

- 7 Halley FM. Self-regulation of the immune system through biobehavioral strategies. *Biofeedback Self Regul* 1991; **16**: 55–74.
- 8 Yirmiya R. Endotoxin produces a depressive-like episode in rats. *Brain Res* 1996; **711**: 163–74.
- 9 Capuron L, Miller AH. Cytokines and psychopathology: lessons from interferon-alpha. *Biol Psychiatry* 2004; **56**: 819–24.
- 10 Danese A, Pariante CM, Caspi A, Taylor A, Poulton R. Childhood maltreatment predicts adult inflammation in a life-course study. *Proc Natl Acad Sci USA* 2007; **104**: 1319–24.
- 11 Dantzer R, O'Connor JC, Freund GG, Johnson RW, Kelley KW. From inflammation to sickness and depression: when the immune system subjugates the brain. *Nat Rev Neurosci* 2008; **9**: 46–56.
- 12 Gouin JP, Kiecolt-Glaser JK. The impact of psychological stress on wound healing: methods and mechanisms. *Immunol Allergy Clin North Am* 2011; **31**: 81–93.
- 13 Fond G, Hamdani N, Kapczinski F, et al. Effectiveness and tolerance of anti-inflammatory drugs' add-on therapy in major mental disorders: a systematic qualitative review. *Acta Psychiatr Scand* 2013; **129**: 163–79.
- 14 Su KP, Lai HC, Yang HT, et al. Omega-3 fatty acids in the prevention of interferon-alpha-induced depression: results from a randomized, controlled trial. *Biol Psychiatry* 2014; **76**: 559–66.

## Asia-pacific ready to act on mental health target in the SDGs

About 2.6 billion people live in the Asia-pacific region, and it is one of the most dynamic regions in the world, with 60% of the world's gross domestic product and 47% of world trade. The Asia-pacific region has increasing economic growth, rapid urbanisation and industrialisation, huge expansion of educational and scientific capability, and an increasingly influential voice in world affairs. The region also faces many challenges, including frequent and destructive natural disasters, vulnerability to the effects of climate change, greatly increased rural-to-urban migration, and widening economic inequality. Profound demographic and epidemiological transitions are forcing a shift in focus to ageing populations, chronic and disabling diseases, and the rapidly developing field of brain health.<sup>1</sup> All these challenges have direct implications for mental health; however, the mental health and social systems needed to respond to them are severely underdeveloped.

In November, 2014, the 26th Asia-Pacific Economic Cooperation (APEC) Ministerial Meeting in Beijing endorsed the Healthy Asia Pacific 2020<sup>2</sup> strategy and adopted the APEC Roadmap to Promote Mental Wellness in a Healthy Asia Pacific (2014–20).<sup>3</sup> Mental health was identified as a priority in the Joint Ministerial Statement<sup>4</sup> and in the Leaders' Declaration.<sup>5</sup> APEC is committed to improvement of research and data collection and to promote expanded public and private investment in mental health.

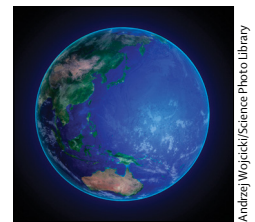
The APEC focus on mental health is of great significance, specifically because APEC is an economic forum. APEC leaders are aware that during the next two decades, the total global economic burden of chronic disease—including mental health—is estimated to be US\$47 trillion and have seen that continued neglect of mental health constitutes a brake on economic and social development.<sup>6,7</sup> This message is important for

the final stages in the development of the Sustainable Development Goals (SDGs), targets, and indicators.

