

Mind the age gap: making mental health matter across the life course



Health and care

Inequalities

International

Prevention

Life expectancy

Disease and Conditions

Executive summary

Decision-makers around the world are failing to meet society's mental healthcare needs. This failure has negative economic and social consequences that will be magnified across our longer lives.

Serious mental health conditions account for an increasing proportion of healthcare spending, and the overall burden of non-communicable diseases (NCDs). One in every eight people around the world currently suffers from a mental health condition, and half of us will experience such a condition at some stage during our lives. In 2021, the world's population experienced over 155 million years lived with disability (YLD) as a result of mental health conditions.

That's the equivalent of every person in the world spending over a week (7.2 days) with a mental health-related disability.

The scale and burden of mental ill health has vast global economic impacts. The equivalent of 4.2% of GDP is lost to mental health conditions across OECD countries every year. This exceeds the average level of borrowing by G7 economies, which stood at 4.1% of GDP in 2022 – at the time, this borrowing was particularly high to manage the economic shock of the COVID-19 pandemic.

This burden will only increase in the coming decades as more of us are living longer lives. We're failing to meet the current demand for mental healthcare; managing serious conditions throughout longer lives will require even more staff, greater system capacity, and increased investment.

But we must also look beyond the economic loss, unemployment, and financial hardship experienced by those of us with serious mental health conditions. There's a significant human cost when we fail to meet people's mental healthcare needs, which cannot be overstated. The suffering caused by inaccessible or inadequate care is needlessly compounded by documented, entrenched ageism across mental health systems worldwide. For instance, in the UK only one in six older adults with depression receives a diagnosis. Meeting the needs of people of all ages is a moral and practical imperative. Failing to do so will deepen inequalities and compromise the future of our communities. As increased longevity continues to reshape our societies and demographics, mental ill health is a huge barrier to realising the opportunities of longer lives.

There are, however, glimmers of hope. Governments and health leaders can change course and reap the benefits of investing in better population mental health. From four high-level roundtable events and dozens of interviews with experts around the world, ILC has identified the key challenges facing health systems globally, and some bold solutions that could make a difference.

We have found that to support the mental health of people throughout their longer lives, governments and health leaders must:

- Use the **2025 UN High-Level Meeting** on NCDs to bring infrastructure for, investment for, and recognition of mental health conditions in line with other NCDs
- Establish a **European Year of Mental Health** to cement this issue as a regional priority for the EU
- Implement a **life course approach** to mental healthcare provision; different age cohorts may benefit from specific interventions and pathways to care
- Reevaluate the **value of investment** in mental healthcare, in order to galvanise increased and sustained investment
- **Embed new interventions**, technologies and concepts, such as person-centred care, into care pathways to improve outcomes and accessibility

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Putting mental health on the UN policy agenda

In 2025, heads of state and government will come together for the Fourth High-level Meeting of the UN General Assembly (HLM4). At HLM4, world leaders will agree a political declaration on how to prevent and control non-communicable diseases (NCDs) towards 2030 and 2050.¹

The four major NCD types recognised by the World Health Organization (WHO) are cardiovascular disease, cancer, chronic respiratory disease and diabetes.² Preventing these NCDs is vital to support healthy ageing. However, serious mental health conditions have severe effects that must be considered alongside physical health conditions. As with physical NCDs, individuals with mental health conditions need support to manage and control these conditions throughout their lives, to ensure that their longer lives are as healthy and fulfilling as possible. The treatment pathways, levels of investment, and care provisions for mental health need to be prioritised alongside physical health conditions.

Table 1: NCD case numbers worldwide

| Cardiovascular disease | Cancer | Chronic respiratory disease | Diabetes | Depression, PTSD and schizophrenia |
|--------------------------|--|-----------------------------|--------------------------|------------------------------------|
| 523 million ³ | 18.1 million new cases per year ⁴ | 454.6 million ⁵ | 830 million ⁶ | ~624 million ⁷ |

Currently, global provisions for mental health are sorely lacking. Serious mental health conditions, such as major depressive disorder, post-traumatic stress disorder (PTSD) and schizophrenia, should be recognised alongside physical NCDs, given their increasing burden across our longer lives. Poor mental health can also stem from poor physical health: those living with underlying physical conditions will often report mental health problems too.⁸ Addressing both physical and mental health in line with each other, and understanding interactions between them, will be key as we manage health outcomes for more people across more years amidst demographic change.

