Editor’s Note: At a conference in April in Washington, D.C., the World Bank Group (WBG), together with the World Health Organization (WHO) and other partners kick-started a call to action to governments, international partners, health professionals, and others to find solutions to a rising global mental health problem. Our authors write that mental disorders account for 30 percent of the non-fatal disease burden worldwide and 10 percent of overall disease burden, including death and disability, and that the global cost—estimated to be approximately $2.5 trillion in 2010—is expected to rise to $6 trillion by 2030.
Who hasn’t felt a sense of loss or detachment from our families, friends, and regular routines, or experienced nervousness and anxiety about changes in our personal and professional lives? For some, fear and worry constantly distract, confuse, and agitate. For others, frequent and severe bouts of depression are a debilitating daily burden that interferes with family, career, and social responsibilities. All too often, such problems lead to alcohol or drug abuse, self-destructive behavior, or even suicide. Mental health is an essential part of human existence—but it tends to be transitory for millions of people throughout the world.

Mental disorders can also be triggered by massive social dislocations—driven by economic crises, such as the financial crisis of 2008; civil conflicts, war, and violence in places like the Middle East, Central America, and Africa; epidemics like the recent Ebola outbreak in West Africa; or earthquakes, such as the recent one in Nepal. Even after economic growth returns and unemployment drops, peace settlements are made, or we reach zero Ebola cases; after the dead are mourned and the rebuilding of countries gets under way, there is long-term damage left behind in the social fabric of affected communities and the mental well-being of individuals.

The social costs of mental- and substance-use disorders, including depression, anxiety, schizophrenia, and drug and alcohol abuse, are enormous. Studies estimate that at least 10 percent of the world’s population is affected, including 20 percent of children and adolescents. The World Health Organization (WHO) estimates that mental disorders account for 30 percent of non-fatal disease burden worldwide and 10 percent of overall disease burden, including death and disability. In addition to their health impact, mental disorders cause a significant economic burden. There is also a notable link between them and costly, chronic medical conditions, including cancer, cardiovascular disease, diabetes, HIV, and obesity.

The global cost of mental disorders was estimated to be approximately $2.5 trillion in 2010; by 2030, that figure is projected to go up by 240 percent, to $6 trillion. In 2010, 54 percent of that burden was borne by low- and middle-income countries (LMICs); by 2030, the proportion is projected to reach 58 percent. The overwhelming majority (roughly two-thirds) of those costs are
indirect ones associated with the loss of productivity and income due to disability or death. Several recent studies in high-income countries have found that the costs associated with mental disorders total between 2.3 and 4.4 percent of gross domestic product (GDP).\textsuperscript{10}

It has become increasingly clear that most countries in the world are ill prepared to deal with this often invisible and overlooked health and social burden. In the second decade of the 21st century, not much has changed in how many countries view and deal with mental illness. Some are still using 17th century tactics to “protect society”: confining and abandoning the “mad” in asylums or psychiatric hospitals, often for life, which grossly compounds the negative impact on these individuals and on society as a whole.\textsuperscript{11} Despite its enormous societal burden, mental disorders continue to be driven into the shadows by stigma, prejudice, and fear that disclosing affliction may mean jobs lost and social standing ruined, or simply because health and social support services are not available or are out of reach for the afflicted and their families.

During April 2016’s World Bank Group/World Health Organization Global Mental Health Event in Washington, D.C.,\textsuperscript{12} hundreds of doctors, aid groups, and government officials convened to start an ambitious effort to move mental health away from the margins of the international development agenda. From the start of the conference, it was evident that, despite enormous challenges inherent in the enterprise, there is growing impatience to move mental health from the periphery to the center of the global health and development agenda. As highlighted in WHO’s Mental Health Action Plan 2013-2020,\textsuperscript{13} and in the summary report and commentary prepared after the 2016 WBG/WHO event,\textsuperscript{14,15} a number of evidence-based interventions have been effective in promoting, protecting, and restoring mental health, well beyond the institutionalization approaches of the past. Properly implemented, these interventions represent “best buys” for any society, with significant returns in terms of health and economic gains. Some of these are within the health sector (e.g., treatment with medicines or psychotherapy) and others outside it (e.g., providing timely humanitarian assistance to refugees).

