

The National Academies report and the Comment by Keusch and colleagues propose the establishment of a coalition of international stakeholders. We argue that such a coalition can only be coordinated by a supranational entity that is global and impartial in nature, and that the R&D Blueprint is already fulfilling this function.

Since its inception, the WHO R&D Blueprint has carried out two epidemic threat assessments and defined a priority list of diseases⁵ that are likely to cause epidemics in the future. For each of these diseases, WHO is preparing R&D roadmaps and developing a profile of the kinds of vaccines, medicines, and diagnostics we would need to address them. These standards will guide the research of our partners and will ensure that everyone works according to the same parameters for quality, safety, and efficacy, in line with good participatory practices.⁶ We are also supporting expansion of capacity to implement adequate study designs, developing tools to frame collaborations and exchanges, and generating evidence to inform regulatory review and policy development.

The west African Ebola epidemic showed a tremendous upsurge of efforts and good will to find cures and save lives. It also showed the competitive spirit that is typical of scientific research, where “getting there first” is not just a matter of professional pride but also carries financial risks and the potential for large profits. This is the fundamental reason why only a global organisation such as WHO, which has no vested interests, is equipped to coordinate global medical R&D efforts during epidemics, and ensure that those efforts will truly serve populations at risk and safeguard public health.

We declare no competing interests.

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- 2 Keusch GT, McAdam KPJW. Clinical trials during epidemics. *Lancet* 2017; **389**: 2455–57.
- 3 WHO. Emergencies preparedness, response. <http://www.who.int/blueprint/en/> (accessed June 3, 2017).
- 4 Henao-Restrepo AM, Camacho A, Longini IM, et al. Efficacy and effectiveness of an rVSV-vectored vaccine in preventing Ebola virus disease: final results from the Guinea ring vaccination, open-label, cluster-randomised trial (Ebola Ça Suffit!). *Lancet* 2017; **389**: 505–18.
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- 6 WHO. Good participatory practice guidelines for trials of emerging (and re-emerging) pathogens that are likely to cause severe outbreaks in the near future and for which few or no medical countermeasures exist (GPP-EP). WHO Press: Geneva. 2016. <http://www.who.int/blueprint/what/norms-standards/GPP-EP-December2016.pdf?ua=1> (accessed June 3, 2017).

Palestinian surgical training: local faculty, local delivery

We write with an update to *The Lancet World Report*,¹ entitled “Scalpel solidarity: surgery in Palestine” (June 18, 2011, p 2069).

The update retains an innovative quality, despite the timescale, because the endeavour itself is associated with the basic right to life. With little or no emergency access to a specialist surgical centre, having a well trained local general surgeon and supportservices is vital. *The Lancet* Commission on Global Surgery² sparked debate about access to surgical treatment of a good standard in low-income and middle-income countries. Our project is one example of a small-scale effort to address the global need for adequate surgical care, based on good relations, with potentially significant outcomes.

In 2011, the first Basic Surgical Skills Course (BSSC) for Palestinian surgical trainees, as credentialled by the Royal College of Surgeons of Edinburgh

(RCSEd), was delivered by a UK team in Augusta Victoria Hospital (AVH; East Jerusalem, Israel). All logistical help on the ground was provided by the UN Relief and Works Agency (UNRWA; West Bank, occupied Palestinian territory), Juzoor for Health and Development (Ramallah, occupied Palestinian territory), and the AVH staff.¹

The 2012 annual course led to the establishment of a local Palestinian faculty, through involvement of senior Palestinian surgeons in preparing the BSSC specimens used for practical sessions.³ A local Palestinian faculty building was used for formal training, with train-the-trainer style sessions, which prefaced the 2013 course.⁴

In 2014, the RCSEd publication, *Surgeons News*,⁵ detailed the considerable progress made in handing over the course to a Palestinian faculty mentored by UK instructors. In the following 3 years, the BSSC was delivered not only in Jerusalem in 2015, but also in Ramallah in 2016 and in Nablus in 2017.