For these reasons, the UN should recognise mental illness as a fifth major category of NCD.

Policymakers should use the High-Level Meeting declaration as an opportunity to commit to improving the treatment, care and management of mental health conditions. A truly global effort is needed to achieve better outcomes for people living with serious mental health conditions. The declaration must focus on building understanding of mental health conditions in line with physical NCDs, to bolster investment and infrastructure, and to give people living with mental illness the support they need and deserve.

How the 2025 UN High-Level Meeting Declaration can address global mental health

In 2025, there will be a global Declaration on non-communicable diseases – the contents of which will be determined by what happens at the 2025 UN High-Level Meeting on Prevention and Control of NCDs.

This offers a crucial opportunity to build parity between physical and mental health. Our interviews and high-level events through our [Mental Health Matters project](#) have built an evidence base to underpin the following recommendations for the wording of the Declaration:

- It should include a commitment to a **life course approach** to mental health conditions, to manage demand for treatment, and ensure continuity of treatment across our longer lives.
 - As longevity continues to reshape our societies, governments must do more to anticipate and respond to changing demand for services. This includes equitable funding and infrastructure based on the needs of each age group.
 - The 2024 announcement of a new [WHO Collaborating Centre for Mental Health Services and Interventions Over the Life Course](#) recognises the importance of prevention and intervention throughout all stages of our lives.
- It should recognise the urgent need to tackle disparities in access and outcomes between different groups:
 - **Ageism** in mental health policy and practice is pervasive and damaging.
 - Ageism has been cited as a contributor to global mental health inequity: a systematic review shows over 95% of studies identified ageism as leading to "significantly worse health outcomes".⁹
- It should emphasise **person-centred care** to ensure that individual needs and preferences are met to support better outcomes. This will also help mental healthcare practitioners feel empowered to provide treatment that most benefits the patient, contributing to job satisfaction and subsequently retention.
 - Health systems must re-evaluate the level and value of investment in mental healthcare. Innovation and investment in

person-centred treatments and services have not kept pace with demand in recent decades.

- o New treatments and medical innovations must meet the needs of patients and better support the symptoms of their mental health conditions. Governments and industries must innovate to develop improved and more accessible interventions, including medications and therapeutic technologies.

Why must we take a life course approach to mental health?

The prospect of increased longevity, and more of us likely to live 100-year lives, presents a range of challenges and opportunities to our societies and economies.

Thanks to advances in medicine and sanitation, more of us are living longer than ever before. But too often, these extra years are spent in poor physical and mental health. Furthermore, many social, economic, and environmental factors may lead to worsening mental health throughout our longer lives.

We need a life course approach to mental health conditions to ensure that healthcare services are effectively supporting people of all ages. Mental health support needs to respond effectively to our changing needs throughout our longer lives, to drive better outcomes that are achieved equitably across age groups. In particular, there is a need to remove the “cliff edge” between adolescent and adult mental healthcare services.

Table 2: Mental health conditions across the life course

| Children (under-10s) | Adolescents (10-19 years) | “Working age” people (20-64 years) ^a | Older people (65+) |
|----------------------|---------------------------|---|--------------------|
| 8% | 15% | 15% | 14% |

Source: WHO estimates of percentage of age group cohorts living with a mental health disorder^{10, 11, 12}

Early identification of mental health issues is vital

Among all people with mental illnesses, at least a third of conditions can be observed by the age of 14.¹³ Adverse and traumatic experiences during childhood and developmental years are often associated with serious mental health conditions in later life.^{14,15} Recognising the long-term impact of early adverse experiences is key to mitigating the potential onset of these conditions across the life course.

