

PROGRESS IN MIND

Resource Center

35th ECNP Congress 2022

BRINGING
GLOBAL
AWARENESS
OF MENTAL
HEALTH

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35th ECNP Congress 2022

Welcome to the ECNP 2022 issue of Progress in Mind

Welcome to your exclusive sneak peek at some of the exciting content that you only can find in the Progress in Mind Resource Center – your source for the psychiatry and neurology knowledge that matters to you. In this special issue, we'll explore a range of topics, including thought-provoking infographics from World Mental Health Day, the evolving landscape of transdiagnostic psychiatry, strategies to improve the lives of patients and their caregivers, and more.

If you'd like to read more about these topics, or similar topics relevant to psychiatry and neurology, visit the Progress in Mind Resource Center at www.progress.im. Here you will find a mix of the latest news, expert interviews, current views, webinars, and insights from global and local key opinion leaders. You can also enjoy highlights from national and international congresses so you can stay up to date on the latest developments.

The Progress in Mind Team

Constantly refreshed and updated, the Progress in Mind Resource Center is the go-to medical education resource for the busy healthcare professional.



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Anxious distress and major depressive disorder: Recognition, assessment and treatment

In an industry-sponsored symposium (Servier Laboratories), titled 'Anxiety symptoms in depression: contemporary treatment approaches,' Professor Malcom Hopwood (University of Melbourne, Melbourne, Australia), Professor Dan Stein (University of Cape Town, South Africa) and Professor Chia-Ming Chang (Chang Gung Memorial Hospital, Linko, Taoyan, Taiwan) discussed the topic of anxious depression including challenges with recognition, assessment and treatment for both healthcare professionals and patients themselves.

Anxious distress in depressive disorders

Globally, major depressive disorder (MDD) is one of the leading causes of disability.¹ Within the category of depressive disorders, in DSM 5, anxious distress includes patients who experience episodes of at least two of the following: feeling keyed up/tense; feeling unusually restless; feeling difficulty concentrating due to worry; fear that something awful may happen; feeling loss of control.²

Anxious distress may occur in the majority of people with MDD³; however, Professor Hopwood discussed, patients may not be able to recall if anxious distress preceded onset of MDD and anxious depression may be hard to distinguish from an anxiety disorder.⁴

Many patients with MDD also experience anxious distress

It is important to recognise anxious distress, stressed Professor Hopwood, as when it is present with MDD, longer times to remission⁵ have been shown and patients report poorer functioning and coping abilities than those without anxious distress.⁶ With these in mind, he concluded, recognition and treatment of anxious distress is key in people with MDD.

Pharmacotherapy for anxiety symptoms in MDD

According to Professor Stein, there are several ways a person can meet diagnostic criteria for MDD. Domains that need to be assessed include not only symptom profile and current stressors, but also early trauma and family history, personality traits, neurocognition, resilience, comorbidities, functioning, severity/staging and clinical subtype. Assessment also needs to take in factors such as social and material resources, occupation, family, abilities and intimate relationships and be culturally congruent.⁷

Within the diagnosis of MDD, anxious depression is associated with greater neuropathological findings, worse outcomes, greater MDD severity and increased suicidality. According to Professor Stein, taking these factors into account means treatment should be tailored accordingly.⁸

Anxious depression is associated with greater severity and worse outcomes in MDD

The Taiwan Tailor Survey of what patients want in MDD treatment

Within this symposium, Professor Chang presented results from a Taiwan Tailor Survey that investigated experience, preferences and stigmatized attitudes toward depression and antidepressants. This survey included 340 patients with MDD who were taking at least one antidepressant for at least a month and had no major comorbid psychiatric disorder, neurological condition or substance use disorder.

Respondents were mainly female (73.2%) and aged 21–50 (84.4%). Results showed that 37.1% had not sought help at their first episode of depression (mean age 32.8), predominantly because they didn't know they were experiencing this or didn't know where to get treatment. When they did seek help, most patients went to a psychiatrist or a counsellor. Regarding their current episode, reasons for seeking help included emotional, physical or life disturbances, insomnia and suicidal ideation.

