

Bangladesh's laudable success has been the avoidance of the twin dangers of inertia and smugness. The future will demand more from these virtues.

Amartya Sen

Department of Economics, Harvard University, Littauer Center, Cambridge, MA 02138, USA
 asen@fas.harvard.edu

I declare that I have no conflicts of interest.

- 1 Chowdhury AMR, Bhuiya A, Chowdhury ME, Rasheed S, Hussain Z, Chen LC. The Bangladesh paradox: exceptional health achievement despite economic poverty. *Lancet* 2013; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(13\)62148-0](http://dx.doi.org/10.1016/S0140-6736(13)62148-0).
- 2 Ahmed SM, Evans TG, Standing H, Mahmud S. Harnessing pluralism for better health in Bangladesh. *Lancet* 2013; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(13\)62147-9](http://dx.doi.org/10.1016/S0140-6736(13)62147-9).

- 3 El Arifeen S, Christou A, Reichenbach L, et al. Community-based approaches and partnerships: innovations in health-service delivery in Bangladesh. *Lancet* 2013; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(13\)62149-2](http://dx.doi.org/10.1016/S0140-6736(13)62149-2).
- 4 Adams AM, Rabbani A, Ahmed S, et al. Explaining equity gains in child survival in Bangladesh: scale, speed, and selectivity in health and development. *Lancet* 2013; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(13\)62060-7](http://dx.doi.org/10.1016/S0140-6736(13)62060-7).
- 5 Cash RA, Halder SR, Husain M, et al. Reducing the health effect of natural hazards in Bangladesh. *Lancet* 2013; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(13\)61948-0](http://dx.doi.org/10.1016/S0140-6736(13)61948-0).
- 6 Adams AM, Ahmed T, El Arifeen S, Evans TG, Huda T, Reichenbach L, for The Lancet Bangladesh Team. Innovation for universal health coverage in Bangladesh: a call to action. *Lancet* 2013; published online Nov 21. [http://dx.doi.org/10.1016/S0140-6736\(13\)62150-9](http://dx.doi.org/10.1016/S0140-6736(13)62150-9).
- 7 Dreze J, Sen A. *An uncertain glory: India and its contradictions*. London: Penguin, 2013.
- 8 Wollstonecraft M. *A vindication of the rights of woman*. London: Penguin, 2004.

The G8 Dementia Research Summit—a starter for eight?

Published Online
 December 11, 2014
[http://dx.doi.org/10.1016/S0140-6736\(13\)62426-5](http://dx.doi.org/10.1016/S0140-6736(13)62426-5)

On Dec 11, 2013, holding the presidency of the G8, the UK hosts a Dementia Summit in London to try to reach agreement on a new international approach on dementia research.¹ Given the long list of problems facing the G8, why has Prime Minister David Cameron chosen to put dementia research centre stage? Although the devastating impact of dementia on patients and families has long been recognised, it is the projections

for future numbers of affected individuals and the economic consequences that have surely focused the minds of international leaders.

Worldwide some 36 million people have dementia, with 66 million people estimated to be affected by 2030.² This so-called pandemic is due to ageing populations and the exponential relationship between age and the incidence of the major causes of dementia, notably

Panel: Eight recommendations for the Dementia Summit—commitments and coordination

- 1 Each of the G8 countries should develop a national dementia plan and commit to publish annually the cost to their nation of dementia and what they are spending on dementia research.
- 2 Each of the G8 countries should commit to sustained increases in national dementia research budgets. It is only right that a collective commitment is made: each nation should agree to double their funding for dementia research within 5 years and bring it up to 1% of their national dementia costs within 10 years.
- 3 There should also be a commitment to coordinate research efforts and for collaboration to be underpinned by an international fund ring-fenced for international research programmes. If it is scientifically sensible for groups to collaborate, then we need to remove disincentives to do so.
- 4 International cohorts and registries need to be established to study the natural history of different dementias and make it easier for patients to be recruited into trials.¹⁰
- 5 A task force should be established to consider what can be done to accelerate and incentivise the development, testing, and approval of new therapies, including reducing regulatory burden and delay.
- 6 Alongside pharmacological interventions to delay onset, we need international research on dementia prevention through the reduction of risk factors, many of which, such as cutting rates of smoking, have wider benefits too. A focus is needed on joint working to establish the methodology, cohorts, and ethical and regulatory frameworks to undertake prevention trials.
- 7 How best to deliver care is an important area for research. Different societies have different approaches, and we need to learn from each other and research best practice.⁹ We need to be able to discuss difficult areas, including those around end-of-life care. We need an international push to involve a much higher proportion of carers and patients in research.
- 8 We must maximise the international benefit of data currently being collected and find effective ways to share, which include enabling access to all data from clinical trials.¹¹ Not only should the G8 encourage pharmaceutical companies and academia to do this, but it should contribute to building the infrastructure for safe data curation, quality control, and managed release of patient-level data that will allow access while protecting confidentiality.