In the UK, almost half (47%) of the population have experienced at least one adverse childhood experience (ACE)^b while 9% have experienced

^aWHO data is often gathered by age group, with “working age” people often included up until the age of 64. ILC’s stance is that with longer lives more of us will need to spend more years in work, and populations in many countries work beyond the age of 64 already.

^bACEs are defined as “highly stressful, and potentially traumatic, events or situations that

four or more.¹⁶ Given that 80% of those diagnosed with a mental illness by the age of 26 have had a prior diagnosis since the age of 11,¹⁷ it seems clear that an ACE can make a significant contribution to different mental health conditions.¹⁸

Socioeconomic factors, social infrastructure and the built environment are also intrinsically linked to childhood mental health outcomes. Previous research has shown that children living in socioeconomically deprived neighbourhoods are more likely to face mental health problems.¹⁹ A German study conducted in 2022 showed a clear correlation between poor mental health and limited access to social infrastructure, such as parks or sports fields.²⁰

As such, strong communities, and a built environment designed with health and wellbeing in mind, can play a key role in determining whether children and adolescents will experience optimal mental health outcomes. Achieving a more equitable spread for these factors will in turn promote better mental health outcomes, especially for the more deprived groups who would benefit most from these changes.²¹

Tackling stigma and ageism to provide better mental healthcare for older people

A life course approach also acknowledges the challenges older people face in accessing and receiving mental healthcare. We have seen that ACEs can influence mental health outcomes in childhood – this can also be true for mental health outcomes in adulthood. Such events could include multiple bereavements, caring responsibilities with insufficient support, living with increased frailty, and a heightened risk of neurodegenerative conditions like dementia.²²

Yet barriers, such as ageism and the feared stigma around mental health conditions, may delay or hinder getting help. Previous studies have suggested that stigma and ageism are often intertwined when older people access mental health services. Older patients could be more likely to feel shame when disclosing their symptoms to a healthcare professional or clinician.²³ Some healthcare facilities aren't perceived by patients to be age friendly.²⁴ Some clinicians make ageist assumptions that depression is an inevitable consequence of ageing, and therefore more difficult to treat. This means that older

occur during childhood and/or adolescence. They can be a single event, or prolonged threats to, and breaches of, the young person's safety, security, trust or bodily integrity." (Young Minds, 2018)

people are less likely to receive tailored mental health support such as psychological therapy.²⁵ Consequently, only one in six older people with depression receive a diagnosis in the UK.^{26, 27}

In addition, internalised ageism can also adversely affect the psychological wellbeing of older people,²⁸ making them less likely to respond to their own mental healthcare needs. Stigma and generational taboos around mental health conditions can be a significant barrier to accessing treatment.²⁹

Despite WHO estimates suggesting that mental health conditions are evenly spread across different age groups (see Table 2), internalised/externalised ageism is a barrier to mental health support. While poor mental health is increasingly recognised as a health concern affecting younger generations and working-aged populations, older people's mental health is too often an afterthought in public policy and research.³⁰ This is despite the fact that people aged 65 and over in England have significantly higher recovery rates if they use services from the Improving Access to Psychological Therapies (IAPT) programme^c than working-age people (64.4% versus 50.2%).³¹ However, less than 5% of people aged 65 and over access IAPT services, compared with 13.6% of 18 to 24-year-olds.³²

If we wish to empower older people to take up mental health services and support, we will need to tackle ageist attitudes among clinicians and policymakers. We can improve mental health outcomes for older people by providing person-centred care in appropriate settings, without fear of ageism or discrimination.

^cLaunched in 2008, the Improving Access to Psychological Therapies (IAPT) programme offer adults in England access to talking therapies for depression and anxiety.

Value of investment in mental healthcare: what do we lose to mental illness?

“People living with mental health conditions carry so much potential. With the appropriate support and medical interventions, more people could work, volunteer, and contribute to their communities much more than is currently the case.”

**Professor Tsuyoshi Akiyama
President, World Federation of Mental Health**

Throughout ILC’s programme of research, the two key themes of sufficient investment and workforce capacity emerged from almost every conversation and roundtable. In 2021, the global population experienced over 155 million years lived with disabilities³³ (YLD)^d as a result of mental health conditions, including major depressive disorder (MDD), schizophrenia and PTSD.^e This figure represents the scale of the economic inactivity, financial hardship and barriers that those living with mental health conditions face when working, volunteering, socialising and doing the things that matter to us.