**Economic Loss and Return on Investment**
Countries are not investing adequately in mental health; for most, it is not high on their list of priorities.\textsuperscript{16} One-third of the countries do not even have a mental health policy or plan and about
half do not have a mental health law. Most countries in the low or middle income group spend less than $2 per capita on mental health. Many allocate less than one percent of their health budget on mental health. The number of trained health professionals delivering mental-health care is also grossly insufficient; many countries have less than one psychiatrist for one-million people. Often, scarce resources are utilized inefficiently. While it is widely accepted that old-style psychiatric hospitals are poorly suited for mental health care, 60 percent of inpatient beds, globally, are still in such institutions.

A study prepared for the WBG/WHO global mental health event\(^{17}\) (using the estimated prevalence of depression and anxiety in different regions)\(^{18}\) presents a new projection of treatment costs and outcomes for the 2016-2030 period in 36 low-, middle-, and high-income countries that between them account for 80 percent of the global burden of common mental disorders. A modest improvement of five percent in the ability to work and in productivity as a result of treatment was factored in and mapped to prevailing rates of labor participation and GDP per worker in each of the 36 countries analyzed. The key outputs of the analysis were year-by-year estimates of the total costs of treatment (the investment), increased healthy life years gained as a result of treatment (health return), enhanced levels of productivity (economic return), and the intrinsic value associated with better health.

The results show that the investment needed to expand effective treatment for common mental disorders is substantial: in the 36 countries for the period in question it amounts to $141 billion, with $91 billion going towards depression treatment and $50 billion for anxiety disorders. The returns on this investment are also substantial. A five percent improvement in labor participation and productivity produces an estimated global return of more than $399 billion; $230 billion of which result from scaled-up depression treatment and $169 billion from better treatment of anxiety disorders. The economic value of improved health is also significant ($250 billion for scaled-up depression treatment alone). The end result is a favorable benefit-to-cost ratio, ranging between 2.3-3.0 to 1 when economic benefits only are considered and 3.3-5.7 to 1 when social returns are also included.

**Mental Health Parity in the Global Health Agenda**
Moving from theoretical to practical gains would require wider acceptance of the idea that mental health disorders are conditions of the brain that should not be treated differently than other chronic health conditions, such as heart disease or cancer. Nor, in fact, are they truly separable: if untreated, mental disorders can negatively affect management of such co-occurring diseases as tuberculosis and HIV, diabetes, hypertension, cardiovascular disease, and cancer.

In the United States, as well as countries such as Chile, Colombia, and Ghana, attempts to push for mental illnesses and addiction treatment equality come up against clauses that deny health-insurance coverage for pre-existing conditions, a common barrier. And when this hurdle is overcome, as explained in a vivid personal account by former US Congressman Patrick Kennedy, the next big issue is determining what is covered and funded at the provider level. And this leads to a host of additional questions, such as what conditions to cover, how to select a menu of evidence-based treatments to be offered by service providers at different levels of care (as is commonly done for other health conditions), and how these services will be funded and reimbursed without perpetuating indirect medical discrimination through high deductibles, copayments, and lifetime limitations in coverage.

This is not an easy task. Strategies and plans for the medium term must be developed across countries to integrate mental health care into health services delivery platforms that focus on the whole patient rather than an aggregation of diseases. And even if these policy and service delivery changes were adopted, the need would remain for unrelenting effort to support affected persons and their families, empowering them to defy the stigma of being seen as “mentally ill” and to get essential services and adhere to prescribed treatments.