The survey also revealed that treatment for depression was most often the decision of healthcare professionals and that patients preferred a combination of pharmacotherapy and psychotherapy over either treatment alone.

When patients were asked about medication adherence, 50.3% reported that they had been nonadherent to an antidepressant, with the main reasons cited being because they felt better, they experienced adverse events or the medication was not effective.

Reasons for medication non-adherence include both symptom recovery and adverse events

Concerns about adverse events included that antidepressants might cause withdrawal effects, sleep disturbances, weight gain, anhedonia and sexual dysfunction.

A final question on the survey was with regard to stigma, with higher ratings for what participants thought other people may believe regarding depression, such as that a person could snap out of it or that it was a sign of personal weakness, than they themselves believed.

1. Murray CJ, Lopez AD. *Science*. 1996; 274: 740-743.
2. American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. Fifth edition. American Psychiatric Publishing; USA, 2013.
3. Zimmerman et al. *Compr Psychiatry*. 2017; 76: 11-17.
4. Kessler et al. *Epidemiol Psychiatr Sci*. 2015; 24: 210-226.
5. Wiethoff K, et al. *J Clin Psychiatry*. 2010; 71: 1047-1054.
6. Zimmerman Met al. *Depress Anxiety*. 2019; 36: 31-38.
7. Maj M, et al. *World Psychiatry*. 2020; 19: 269-293.
8. Gaspersz R, et al. *Curr Opin Psychiatry*. 2018; 31: 17-25.
9. Cipriani A, et al. *Focus (Am Psychiatr Publ)*. 2018; 16: 420-429.
10. Cuijpers P, et al. *World Psychiatry*. 2020; 19: 92-107.



Schizophrenia

Strategies to improve cognition in schizophrenia

Cognition depends upon a complex interaction of brain regions and is often impaired in schizophrenia. Treatment strategies that improve cognition improve patient functioning and quality of life. They include a healthy lifestyle, second-generation antipsychotics, cognitive remediation and aerobic exercise, explained Professor Christoph Correll, Berlin, Germany, and New York, USA at EPA 2022.

Cognitive impairment is common among patients with schizophrenia

Many patients with schizophrenia have cognitive impairment,¹ which impacts every aspect of functioning² and quality of life.³ Treatment of cognitive impairment should therefore be a greater focus for psychiatrists managing patients with schizophrenia, said Professor Correll.

The cognitive impairment can be subdivided into difficulties with: learning and remembering information; organizing, planning and problem solving; accurately perceiving the environment; understanding and using language; processing new information; and focusing, maintaining and shifting attention.^{4,5}

Cognitive impairment impacts every aspect of patient functioning and quality of life

Strategies to improve cognition

Cognition depends upon a complex interaction of brain regions,³ Professor Correll explained, with the word “schizophrenia” meaning a schism between the different cognitive, behavioral and affective networks in the brain.

The hierarchical translational model of treatment effects for cognition proposes that targeted improvements in the neural system (e.g., efficiency of neural processing) in mental illness that improve cognition should translate into better community functioning (e.g., work and social life),⁶ Professor Correll said.



Targeted improvements in neural system that improve cognition should translate into better community functioning

Strategies that improve cognition include:

- A healthy lifestyle — metabolic syndrome, diabetes and hypertension are all significantly associated with global cognitive impairment in patients with schizophrenia⁷
- Antipsychotic control of positive symptoms of schizophrenia, particularly with second-generation antipsychotics^{8,9}
- Cognitive remediation — a behavioral training-based intervention to improve cognitive processes, especially when administered by a trained therapist and integrated with psychosocial rehabilitation¹⁰
- Aerobic exercise¹¹

Antipsychotic control of positive symptoms of schizophrenia, particularly with second-generation antipsychotics improves cognition

The effect sizes of second-generation antipsychotics,⁹ cognitive remediation¹² and aerobic exercise¹¹ on improving cognition are similar and small, however, said Professor Correll. More research is needed to investigate whether the effects might be additive when these treatments are used together.

