.int/edocs/pubdocs/en/wipo\\_pub\\_gii\\_2017.pdf](http://www.wipo.int/edocs/pubdocs/en/wipo_pub_gii_2017.pdf) (accessed Nov 5, 2017).
- 4 Lam L. Wolbachia study to control dengue shows promise. *The Straits Times* (Singapore) Feb 9, 2017. <http://www.straitstimes.com/singapore/wolbachia-study-to-control-dengue-shows-promise> (accessed Nov 5, 2017).
- 5 PUB: Singapore's National Water Agency. NEWater. <https://www.pub.gov.sg/watersupply/fournationaltaps/newater> (accessed Nov 29, 2017).