**Mental Health of Migrants and Refugees**
Conflict exposes civilian populations and refugees to violence and high levels of stress, causing dramatic rises in mental illness that can continue for decades after armed conflict has ceased. Cambodians, for example, continue to suffer widespread mental illness and poor health almost four decades after the Khmer Rouge-led genocide of the late 1970s. Rebuilding efforts in post-conflict and post-disaster societies, therefore, should include building out mental health services that are well integrated into primary care and public health. A series of catastrophic earthquakes in Japan,
including the 1995 Hanshin-Awaji earthquake, the 2006 Niigata Chuetsu earthquake, and the 2011 Great East Japan earthquake, has provided evidence that mental health and psychosocial support can also be effectively integrated into humanitarian response and disaster risk management.24

It has been established that in low and middle income settings, an emergency provides an opportunity to improve the mental health system.25 At present, projects funded by the World Bank Group (WBG) and other organizations utilize a bottom-up, multidisciplinary approach to re-integrate displaced population groups after conflicts and natural disasters. Incorporating treatment for mental illness into such projects would help overcome barriers to employment among the poor and vulnerable. Further investment in education, social protection, and employment training would ameliorate social exclusion and build social resilience by serving the unique needs of vulnerable groups. In Canada, for example, an initiative known as Rise Asset Development is another source of funding and support for persons with mental health problems. Rise provides a combination of low interest small business loans, training, and mentorship to entrepreneurs with a history of mental health or addiction challenges in order to support their self-employment ambitions (and enjoys a 93 percent payback rate).26

Technological Solutions
Information and communications technology (ICT) can be a useful instrument for global mental health. It offers alternative modes of mental health care delivery when resources are scarce, and new ways to address long-standing obstacles that hinder access to care, such as transportation barriers, stigma associated with visiting mental health clinics, clinician shortages, and high costs.27 These platforms, especially in mobile formats, can offer remote screening, diagnosis, monitoring, and treatment, and remote training for non-specialist healthcare workers. They can be instrumental in developing and delivering highly specific, contextualized interventions.28 Overall, ICT for mental health has a potentially important supporting function for specialized care and community mental-health care, and could enhance and enable informal approaches and self-care as well.

Important though digital innovation promises to be, it needs scientific validation before it can become part of global mental health. Data collection achieved through technology is fundamental for advancing evidence in the field. Data collected from individuals will, furthermore, create a basis
for strengthening the understanding of mental health and behavioral disorders and take that understanding to another level. Timely access to data for decision-making can help improve health care organization, allocation of resources, and service delivery.

Governments should work with the private sector, academia, and the medical establishment to develop and adapt these tools to advance the mental health agenda.

**Mental Health in the Workplace**

There is a robust body of evidence showing that investment in workplace wellness programs is not only good for employees but also for companies’ bottom line. In addition to obesity and smoking cessation programs, such interventions commonly focus on stress management, nutrition, alcohol abuse, and blood pressure, and on preventive care such as flu vaccination. In regard to mental health, workplace interventions focused on individuals might center on either treatment or promotion, such as cognitive-behavioral approaches to stress reduction. Organization-level policies can encourage interventions that address prevention and early intervention. There is some evidence that an integrated approach to workplace mental health that includes harm prevention through reducing workplace risks, mental health promotion, and treatment of existing illness, provides comprehensive management of mental health needs. A simple guide with seven steps towards a mentally healthy organization has been published by the Global Agenda Council of the World Economic Forum.

**Relevance of Neuroscience**

At the WBG/WHO global mental health event, experts such Gustavo Roman, director of Houston Methodist Neurological Institute, emphasized that although mental illnesses are brain diseases, this concept has been lost over the years and ignored by policy makers. To reverse this situation, he advocated calling mental illnesses neuropsychiatric diseases, a term used by WHO, since it helps to address mental and neurological disorders as a group, where mental health is considered along with neurology.

Indeed, advances in research on brain structure and function as well as in molecular genetics have already contributed enormously to our understanding of several mental disorders. For example,
certain brain regions and neurotransmitters have been identified as important in depression. Genes that apparently increase the risk of diverse mental disorders have likewise been identified. However, these scientific advances have not yet defined and validated biomarkers that can be used at a population level; they have facilitated development of newer medicines, but not yet resulted in breakthrough discoveries. Several brain projects that have been initiated across the world (e.g., in the US, Europe, Japan, and China) are likely to contribute to more knowledge and better diagnostic and therapeutic tools for mental disorders in the future. But whether these will significantly impact the overall global burden of mental disorders in the near future is not entirely clear.