Second-generation antipsychotics, cognitive remediation and aerobic exercise improve cognition with similar, but small effect sizes

1. Keefe RS, Bilder RM, Harvey PD, et al. Baseline neurocognitive deficits in the CATIE schizophrenia trial. *Neuropsychopharmacology*. 2006;31(9):2033–46.
2. Keefe RS. Cognitive deficits in patients with schizophrenia: effects and treatment. *J Clin Psychiatry*. 2007;68 Suppl 14:8–13.
3. Millan MJ, Agid Y, Brüne M, et al. Cognitive dysfunction in psychiatric disorders: characteristics, causes and the quest for improved therapy. *Nat Rev Drug Discov*. 2012;11(2):141–68.
4. Kalkstein S, Hurford I, Gur RC. Neurocognition in schizophrenia. *Curr Top Behav Neurosci*. 2010;4:373–90.
5. Butler PD, Silverstein SM, Dakin SC. Visual perception and its impairment in schizophrenia. *Biol Psychiatry*. 2008;64(1):40–7.
6. Keshavan MS, Vinogradov S, Rumsey J, et al. Cognitive training in mental disorders: update and future directions. *Am J Psychiatry*. 2014;171(5):510–22.
7. Hagi K, Nosaka T, Dickinson D, et al. Association between cardiovascular risk factors and cognitive impairment in people with schizophrenia: a systematic review and meta-analysis. *JAMA Psychiatry*. 2021;78(5):510–18.

8. Davidson M, Galderisi S, Weiser M, et al. Cognitive effects of antipsychotic drugs in first-episode schizophrenia and schizophreniform disorder: a randomized, open-label clinical trial (EUFEST). *Am J Psychiatry*. 2009;166(6):675–82.
9. Zhang JP, Gallego JA, Robinson DG, et al. Efficacy and safety of individual second-generation vs. first-generation antipsychotics in first-episode psychosis: a systematic review and meta-analysis. *Int J Neuropsychopharmacol*. 2013;16(6):1205–18.
10. Vita A, Barlati S, Ceraso A, et al. Effectiveness, core elements, and moderators of response of cognitive remediation for schizophrenia: A systematic review and meta-analysis of randomized clinical trials. *JAMA Psychiatry*. 2021;78(8):848–58.
11. Firth J, Stubbs B, Rosenbaum S, et al. Aerobic exercise improves cognitive functioning in people with schizophrenia: A systematic review and meta-analysis. *Schizophr Bull*. 2017;43(3):546–56.
12. Wykes T, Huddy V, Cellard C, et al. A meta-analysis of cognitive remediation for schizophrenia: methodology and effect sizes. *Am J Psychiatry*. 2011;168(5):472–85.

The evolving landscape of transdiagnostic psychiatry

Transdiagnostic psychiatry aims to provide a better classification system for psychiatric disorders than current systems by cutting across current diagnostic boundaries to guide more effective prevention and treatment, explained experts at EPA 2022.

Why is transdiagnostic psychiatry necessary?

Psychiatric diagnoses not only overlap in their clinical features, for instance in terms of sleep, appetite, interest, activity, cognition, mood, delusions, and self-harm, but many patients with a psychiatric diagnosis have psychiatric comorbidities,¹ said Professor Ole Andreasson, Oslo, Norway.

Any concept that is transdiagnostic must cut across diagnostic boundaries

In addition, common genetic variants are shared across mental traits and disorders, which suggests that the current diagnostic boundaries do not reflect distinct underlying pathogenic processes on a genetic level and that psychiatric disorders are interconnected.²

What has been achieved so far using the transdiagnostic approach?

Professor Marco Solmi, Ottawa, Canada, presented the results of a systematic review of transdiagnostic psychiatric research (based on the word transdiagnostic in the title) he carried out with colleagues to analyze the quality and findings of transdiagnostic studies.³

The study revealed that most of the 111 transdiagnostic studies analyzed had focused on depressive and anxiety disorders, and that 20% of the studies analyzed were not actually transdiagnostic. Overall, the quality of the studies was low.