The targets set for the SDGs will profoundly affect decisions about priorities and investment by national governments, development agencies, international donors, non-governmental organisations, civil society organisations, and the private sector. FundaMentalSDG<sup>8</sup>, a global initiative formed for this purpose, is vigorously advocating inclusion of a specific mental health target and indicators,<sup>9–11</sup> a position supported by the UK All-Party Parliamentary Group on Mental Health.<sup>6</sup>

The provisional health goal, "ensure healthy lives and promote wellbeing for all at all ages", includes the proposed target 3.4 "by 2030 reduce by one third premature mortality from non-communicable diseases (NCDs) through prevention and treatment, and promote mental health and wellbeing".<sup>12</sup> Although reduction of premature mortality is an essential target, and halving of premature deaths (including death by suicide) by 2030 would be feasible,<sup>13</sup> a growing concern for national governments is the disability burden attributable to non-communicable diseases (including mental disorders) and the costs that disabilities impose on health and social systems.<sup>14</sup> To respond to this universal concern, disability resulting from non-communicable diseases and mental disorders should be measured and reduced.<sup>15</sup> These aims need to be incorporated in a revised target 3.4. Measurement of progress towards whatever target is used by the UN will need substantial strengthening of the currently weak health information systems in low-income and middle-income countries.<sup>16</sup>

Action to reduce the global disease burden attributable to mental disorders should include promotion of positive mental health and wellbeing, prevention and treatment



Andrzej Wojcicki/Science Photo Library

of mental disorders, attention to disabilities and human rights, prevention and control of non-communicable diseases, poverty reduction measures, and improvements in education, housing, and employment, with integration across these domains.<sup>17</sup> Governments in the Asia-Pacific region are responding to these challenges and a coherent development architecture that can support intervention in complex systems<sup>18</sup> is emerging (figure).

Developments in Vietnam show that it is possible, even in a context of very limited financial and human resources and great urban-rural and regional variations in poverty, to put in place a comprehensive suite of mental health and social system governance arrangements, foster leadership, and build evidence for policy and practice. A national strategy on prevention and control of non-communicable diseases is close to completion. A national mental health strategy, informed by the WHO Mental Health Action Plan<sup>19</sup> and closely aligned with the national non-communicable diseases strategy, is being developed. The principles underpinning the strategy include protection of human rights, universal health coverage, a multisectoral and full life-course approach, community engagement, and evidence-informed policies and practice. The strategy will include action to develop national mental health law. On Nov 28, 2014, the National Assembly ratified the Convention on the Rights of Persons with Disabilities. An increase in collaboration between

the ministries of health and social affairs will ensure that mental health, non-communicable diseases, and disability can be managed in a more integrated way in both institutional and community settings. Health and social system leadership is being built through both the Melbourne-based International Mental Health Leadership Program and a Vietnam-based leadership programme. To strengthen the quality of the health information system,<sup>16</sup> the Ministry of Health approved the Health Information System Development Strategic Plan in 2014. A national survey of mental health and social affairs services that will provide essential evidence for planning, monitoring, and evaluation has been completed, and a collaborative project that will build the capacity in Vietnam to measure annual burden of disease estimates is in early stage of development.

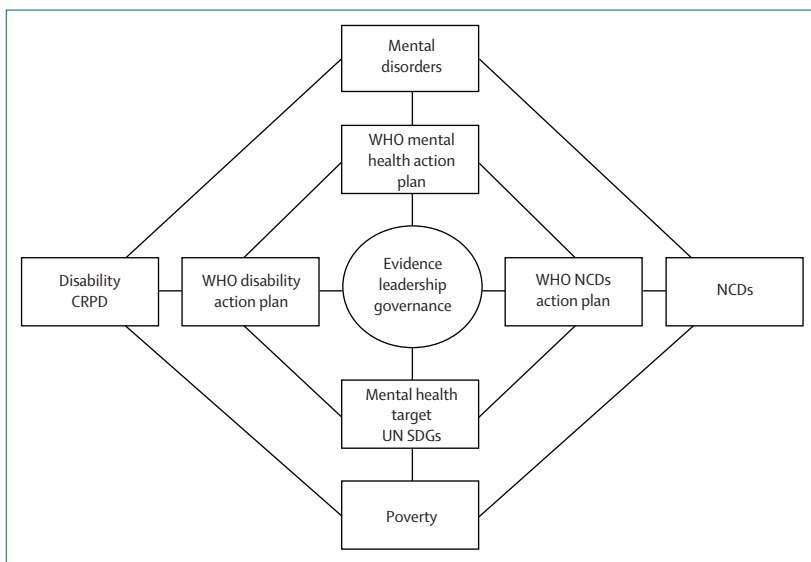
The political leaders of APEC have expressed a clear will to act decisively on mental health and are ready to promote expanded investment for action. The inclusion of an explicit mental health target and indicators in the SDGs will strongly support achievement of the goals of the APEC Roadmap and will improve the lives of millions of people.