In February, 2017, 5 years after direct involvement of Palestinian colleagues, we assessed the successful delivery of the BSSC by the faculty—from preparation of tissue for practical sessions to teaching—under the leadership of Dr Omar Abdul Shafi, the Chief of Surgery at AVH and Palestinian BSSC Convenor.

Handing over delivery of the BSSC to Palestinian surgeons was the original aim of our project, which has now been achieved. Our next challenge involves increasing the size of the BSSC Palestinian faculty, ensuring continued training of new BSSC trainers, and making the course accessible for all Palestinian trainee surgeons, including those from the Gaza Strip.

The outcome of this project—turning an idea into a sustainable reality using a team of volunteers with no sponsors, who have no personal or professional links to the region—might be of interest to peers with similar ideas.

Clarity of a defined purpose (namely standardising basic surgical training

For *The Lancet* Commission on Global Surgery see <http://www.thelancet.com/commissions/global-surgery>

to UK certification) was a crucial factor for progress on practical and organisational matters in a difficult geopolitical environment. The involvement of individuals with considerable enthusiasm and determination was particularly useful. The project was endorsed by the RCSEd who donated the intellectual rights to the BSSC, administrative support, and the certification, as a charitable act.

We received a warm welcome from our Palestinian hosts, who were extremely enthusiastic and committed to the project, and we are grateful to Dr Ummaiye Khammash (former Chief of Health for UNRWA) for his vision and dynamic drive during this venture.

The BSSC has been incorporated by the Palestinian Medical Council as an entry requirement to higher surgical training in Palestinian hospitals. As a result of our relationship, we were invited to meet with the Council in February, 2016 and 2017, to advise on the development of the surgical curriculum, with an exchange of ideas and input into the higher syllabus for surgical training, trainee assessment techniques, and objective structured clinical examination questions.

We would very much welcome correspondence and dialogue on any issues raised by this update.

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Tuberculosis in India: health policy alone is not enough

I read with keen interest the Comment by Madhukar Pai and colleagues (March 25, p 1174).¹ The authors highlight the statistical reasons for why India is the ground zero for the global epidemic of tuberculosis. They also cite several factors that contribute to the enormous mortality caused by tuberculosis in India, including malnutrition, tobacco smoking, underinvestment, implementation failure, a weak health system, and poor quality of tuberculosis care in the private sector. Their suggested solutions include increases in political commitment to increases in funding, quality improvement, and testing of novel approaches such as decentralised molecular diagnostics and information communication technology. Although these suggestions are noteworthy, they do seem to underplay the environmental and social factors contributing to the burden of tuberculosis in India.

Tuberculosis is an airborne disease and the bacillus cannot survive on surfaces, although sustained contact with an infected individual is necessary for development of the disease. Sustained contact is a greater risk factor for tuberculosis than are the social factors of tobacco smoking and malnutrition that were raised in the Comment by Pai and colleagues. WHO states that, even in many industrialised countries,

the incidence of tuberculosis among homeless people can be 20 times greater than that in the general population.² Homelessness, crowded environments, and poor hygienic practices are the bane of a country such as India. Hence, the observations made by Pai and colleagues would have been more complete if the authors had taken cognisance of these major social and environmental aspects.

Mortality due to tuberculosis in England and Wales steadily declined from 400 deaths per 100 000 in 1838 to fewer than 50 deaths per 100 000 by 1940, a period before antibiotics and vaccines became available.³ This decline is attributed to decreased crowding and improved housing and sanitation. Hence, in addition to the health budget for fighting tuberculosis, it is likely that other parallel programmes initiated by the Government of India, such as the Swachh Bharat Mission,⁴ Housing for All by 2022,⁵ and development of Smart cities,⁶ would help mitigate the burden of tuberculosis in India.

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Authors' reply

Key drivers of tuberculosis mortality are obviously context specific. For example, HIV is a major driver of tuberculosis-associated deaths in sub-Saharan Africa,



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