TRANSDiagnostic research recommendations have been developed to improve future transdiagnostic psychiatric research

To guide and improve future transdiagnostic psychiatric research on prevention, treatment and diagnostic and clinical characterization, Professor Solmi and his colleagues therefore propose practical TRANSDiagnostic research recommendations as follows:³

- Transparent definition of the existing gold standard diagnosis
- Report the study design and primary outcome, and define the transdiagnostic construct in the abstract and main text
- Appraise the conceptual framework of the transdiagnostic approach, for instance across diagnoses or beyond diagnoses
- Numerate the diagnostic categories in which the transdiagnostic construct is being tested and then validated
- Show through comparative analyses the degree of improvement of the transdiagnostic approach against the specific diagnostic approach
- Demonstrate the generalizability of the transdiagnostic approach through external validation studies

Transdiagnostic research should not neglect individual diagnoses

Use of the transdiagnostic approach for prevention

Professor Solmi presented a meta-umbrella systematic synthesis of umbrella reviews (systematic reviews of metaanalyses of individual studies) he had carried out on non-genetic risk or protective factors for any diagnosed mental disorders. The TRANSD criteria were applied to test the transdiagnosticity of factors.⁴

Many transdiagnostic risk factors occur during childhood, the perinatal period or gestation⁴

1. Trivedi RB, Post EP, Sun H, et al. Prevalence, comorbidity, and prognosis of mental health among US veterans. *Am J Public Health.* 2015;105(12):2564–9.
2. Brainstorm Consortium, Anttila V, Bulik-Sullivan B, et al. Analysis of shared heritability in common disorders of the brain. *Science.* 2018;360(6395):eaap8757.

The study revealed many transdiagnostic risk factors for mental disorders, many of which occur during childhood, the perinatal period or gestation.⁴

Universal prevention might be more likely to be evaluated using transdiagnostic approaches in the future, but the cost-effectiveness of transdiagnostic approaches should be evaluated before discontinuing effective diagnostic categories-based paradigms, concluded Professor Solmi.

3. Fusar-Poli P, Solmi M, Brondino N, et al. Transdiagnostic psychiatry: a systematic review. *World Psychiatry.* 2019;18(2):192–207.
4. Arango C, Dragioti E, Solmi M, et al. Risk and protective factors for mental disorders beyond genetics: an evidence-based atlas. *World Psychiatry.* 2021;20(3):417–36.





Beyond symptoms: the importance of hearing the patient's voice in measuring life engagement

Historically, the definition of mental illness has been diagnosis-focused, with successful treatment defined as 'absence of disease'.¹ This is shifting to a person-focused definition. Treatment goals need to encompass positive psychological function,¹ as the absence of mental distress does not guarantee the presence of mental well-being. ECNP 2021 symposium encouraged clinicians to look beyond symptom control, to improved patient life engagement and resilience, with the use of functional patient-reported outcomes.

Successful treatment goal-setting

Melissa Paulita Mariano (University of the East Ramon Magsaysay Memorial Medical Center, Quezon City, Philippines) introduced the session by stressing the importance of treatment goal-setting. This identifies priorities, enhances patients' motivation, promotes patients' ownership of the recovery process, and leads to focused efforts.² Successful goal-setting should be collaborative, and revisited and adjusted as an active process between clinician and patient.^{2,3}

Improved communication is essential, as treatment goals may differ between patients and healthcare professionals (HCPs). A study in major depressive disorder (MDD)⁴ showed that the most common acute primary treatment goal for patients (29%) and HCPs (53%) was to lift mood, but that patients also valued return to social (21%), family (20%) or work (14%) life, and reduced side effects (16%), whereas only 1% of HCPs considered reduced side effects as the primary treatment goal. Similarly in schizophrenia, patients' treatment goals encompass more than just symptom control, with other common goals being able to think clearly and reduced hospitalisations.⁵ HCPs undervalue resumption of activities of daily living, improved satisfaction, and recovered capacity for work.⁶