*\*Harry Minas, Takashi Izutsu, Atsuro Tsutsumi, Ritsuko Kakuma, Alan D Lopez*

Global and Cultural Mental Health Unit, Centre for Mental Health (HM, RK) and Global Burden of Disease Group (ADL) School of Population and Global Health, The University of Melbourne, VIC 3010, Melbourne, Australia (HM, RK, ADL); Tokyo Development Learning Center, The World Bank, Tokyo, Japan (TI); and International Institute for Global Health, United Nations University, Kuala Lumpur, Malaysia (AT) [h.minas@unimelb.edu.au](mailto:h.minas@unimelb.edu.au)

HM is a member of the FundaMentalSDG Steering Group and supports the group's campaign to include a mental health target and indicators in the SDGs.

- 1 Sahakian BJ. What do experts think we should do to achieve brain health? *Neurosci Biobehav Rev* 2014; **43**: 240–58.
- 2 Asia Pacific Economic Cooperation. Healthy Asia Pacific 2020 fourth high level meeting on Health and the Economy Beijing, China, 15 August 2014. [http://www.apec.org/-/media/Files/MinisterialStatements/Health/20140819\\_HLM-he\\_002.pdf](http://www.apec.org/-/media/Files/MinisterialStatements/Health/20140819_HLM-he_002.pdf) (accessed Nov 27, 2014).
- 3 Asia Pacific Economic Cooperation. APEC roadmap to promote mental wellness in a healthy Asia Pacific (2014–2020). <http://mhinnovation.net/resources/apec-roadmap-promote-mental-wellness-health-asia-pacific-2014-2020#.VMe-6C4nmw> (accessed Nov 27, 2014).
- 4 Asia-Pacific Economic Cooperation. APEC Ministerial Meeting, Joint Ministerial Statement. 2014. [http://apec.org/Meeting-Papers/Ministerial-Statements/Annual/2014/2014\\_amm.aspx](http://apec.org/Meeting-Papers/Ministerial-Statements/Annual/2014/2014_amm.aspx) (Dec 3, 2014).
- 5 Asia-Pacific Economic Cooperation. Leaders' Declaration. The 22nd APEC Economic Leaders' Declaration—Beijing Agenda for an Integrated, Innovative and Interconnected Asia-Pacific. 2014. [http://www.apec.org/Meeting-Papers/Leaders-Declarations/2014/2014\\_aelm.aspx](http://www.apec.org/Meeting-Papers/Leaders-Declarations/2014/2014_aelm.aspx) (Dec 3, 2014).
- 6 De Silva M, Roland J. Mental health for sustainable development. London: All-Party Parliamentary Group on Mental Health, 2014.



**Figure: A coherent health and development architecture**  
CRPD=Convention on the Rights of Persons with Disabilities. NCD=non-communicable diseases. SDG=Sustainable Development Goals.