Demand for mental healthcare services has significantly increased in recent years. This will only grow as more of us live with diagnosed mental health conditions throughout our longer lives. Investment in mental healthcare ranges from 2% to 10% of healthcare budgets across the countries in our study (China, Germany, Japan, the UK and USA)^f; this low level of investment when compared with physical health simply doesn’t match the scale of the problem. Each of these countries are far from achieving parity between mental and physical illness, with regards to the investment, awareness and infrastructure needed to maintain population health.

^dThe Institute for Health Metrics and Evaluations defines YLDs as: “Years lived with any short-term or long-term health loss. It is measured by taking the prevalence of the condition multiplied by the disability weight for that condition. Disability weights reflect the severity of different conditions and are developed through surveys of the general public.”

^eData collected from the *Global Burden of Disease Study* in 2021 by the Institute for Health Metrics and Evaluation. These figures encompass anxiety and depressive disorders, bipolar disorder and schizophrenia.

^fData unavailable for China.

“Money is always the issue. Lack of investment limits many countries’ capacity to move from traditional in-patient, institution-based models of care to community care. We know the latter works better for patients and is cheaper in the long run.”

Professor Pavel Mohr

Clinical Director at the National Institute of Mental Health, Czech Republic

“The total cost of presenteeism in the Japanese workforce could be higher than the cost of mental healthcare would be to the Japanese economy should people seek it out. This is in part due to the reduced productivity of those who suffered from mental disorders because of the long working hours prevalent in Japan.”

Jun Saito

Senior Research Fellow, Japan Center for Economic Research

Inaction on mental healthcare is not just harmful to people’s life chances; it poses a risk to economic sustainability in the coming decades. We know that mental health conditions cost OECD countries the equivalent of 4.2% of GDP,³⁴ through absenteeism and presenteeism, economic inactivity, and other adverse economic impacts. This figure exceeds the average level of borrowing by G7 economies in 2022, which stood at 4.1% of GDP – a particularly high level, given the economic shock of the COVID-19 pandemic.³⁵ Greater investment in the treatment and management of mental health conditions will be crucial if we are to maintain sustainable levels of economic activity. It’s equally crucial for those caring for a loved one with a mental illness.

While healthcare investment is too often a zero-sum game, where investing in X means choosing not to invest in Y, governments need to think differently about how they will respond to the growing burden of mental health conditions. Throughout this project, expert stakeholders highlighted the economic value of investment in prevention and healthcare infrastructure for mental health conditions wherever possible.

“In the UK there is a lot of focus on perinatal mental health support services, given the economic arguments that have been made based on research since 2014. The integration of mental health services with other perinatal services has been particularly effective at preventing and managing poor mental health in the perinatal phase. This is a clear example of how long-term costings and economic modelling can influence policymakers and change policies.”

Dr Annette Bauer

Assistant Professorial Research Fellow, Care Policy and Evaluation Centre, London School of Economics and Political Science

Social drivers of poor mental health exacerbate mental health conditions that are already present and make future episodes of poor health more likely. Investment in the support people need to live well is crucial to closing disparities in access and outcomes, and to managing the growing burden of poor mental health in the long term.

“People need to have a decent physical, social and economic environment to ensure that the social drivers of poor mental health do not continue to have an impact. We also know that structural racism and discrimination has a huge impact on population mental health – there is much we can do to tackle these disparities, and this would reduce the demand on health and social care services.”

Andy Bell

Chief Executive, Centre for Mental Health

Embedding person-centred treatment

Beyond the waiting lists and unmet need for mental healthcare around the world, a focus on person-centred care is also lacking. Common themes emerged during our research included healthcare systems being siloed and difficult to access, particularly for patients with long-term conditions and comorbidities. We also heard that treatment options are too often constrained by inadequate funding, difficulties with developing new treatments, and insufficient workforce to administer them.

