

Mental and Neurological Disorders

Addressing a Global Health Priority

Summary

- Mental and neurological disorders (MNDs) are not just an individual's health challenge but a burden affecting societies at large.
- Governments should adopt policies to address the costs of mental and neurological disorders across the health, social, and employment sectors.
- New medicines offer hope of reducing the devastating impact of MNDs globally, but innovative and holistic solutions will require a fundamental understanding of the diseases as well as creative partnership between our industry, governments, the WHO and other stakeholders.
- IFPMA advocates for a multi-stakeholder approach to overcome scientific, social, financial, and health-related hurdles related to this public health challenge.
- Push and pull mechanisms could help incentivize research and accelerate the development of new therapies.

1. Background

Over the past 50 years, pharmaceutical innovation has contributed in transforming mental and neurological disorders (MNDs) from highly stigmatized and poorly understood diseases into treatable and often curable conditions. MNDs comprise a range of central nervous system conditions that negatively impact mood, behavior, brain functioning, and cognition. Despite progress, the World Health Organization (WHO) estimates that 700 million cases of MNDs are reported annually—accounting for 13% of global disease burden. Out of this number, 150 million live with depression, 25 million live with schizophrenia, 38 million live with epilepsy, and 90 million live with a substance abuse disorder.

A number of factors are responsible for increasing the disease burden: insufficient focus on basic mental health care, lack of funding of prevention programs, and the stigma associated with these disorders. Estimates show this disease area will become the leading cause of disability in two decades.¹ Annually, mental disorders lead to 1 million suicides worldwide.² One mental condition, major depressive disorder, is projected to be the worldwide leading cause of disease burden by 2030.³ Alzheimer's disease, a neurological disorder for which there is not yet a cure, affected 36 million people globally in 2010 and is expected to rise steeply to 115 million by 2050.⁴ Through cutting-edge research, new medicines in the pipeline offer hope of reducing the disease burden and the social and economic costs of MNDs.

¹ Return on Investment: Mental Health Promotion and Mental Illness Prevention. Canadian Institute for Health Information. 2011.

² World Health Organization. 2011. http://www.who.int/mental_health/media/en/382.pdf

³ Report by the WHO Secretariat on the Global Burden of Mental Disorders. WHO. 2011.

⁴ World Alzheimer Report 2011. Alzheimer's Disease International. 2011. Available at: <http://www.alz.co.uk/research/WorldAlzheimerReport2011.pdf>

2. The burden and costs of MNDs

IFPMA calls for a policy environment that recognizes the impact of MNDs across the health, social, and employment sectors.

A 2012 publication from the Organization for Economic Cooperation and Development (OECD) confirmed the magnitude of this public health challenge: in OECD countries, on average, around 20% of the working-age population is suffering from a mental disorder in a clinical sense. Further, between 33 to 50% of disability claims in OECD countries are due to mental disorders, and this percentage soars to over 70% among young adults.⁵ The economic burden to governments is equally paramount: mental disorders account for 3-4% of gross domestic product in the European Union and the World Economic Forum calculated a \$6 trillion loss in direct and indirect costs worldwide by 2030.⁶ Patients with undiagnosed or untreated MNDs are at higher risk of engaging in substance abuse, smoking, and being overweight—all risk factors for developing other non-communicable diseases.⁷ The comorbidity of these conditions with mental or neurological disorders results in lower life expectancies and higher premature mortality rates compared with those who do not suffer from MNDs.⁸ As such, any strategy targeting progress in the traditional NCDs arena would be incomplete without an updated action plan to lower the burden of MNDs. IFPMA therefore welcomes WHO's current work in formulating a Mental Health Action Plan.

3. Key Part of the Solution: Strengthening Primary Care

IFPMA believes health policies should focus on strengthening the primary care system.

Contrary to the case of infectious diseases or other NCDs, the diagnosis of most MNDs relies on symptoms, rather than biological markers. Early diagnosis and primary care prevention strategies through primary care could therefore be pivotal steps towards diminishing the global incidence of MNDs. A step in the right direction in strengthening mental health services comes through the WHO's Mental Health Gap Action Program (mhGAP) intervention guide, which aims to help health professionals diagnose and treat mental disorders globally. Tackling under-treatment for MNDs should be a priority for healthcare systems. This is particularly important in low and middle-income countries, where only \$0.25 is spent per person, per year on mental health. In these countries, 76% to 85% of people with severe mental disorders receive no treatment. This figure is 35 to 50% in high-income countries. Affordable treatment options for these disorders can be easily obtained⁹, yet the burden of mental disorders can only be significantly reduced through a strengthening of primary care services and anti-stigma and anti-discrimination strategies.

⁵ Sick on the Job? Myths and Realities about Mental Health and Work. OECD. 2012.

⁶ The Global Economic Burden of Non-Communicable Diseases. World Economic Forum. 2011. Available at: <http://www.weforum.org/reports/global-economic-burden-non-communicable-diseases>

⁷ Ibid.

⁸ Priority actions for the non-communicable disease crisis. The Lancet. 2011. Available at: <http://download.thelancet.com/pdfs/journals/lancet/PIIS0140673611612828.pdf>

⁹ Mental Health Atlas 2011. WHO. 2011. Available at: http://whqlibdoc.who.int/publications/2011/9799241564359_eng.pdf

4. Understanding the Brain and the Value of Innovation

IFPMA encourages creative partnership between our industry, governments, WHO and other health stakeholders to overcome scientific, social, regulatory and financial obstacles.

Until the early 1960s, limited evidence existed on the biological basis of MNDs. Advances in neuroscience and clinical practice have since then profoundly enhanced both the understanding of MNDs and the available pharmacological and psychosocial interventions to treat these disorders. However, science has only begun to grasp the functioning of the brain. Current trends are no longer focusing solely on symptoms of the illnesses but also on disease prevention and the disruption of disease progression. The introduction of many innovative therapies can lead to a reduction of the length of patient hospitalizations, absences due to sick leave, and lost economic output in terms of reduced worker productivity.

In the U.S. alone, the current pipeline on MNDs has over 300 molecules¹⁰, and needs to be invigorated and overcome scientific, regulatory, and financial obstacles. There are a number of challenges for the research-based pharmaceutical industry:

a) Brain research is complex and inter-disciplinary

The research and development of antidepressants, antipsychotics, and therapies for neurological disorders is extremely challenging. Research in this area requires a deep insight into both the clinical world—defined by a complex mixture of subjective assessments and indirect measures—and the molecular world—defined by objective molecular parameters.

b) Brain research takes more time

A 2012 Tufts Center for the Study of Drug Development identified that medicines developed in this area take 35% longer to complete clinical trials and receive regulatory approval compared to other new prescription medicines. Development in this area also poses bigger hurdles: only 1 in 10 molecules that enter clinical trials obtains approval compared to the 1 in 6 ratio in other areas.¹¹

c) Brain research needs to be incentivized

Brain research is witnessing a shift in studies focusing into the biology underlying MNDs. The benefits of this research will only happen if momentum is kept on this area. Policymakers and society progressively recognize the economic and social repercussions of MNDs, but increased awareness should be harnessed into action. Push and pull mechanisms could help incentivize research to accelerate the development of new therapies; however it will take a multi-stakeholder effort to achieve holistic solutions.

¹⁰ Medicines in Development for Mental Illnesses. PhRMA. 2010. Available at: <http://www.phrma.org/sites/default/files/422/mental2010.pdf>

¹¹ Pace of CNS drug development and FDA approvals lags other drug classes. Tufts CSDD Impact Reports. 2012. Available at: http://csdd.tufts.edu/reports/description/ir_summaries