- 7 Annan K. The global crisis of depression. 2014. <http://kofiannanfoundation.org/newsroom/speeches/2014/11/global-crisis-depression> (accessed Nov 27, 2014).
- 8 FundaMentalSDG. Call for Action to the United Nations: make mental health a post-2015 sustainable development target. <http://www.fundamentalsdg.org/call-to-the-un.html> (accessed Nov 27, 2014).
- 9 Gureje O, Thornicroft G, on behalf of the FundaMentalSDG Steering Group. Health equity and mental health in post-2015 sustainable development goals. *Lancet Psychiatry* 2014; **2**: 12–14.
- 10 Thornicroft G, Patel V. Including mental health among the new sustainable development goals. *BMJ* 2014; **349**: g5189.
- 11 Votruba N, Eaton J, Prince M, Thornicroft G. The importance of global mental health for the Sustainable Development Goals. *J Ment Health* 2014; **23**: 283–86.
- 12 Open Working Group. Open Working Group proposal for Sustainable Development Goals. 2014. <http://sustainabledevelopment.un.org/sdgsproposal.html> (accessed Nov 26, 2014).
- 13 Peto R, Lopez AD, Norheim OF. Halving premature death. *Science* 2014; **345**: 1272.
- 14 Bloom DE, Caferio ET, Jané-Llopis E, et al. The Global Economic burden of noncommunicable diseases. Geneva: World Economic Forum; 2011.
- 15 Whiteford HA, Degenhardt L, Rehm J, et al. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet* 2013; **382**: 1575–86.
- 16 Whiteford HA, Degenhardt L, Murray CJ, Vos T, Lopez AD. Commentary: improving the mental health and substance use estimates in the Global Burden of Disease study: strengthening the evidence base for public policy. *Int J Epidemiol* 2014; **43**: 296–301.
- 17 Eaton J, Kakuma R, Wright A, Minas H. A position statement on mental health in the post-2015 development agenda. *Int J Ment Health Syst* 2014; **8**: 28.
- 18 Minas H. Human security, complexity and mental health system development. In: Patel V, Minas H, Cohen A, Prince M, eds. *Global mental health: principles and practice*. New York: Oxford University Press, 2014.
- 19 WHO. Mental health action plan 2013–2020. Geneva: World Health Organization, 2013.

## Personality disorder and population mental health

Despite increasing rates of diagnosis and treatment of mental state disorders, the burden of disability due to disorders such as major depressive, anxiety, bipolar, substance misuse, and psychotic disorders has not substantially decreased and might be increasing.<sup>1</sup> One potential reason for the insufficient progress<sup>2</sup> in reduction of the prevalence, duration, and associated disability of these mental disorders in the population might be that we have continued to neglect the effect of personality disorder at a population level.

Population-based epidemiological studies confirm that personality disorder is common and is associated with substantial overall disability. Estimated prevalence rates for any personality disorder vary between countries: 4–4% in the UK,<sup>3</sup> 13–4% in Norway,<sup>4</sup> and 9–1% and 21–5% in the USA.<sup>5,6</sup> Cross-national prevalence data from WHO Mental Health Surveys for any personality disorder in western European developed countries yields an overall prevalence of 6–1% across samples (range of 2–4%–7–9%).<sup>7</sup> Probable cases of personality disorder were associated with functional impairment in all 13 European countries surveyed, a picture consistent with US data.

Substantial clinical and population-based research shows that personality disorder is not only associated with chronic impairments in interpersonal and adaptive functioning,<sup>8,9</sup> but also that it predicts poor outcomes in diverse psychiatric comorbidities, and poor engagement in and adherence to treatment.<sup>10</sup> Although substantial progress has been made in the treatment of borderline personality disorder, treatment of this

disorder has rarely resulted in demonstrable change in functional capacity in patients.<sup>8,9</sup> Additionally, little attention has been paid to treatments for other forms of personality disorder.

The covert effects of additional disability and morbidity due to personality disorder are underscored by the fact that personality disorder is one of the most common comorbidities in clinical practice.

For example, about half of patients receiving treatment for common mental state disorders—namely, major depression and anxiety—also suffer from a comorbid personality disorder.<sup>11</sup> Some of the persistent dysphoria, anxiety, unhappiness, and disability experienced by many individuals who seem to be partial responders to treatment or treatment resistant might be due to the personality factors that serve as predisposing or perpetuating factors for their distress.

There is also potentially a substantial, and yet covert role for the effect of personality disorder on medical comorbidity. Although those with mental disorders commonly also suffer from co-occurring chronic physical illnesses, personality disorder has not been thoroughly investigated as one of these disorders. Population-based epidemiological research has shown that individual personality disorders are associated with an increased risk of a range of physical health comorbidities (eg, adjusted odd ratios for associations between borderline personality disorder and cardiovascular disease range from 1.47 to 7.2),<sup>12–14</sup> similar to the association seen between depression and cardiovascular disease.