Improved communication is essential, as treatment goals may differ between patients and healthcare professionals

Restoration of functioning remains an unmet need

Roueen Rafeyan (Fienberg School of Medicine, Chicago, USA) discussed how restoration of functioning remains an unmet need in both MDD and schizophrenia. The STAR*D study⁷ showed that approximately one-third of patients do not achieve symptom remission after multiple treatment steps, and this has a significant impact on patient functioning.⁸ In a large-scale metaanalysis of antipsychotics, not all medications outperformed placebo on measures of social functioning.⁹

Failure to achieve symptom remission has a significant impact on patient functioning

Introducing patient life-engagement

There is therefore recognition of the need for treatments that achieve benefits beyond symptom control.¹⁰ Patient life engagement¹¹ refers to positive health aspects relating to cognition, vitality, motivation and reward, and the ability to feel pleasure – outcomes that are important to patients. Dr Rafeyan stressed that combining measurement-based care with the patient's voice, is key to understanding the full impact of a condition.

PROs that capture meaningful domains to patients are needed in measurement-based care

In order to achieve this, suitable assessment tools are required that can adequately reflect the patient's

voice.¹² These should cover cognitive, social, physical, and emotional aspects. One suggestion is increasing use of patient-reported outcomes (PROs).¹³ Patient life engagement requires PROs to capture domains that are meaningful to patients, and not just symptoms evaluated on observer-related scales.

Beyond response to recovery and resilience

Greg Mattingly (Washington University School of Medicine, St. Louis, USA) described how the aim of treatment is changing:

- Response - many symptoms remain
- Remission - symptoms mostly alleviated, but some remain
- Recovery - few/no symptoms, improved patient functioning and quality of life
- Resilience

Resilience is critical to promotion of health, and prevention and treatment of mental health problems.¹⁴ Fostering resilience involves basic strategies like adequate nutrition, sleep, and physical activity, combined with additional strategies such as mindfulness training and pharmacotherapy.¹⁵ Targeting neural systems involved in emotion and stress regulation, cognitive processes and social behaviours, may ultimately effect the neurobiological changes that drive behaviour.¹⁵ In a holistic view, helping patients to achieve

resilience, and engage with their lives, is essential in shared treatment decision-making.

Resilience is critical to promotion of health, and prevention and treatment of mental health problems

Using patient-reported outcomes to measure patient life engagement

Prof Mattingly discussed 10 selected items of the the IDS-SR (Inventory of Depressive Symptomatology – self-report, IDS-SR10), a patient-reported measure that has been explored to capture elements of patient life engagement beyond the core symptoms of depression.¹⁶ It may be worth exploring the IDS-SR10 in disease states other than MDD. Early studies suggest that patient life engagement is a measurable outcome that can improve following treatment.¹⁶

Patient life engagement is a measurable outcome that can improve following treatment

All the speakers agreed that a holistic approach to patient-centric care is needed in MDD and schizophrenia. The new concept of 'patient life engagement' reflecting meaningful treatment outcomes to patients is also measurable, which can help HCPs to incorporate patient perspectives in developing a healthcare strategy.