Medication

Mental illnesses are complex and diverse in their symptoms and presentation. Some patients may lack physical symptoms (and few mental health conditions have measurable biomarkers, which are seen in many physical health conditions and support diagnosis) which makes it more difficult to develop pharmacological interventions that are effective for a large number of patients.

Development of new medications for mental health conditions has been hamstrung in recent years by stigma and underinvestment. Public and private actors must create more opportunities for collaboration, which will give patients more choices, helping them find interventions that work for them.

Throughout our interviews and events, participants frequently cited the use of psychoactive substances for treatment-resistant conditions as a reason for optimism. And further developments are expected in the coming years, which may be beneficial for patients. The US Food and Drug Administration recently voted not to approve MDMA for treating PTSD, as an advisory committee raised concerns that double-blind clinical trials couldn't demonstrate sufficient benefit, given that the psychedelic effects of the drug can't be replicated with a placebo. However, the UK Government is currently reviewing a future role for psychoactive substances in mental healthcare.³⁶

Accessibility

Pathways to care and interventions aren't always straightforward, making it harder for individuals to get help. There may be long waiting times for appointments with referring GPs and family doctors, then once a referral is made, waiting times are longer still.

“Many of the children coming into my office have seen half a dozen other professionals before me; parents often struggle to identify the issue and therefore the right service to seek out. There is a lack of literacy, and also ageism relating to paediatric mental health – a lack of belief that children can suffer. We could be screening for mental health issues throughout their time at school.”

Dr Marc Hermans
Child and Adolescent Psychiatrist, UEMS Officer
for European and International Affairs






“In the US, we see a chaotic system of insurance where insurance providers don’t often give access to the support people need. Even people with good insurance cannot always access appropriate care, due to structural barriers and the need to pay out of pocket. There is also a shortage of psychiatrists qualified to support acute conditions such as schizophrenia.”

Professor Stephen Marder
Vice Chair of the Department of Psychiatry, UCLA

Workforce

Each country in our study is reported to lack the skilled mental healthcare workforce with sufficient capacity, training and regulation needed to improve access and outcomes for people with serious mental health conditions. The changing pressures placed on mental healthcare systems by an ageing population will require an adaptable, well-qualified workforce.

Table 3: Mental health professionals per 100,000 population

| Country |  China |  Germany |  Japan |  UK |  USA |
|--------------------------|---|---|---|--|---|
| Psychologists | 1.89 | 49.5 | 3 | 36 | 29.8 |
| Psychiatrists | 2.2 | 13.2 | 11.8 | 7.6 | 10.5 |
| Mental health nurses | 5.4 | 56 | 83.8 | 56 | 4.2 |
| Total per 100,000 | 9.49 | 118.7 | 98.6 | 99.6 | 44.5 |

China offers one example of a small workforce being a barrier to accessing mental healthcare that we can see in this table. In contrast, we heard from Japanese expert stakeholders that the very high number of mental health nurses working in Japan is a legacy of the country's historical use of in-patient (often compulsory) treatment pathways.

The high number of clinicians working in Germany is a positive indicator of investment and infrastructure in the mental health system. However, some of our expert stakeholders raised concerns that regulations around who may practice as a psychologist in Germany can be too lax, as these may allow practitioners who reportedly deliver treatments and therapies that are not evidence-based to practice under this title.

Common workforce challenges raised by our expert stakeholders throughout this work were staff retention due to limited job satisfaction. Person-centred care must be part of the solution here. This approach is known to benefit patients, and it helps clinicians feel more empowered to deliver treatment according to the patient's needs and preferences.

“In countries like the US, you may be able to see a psychiatrist and spend enough time with them, but you may have to wait three to six months. In Japan, you can see a psychiatrist the next day, but Japanese psychiatrists see dozens of patients a day, so consultation times are short.”

**Dr Daisuke Nishi
Professor, University of Tokyo
Graduate School of Medicine**

Each country faces unique challenges within their current mental healthcare system. This includes clinician autonomy around how treatment is delivered. Weekly 50-minute talking therapy sessions are a common course of treatment for several mental health conditions; while they're clearly effective for some, they're too prescriptive and inflexible for others. Some patients may prefer a 10-minute daily conversation with their therapist, and others might prefer to work on an ad-hoc basis.