**Collaboration and Financing Options**

Jim Y. Kim, president of the WBG, noted during the opening plenary session at the conference that the WBG, together with WHO and other international and national partners, have kick-started an important global conversation and a call to action to governments, international partners, health professionals, and community and humanitarian workers.33

The physical, social, and economic burden and cost of mental illness are too large to ignore. Since the impact of mental health is pervasive and relevant to not only health but to other sectors, like education and labor, investing in mental health would significantly contribute to more general efforts to reduce poverty and share prosperity. Indeed, many non-health related global concerns have clear linkages to mental illness, such as enduring poverty, natural disasters, wars, and refugee crises. Also, such existing health priorities as non-communicable medical diseases, child health and HIV are inextricably related to mental health. They provide entry points to link priorities and collaboration with relevant actors in order to increase investment in mental health.

The challenge is clear: if we are to fully embrace and support the progressive realization of universal health coverage, we must work to ensure that prevention, treatment, and care services for mental-health disorders at the community level, along with psychosocial support mechanisms, are integrated into service delivery platforms, and are accessible and covered under financial protection arrangements. But we must also advocate for and identify entry points across sectors to address the social and economic factors that contribute to the onset and perpetuation of mental-health disorders.
The exploration of alternative sources of financing to support mental-health parity in the health system and to mainstream across other “entry points” should be a priority. For example, if development lifts lives, and new and innovative approaches for funding development are seen as “game changers,” then perhaps we could argue that the development community, in accordance with the 2015 Financing for Development Addis Ababa Action Agenda, needs to redouble its commitment to advocate with national governments and society at large for raising “sin taxes” such as taxes on tobacco, alcohol and sugary drinks, which are a win-win for public health and domestic revenue mobilization.

For example, taxing tobacco is one of the most cost-effective measures to reduce consumption of products that kill prematurely, make people ill with diverse diseases (e.g., cancer, heart disease, and respiratory illnesses), and burden health systems with enormous costs. In addition, hiking tobacco taxes can help expand a country’s tax base to mobilize needed public revenue to fund vital investments and essential public services that benefit the entire population and help build the human capital base of countries, such as financing the progressive realization of universal health coverage, including mental health care. Indeed, data from different countries indicate that the annual tax revenue from excise taxes on tobacco can be substantial: in the US, for example, as part of the 2009 reauthorization of the Children’s Health Insurance Program approved by the US Congress, and that President Obama signed as the first bill after being elected, a 62 percent per pack increase in the federal cigarette tax was adopted to help fund the program, increasing the total federal cigarette tax to about $1 a pack. Federal cigarette tax revenue rose by 129 percent, from $6.8 billion to $15.5 billion, in the 12 months after the tax (April 2009 to March 2010), while cigarette pack sales declined by 8.3 percent in 2009—the largest decline since 1932.

In the Philippines, the adoption of the 2012 Sin Tax Law showed that substantial tax increases on tobacco and alcohol is good for public health impact and for resource mobilization for health investments. In the first three years of implementation of the law, $3.9 billion in additional fiscal revenues was collected. The additional fiscal space increased the Department of Health budget threefold and increased the number of families whose health insurance premiums were paid by the National Government from 5.2 million primary members in 2012 to 15.3 million in 2015, or about
45 million poor Filipinos (about 50 percent of the total population). Indeed, both country initiatives show that increasing taxes on tobacco and alcohol is a low lying fruit to raise domestic resources to attain sustainable development goals, including expanding mental health care coverage.40

As we move forward with this task, we should be guided by the belief that the agonies of mental health problems that blight and distort lives and communities and that impose a heavy economic and social burden on the planet can be dealt with effectively—if there is political commitment, broad social engagement, additional funding, and international support to make mental health an integral part of health care and promotion across the globe.41

**Bios**

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adopted by the World Health Assembly in May 2013 and scaling up care for priority mental, neurological, and substance-use disorders.

References