1. Manderscheid RW, et al. Evolving definitions of mental illness and wellness. *Prev Chronic Dis* 2010;7(1):A19.
2. Stewart V, et al. Exploring goal planning in mental health service delivery: a systematic review protocol. *BMJ Open* 2021;11(5):e047240.
3. Rose G, Smith L. Mental health recovery, goal setting and working alliance in an Australian community-managed organization. *Health Psychol Open* 2018;5(1):2055102918774674.
4. Baune BT, Cronquist Christensen M. Differences in Perceptions of Major Depressive Disorder Symptoms and Treatment Priorities Between Patients and Health Care Providers Across the Acute, Post-Acute, and Remission Phases of Depression. *Front Psychiatry* 2019;10:335.
5. Bridges JFP, et al. Quantifying the treatment goals of people recently diagnosed with schizophrenia using best-worst scaling. *Patient Prefer Adherence* 2018;12:63-70.
6. Bridges JFP, et al. A test of concordance between patient and psychiatrist valuations of multiple treatment goals for schizophrenia. *Health Expect* 2013;16(2):164-76.
7. Rush JA, et al. Acute and longer-term outcomes in depressed outpatients requiring one or several treatment steps: a STAR*D report. *Am J Psychiatry* 2006;163(11):1905-17.
8. Israel JA. The Impact of Residual Symptoms in Major Depression. *Pharmaceuticals (Basel)* 2010;3(8):2426-40.
9. Huhn M, et al. Comparative efficacy and tolerability of 32 oral antipsychotics for the acute treatment of adults with multi-episode schizophrenia: a systematic review and network meta-analysis. *Lancet* 2019;394(10202):939-51.
10. Juckel G, et al. Towards a framework for treatment effectiveness in schizophrenia. *Neuropsychiatr Dis Treat* 2014;10:1867-78.
11. Bartrés-Faz D, et al. Meaning in life: resilience beyond reserve. *Alzheimers Res Ther* 2018;10(1):47.
12. McCue M, et al. Adapting the Goal Attainment Approach for Major Depressive Disorder. *Neurol Ther* 2019;8(2):167-76.
13. Mercieca-Bebber R, et al. The importance of patient-reported outcomes in clinical trials and strategies for future optimization. *Patient Relat Outcome Meas* 2018;9:353-67.
14. Malhi GS, et al. Make News: Modelling adversity-predicated resilience *Aust N Z J Psychiatry* 2020;54(7):762-5.
15. Malhi GS, et al. Modelling resilience in adolescence and adversity: a novel framework to inform research and practice. *Transl Psychiatry* 2019;9(1):316.
16. Thase M, et al. Efficacy of Adjunctive Brexpiprazole in Adults With MDD: Improvement of Patient Engagement Based on Selected Items From the Inventory of Depressive Symptomatology Self-Report (IDS-SR) Scale. *Psych Congress* 2019; P301.

WORLD MENTAL HEALTH DAY

Monday 10th October
2022

The 10th of October was World Mental Health Day which aims to globally raise awareness of mental health and eliminate stigma. This magazine highlights the global priority of mental health through resource sharing focused on the burden of brain diseases, how it impacts daily life, as well as strategic coping mechanisms.

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DEPRESSION

A growing health concern

Page 16 and 17

ALZHEIMER'S & PARKINSON'S DISEASE

Page 18

Global burden of
SCHIZOPHRENIA TODAY



Depression – a growing health concern

Depression is a growing global public health issue



More than **280 million** people worldwide are living with depression¹



This number has risen by **30%** since the COVID-19 pandemic¹



A major cause of disability

Depression is the leading cause of mental health-related disease burden globally^{2,3} and the **single largest factor contributing to global disability**⁴

At significant human cost



2,000 people will die due to suicide today: 60% have a mood disorder (MDD, bipolar disorder, dysthymia)^{5,6}



Two-thirds of people with depression receive no formal mental health care^{1,7}

And societal burden



33 million days of global work productivity are lost in a single day due to depression and anxiety costing US\$ 2.5 billion⁸

Strategies to improve the lives of people with depression

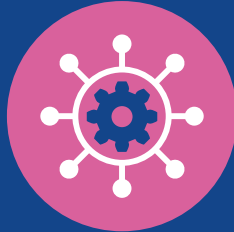
Medical intervention can improve outcomes



Break down barriers to **effective care**⁵



Invest in evidence-based care and prevention³



Improve access to psychological treatment and medication, as appropriate¹



Provide effective intervention and **assess treatment response** early to improve functioning over time and patient life engagement