Alzheimer's disease, dementia with Lewy bodies, and vascular cognitive impairment. The economic consequences are stark. In the UK, dementia costs the economy over £20 billion per year, more than heart disease and cancer combined and well over 1% of gross domestic product; the equivalent cost is over US\$200 billion in the USA and more than \$600 billion worldwide.³⁻⁶ These costs dwarf budgets for dementia research in the UK and USA of around £50 million and \$500 million per year, respectively—a scenario mirrored across the G8.³⁻⁶

The G8 will need to deal with increasing proportions of their populations who will be cognitively impaired, increasingly dependent, and isolated. Thus, it is vital that we find ways to delay the onset or slow progression of dementia, and deliver care and manage symptoms in radically different ways. We need research in these areas and we must also address barriers to research progress, which range from our incomplete understanding of basic disease mechanisms to the challenges of undertaking increasingly costly and time-consuming clinical trials.

Several G8 countries have launched initiatives to tackle dementia,⁷⁻⁹ so why then bring it to the G8? Dementia does not respect national boundaries—this is a crisis that demands a collaborative response. Research is largely funded nationally and yet the benefits to patients of any breakthrough will be international. There is arguably a moral imperative for different nations to contribute to a joint research effort.

What then can this summit achieve? Although we welcome the way the UK Government has put dementia research in the spotlight, if the summit closes without definite but realistic commitments, and without clear legacy plans in place, a great opportunity will have been missed. Working together the G8 could advance research by increasing resources, supporting collaboration and data sharing, and reducing regulatory barriers. We propose eight recommendations for what should be on the agenda for the summit, and for the implementation meetings to follow (panel).

The G8 Dementia Summit needs to be the beginning rather than the end of the conversation. If this summit and its legacy meetings can agree on clear commitments and effective international joint programmes, then this

will be a major achievement. The G8 governments can reasonably expect, and will need, engagement from and partnerships with international institutions, industry, non-governmental organisations, and philanthropy. Unless we act collectively to address the global burden of dementia, we face an international disaster that will blight not just millions of affected families but also economies and health-care systems.

*Nick C Fox, Ronald C Petersen

Dementia Research Centre, Department of Neurodegenerative Disease, UCL Institute of Neurology, London WC1N 3BG, UK (NCF); and Alzheimer's Disease Research Center, Department of Neurology, Mayo Clinic College of Medicine, Rochester, MN, USA (RCP)
n.fox@ucl.ac.uk

NCF's research group has received research support or payment for image analysis from Eisai, GE Healthcare, GlaxoSmithKline, IXICO, Janssen, Johnson & Johnson, Lilly, Novartis, Pfizer, and Sanofi. RCP has served on data monitoring committees for Pfizer and Janssen, as a consultant for Roche and GE Healthcare, and participated in an advisory meeting for Elan Pharmaceuticals in 2010. NCF acknowledges support from Alzheimer's Research UK, the Brain Research Trust, the Wolfson Foundation, and the NIHR Queen Square Dementia Biomedical Research Unit. RCP acknowledges NIH/NIA support. RCP chairs the Advisory Council for Research, Care and Services of the US National Alzheimer's Project Act. NCF co-chairs the Alzheimer's Society Research Strategy Committee. We are grateful for helpful discussions with Eric Karran (ARUK) and Doug Brown (Alzheimer's Society).

- 1 Department of Health, Foreign and Commonwealth Office, Prime Minister's Office. UK to host G8 dementia summit. Sept 3, 2013. <https://www.gov.uk/government/news/uk-to-host-g8-dementia-summit> (accessed Nov 8, 2013).
- 2 Prince M, Bryce R, Albanese E, Wimo A, Ribeiro W, Ferri CP. The global prevalence of dementia: a systematic review and meta-analysis. *Alzheimers Dement* 2013; **9**: 63-75.
- 3 Alzheimer's Research Trust. Dementia 2010: the economic burden of dementia and associated research funding in the United Kingdom. Cambridge: Alzheimer's Research Trust, 2010. <http://www.dementia2010.org/reports/Dementia2010Full.pdf> (accessed Nov 8, 2013).
- 4 Hurd MD, Martorell P, Delavande A, Mullen KJ, Langa KM. Monetary costs of dementia in the United States. *N Engl J Med* 2013; **368**: 1326-34.
- 5 Luengo-Fernandez R, Leal J, Gray AM. UK research expenditure on dementia, heart disease, stroke and cancer: are levels of spending related to disease burden? *Eur J Neurol* 2012; **19**: 149-54.
- 6 Alzheimer's Disease International. World Alzheimer Report 2013. Journey of caring: an analysis of long-term care for dementia. London: Alzheimer's Disease International, 2013. <http://www.alz.co.uk/research/world-report-2013> (accessed Nov 8, 2013).
- 7 Department of Health. The dementia challenge: fighting back against dementia. 2013. <http://dementiachallenge.dh.gov.uk/> (accessed Nov 8, 2013).
- 8 US Department of Health and Human Services. National Alzheimer's Project Act. 2013. <http://aspe.hhs.gov/daltcp/napa/> (accessed Nov 8, 2013).
- 9 Nakanishi M, Nakashima T. Features of the Japanese national dementia strategy in comparison with international dementia policies: how should a national dementia policy interact with the public health- and social-care systems? *Alzheimers Dement* 2013; published online Aug 14. DOI:10.1016/j.jalz.2013.06.005.
- 10 Lauer MS, D'Agostino RB Sr. The randomized registry trial—the next disruptive technology in clinical research? *N Engl J Med* 2013; **369**: 1579-81.
- 11 Eichler HG, Pétavy F, Pignatti F, Rasi G. Access to patient-level trial data—a boon to drug developers. *N Engl J Med* 2013; **369**: 1577-79.