And societal intervention provides support



Remove the stigma associated with mental health disorders^{1,5}



Support prevention programmes to avoid relapse⁵



Increase resources and training of healthcare providers⁵



Provide integrated mental health and social care services in the community¹

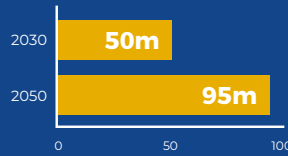
1. WHO FactSheet. Mental disorders. 8 June 2022. 2. GBD 2019 Diseases and Injuries Collaborators. Lancet 2020;396:1204-22. 3. Herrman H, et al. Lancet 2019;393:e42-e43. 4. Liu Q, et al. J Psychiatric Res 2020;126:134-140. 5. WHO FactSheet Depression 13 September 2021. 6. US HHS. Mental Health and Substance Abuse. 2022. Available from: <https://www.hhs.gov/answers/mental-health-and-substance-abuse/does-depression-increase-risk-of-suicide/index.html> 7. Moitra M et al. PLOS Medicine 2022;19(2):e1003901. 8. Chisholm D, et al. Lancet Psychiatry 2016;3:415-24.

Alzheimer's Disease

A growing global public health issue



33–38.5 million people live with AD worldwide¹



Aging populations mean the prevalence is expected to increase to **50 million in 2030 and 95 million in 2050**¹



60% of patients live in low and middle-income countries¹



A major cause of disability

Responsible for **5.6% of DALYs*** in people **over 75 years of age in 2019 worldwide**²

Significant human and healthcare costs

Burden on carers

5 hours/day care on average provided by informal carers in 2019¹

70% of **informal care** is provided by **women**³

Estimated global cost



Approximately **0.8 US\$ trillion** in 2019¹

Approximately **1.7 US\$ trillion** in 2030¹

50% is attributed to **informal care**¹

Strategies to improve the lives of patients and their caregivers



Screening and **early diagnosis**³



Social support and interventions to **support caregivers**⁴



Early **pharmacologic interventions** to slow worsening of **cognition, function** and **behavior**⁵

Interventions to address risk factors such as:



Hearing loss



Hypertension



Depression



Diabetes mellitus

*Disability-adjusted life years

1. WHO Fact Sheet Dementia. 2 September 2021. Available at: <https://www.who.int/news-room/fact-sheets/detail/dementia>. 2. GBD 2019 Diseases and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;396:1204–22. 3. Alzheimer's

Disease International. World Alzheimer Report 2011. Available at: <https://www.alzint.org/resource/world-alzheimer-report-2011/>. 4. Livingston G, Huntley J, Sommerlad A, et al. Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *Lancet*. 2020;396:413–46. 5. Tariot PN, Farlow MR, Grossberg GT, et al. Memantine treatment in patients with moderate to severe Alzheimer disease already receiving donepezil: a randomized controlled trial. *JAMA*. 2004;291(3):317–24.

Parkinson's Disease

A growing global public health issue, especially for older men



8.5 million individuals were living with PD in 2019 worldwide¹



The 2nd most common neurodegenerative disorder (after AD)²



Prevalence has doubled over the past 25 years³



1.4 times **more common** in men than women³



A major cause of disability

Responsible for **1.1% of DALYs*** in people over **75 years of age** in 2019 worldwide⁴

Significant human and healthcare costs

Burden on carers



Carers of 115 patients with moderate-to-advanced PD averaged 71 years of age, 66% were female, and **median care time was 16 hours/day, 63% helped with dressing and 50% helped with feeding**⁵

Estimated cost in the United States



52 billion year⁶

2500 for medications/person⁶

100,000 for therapeutic surgery/person⁶

Strategies to improve the lives of patients and their caregivers



Early diagnosis⁷



Physical, emotional and financial **support for caregivers**¹



Rehabilitation to help improve functioning and **quality of life**¹



Individualized pharmacologic and surgical interventions to treat symptoms and improve **quality of life**⁸

*Disability-adjusted life years

1. WHO Fact Sheet Parkinson disease. 13 June 2022. Available at: <https://www.who.int/news-room/fact-sheets/detail/parkinson-disease>. 2. Ou Z, Pan J, Tang S, et al. Global trends in the incidence, prevalence, and years lived with disability of Parkinson's disease in 204 countries/territories from 1990 to 2019. *Front Public Health*. 2021;9:776847. Available at: <https://doi.org/10.3389/fpubh.2021.776847>. 3. GBD 2016 Parkinson's Disease Collaborators. Global, regional, and national burden of Parkinson's disease, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. *Lancet Neurol*. 2018;17(11):939–53. 4. GBD 2019 Diseases and Injuries

Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020;396:1204–22. 5. Hand A, et al. The role and profile of the informal carer in meeting the needs of people with advancing Parkinson's disease. *Aging Ment Health*. 2019;23:337–44. 6. Parkinson's Foundation. 2022. Causes. Available at: <https://www.parkinson.org/Understanding-Parkinsons/Causes>. 7. Parkinsonsdisease.net. Diagnosis – early symptoms and early diagnosis. March 2017. Available at: <https://parkinsonsdisease.net/diagnosis/early-symptoms-signs/>. 8. Parkinson's Foundation. 2022. Treatment. Available at: <https://www.parkinson.org/Understanding-Parkinsons/Treatment>.

Global burden of schizophrenia today

Schizophrenia is a growing global public health issue



24 million
people globally are living
with schizophrenia¹



And a major cause of disability

Schizophrenia is one of the top 25 causes of disability worldwide^{2,3}

At significant human cost



Only **10-15%** of people with schizophrenia have paid jobs⁴



Two-thirds do not receive the specialist mental health care they need¹



Their life expectancy is **15-25%** less than people without schizophrenia⁵



70% are cared for by their parents⁵

And significant healthcare cost



In the US alone, **238 people** will be hospitalised today due to psychosis at a cost of US\$ 2.2 million⁷

Strategies to improve the lives of patients and their caregivers

Medical intervention can improve outcomes



Intervene early in **first episode psychosis** to delay time to first hospitalisation, reduce the risk of relapse, and improve long-term outcomes⁸



Integrate pharmacological treatment, psychoeducation and rehabilitation¹



Manage **comorbid mental disorders**⁷



Maintain adherence to therapy to **improve functioning** and patient life engagement

And societal intervention provides support



Reduce the stigma of schizophrenia^{1,5}



Increase access to **mental health services**¹



Provide caregiver support⁶



Improve access to **assisted housing and employment**¹

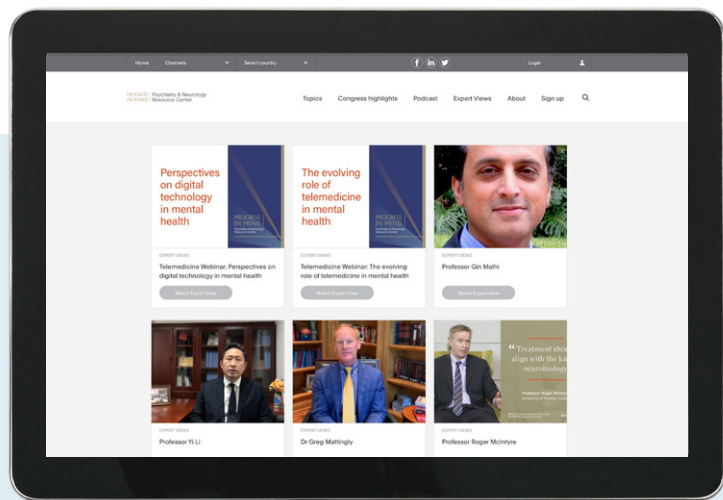
1. WHO FactSheet. Schizophrenia. 10 January 2022. 2. Chong HY, et al. Neuropsychiatric Dis Treat 2016;12:357-373. 3. GBD 2019 Diseases and Injuries Collaborators. Lancet 2020;396:1204-22. 4. He H, et al. Epidemiol Psychiatry Sci 2019;29(e91):1-11. 5. WHO FactSheet. Mental disorders. 8 June

2022. 6. The National Alliance on Mental Illness. 2008. Available from: <https://nami.org/getattachment/About-NAMI/Publications/Surveys/SchizeExecSummary.pdf> 7. Marcus SC and Olfson M. Schizophrenia Bulletin 2008;34(1):173-180. 8. Crespo-Faccoro B, et al. CMRO 2021;37(1):109-121.

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