Looking ahead to the coming decades, each system will have to adapt to the changing demands of an ageing population who are likely to seek support for more years for serious mental health conditions. This will require healthcare workers to work flexibly and ensure that they're equipped to meet patients' needs where the patients are.

Mental health and the Healthy Ageing and Prevention Index

ILC's [Healthy Ageing and Prevention Index](#) is an innovative tool that ranks 153 countries around the world on six metrics of healthy ageing. We have used this tool to engage decision makers around the world on the importance of healthy ageing and have presented evidence-based recommendations for change using insights from our Index.




The key indicators here are **healthy life expectancy**, which takes data from the WHO's Global Health Observatory, and **happiness**, which takes data from the annual Gallup World Poll. While happiness is not a clinical measure of mental health and we don't treat it as such, we used this indicator to begin discussions about what mental health looks like across our five target countries. Our thesis was that in more individualistic societies, such as the UK and US, individuals might think differently about, and be more likely to prioritise, mental health and emotional wellbeing; this is compared to more collectivistic cultures such as China and Japan. This contrast may impact how mental health is understood and perceived, and the role that healthcare systems play in managing serious conditions.

These cultural differences can also be reflected in the literature and approaches to diagnosing and treating mental health conditions. The *Diagnostic Statistical Manual of Mental Disorders-5* (DSM-5) is the world's most widely used diagnostic framework for mental healthcare research.³⁷ Although more recent editions have drawn from broader groups of professionals, it's arguably still culturally centred in the US and similar Western countries. This means that research frameworks, and other ways in which we might expand our knowledge on mental health conditions, are carried out predominantly through this lens.

By contrast, the *International Classification of Diseases-11* (ICD-11) is used more widely in everyday clinical practice by psychiatrists outside the US. The most recent version of this tool was brought into effect in 2022. It aims to take a life course approach to classifying and diagnosing mental health conditions. For instance, the separate grouping of behavioural and emotional disorders usually associated with childhood and adolescence was eliminated; and conditions were grouped by symptoms. Culture-related information was systematically incorporated into the ICD-11, including culture-related guidance for each disorder.³⁸

To varying degrees, the frameworks that we have for understanding mental health around the world take into account the cultural and social context. We used the findings of our [Healthy Ageing and Prevention Index](#) to begin conversations about the social and cultural factors affecting mental health. The table below gives a high-level view of the mental health policies and relevant social and economic context in each country, providing a basis for comparison.

Table 4: Country overviews

| Country |  China |  Germany |  Japan |  UK |  USA |
|--|---|---|---|--|--|
| Overall ranking (of 153) | 49 | 22 | 20 | 14 | 31 |
| Happiness ranking | 52 | 19 | 62 | 25 | 32 |
| Happiness value (0-10) | 6.14 | 6.79 | 5.91 | 6.66 | 6.52 |
| Healthy life expectancy ranking | 33 | 27 | 1 | 26 | 61 |
| Healthy life expectancy (years) | 69.2 | 70.4 | 74.4 | 70.5 | 65.5 |
| Overall health expenditure per capita in 2021* (USD)³⁹ | \$670.51 | \$6626.00 | \$4347.34 | \$5738.48 | \$12,012.24 |
| % of health spending on mental health | (\$831 billion USD on health overall) | 10% in 2020 ⁴⁰ | 2% in 2021 ⁴¹ | 9% in 2022-23 ⁴² | 8.2% in 2020 ⁴³ |
| Suicide rate per 100,000 in 2021** | 5.25 | 11.16 | 16.8 | 10.7 | 14.5 |
| Standalone law for mental health Y/N | Yes | Yes | Yes | Yes | Not at a federal level |
| Standalone policy/plan for mental health Y/N | Yes | Yes | Yes | Yes | Yes |

*Each healthcare system uses different funding models, and data is collected and reported using different methods in each country.

**Sadly, each country, with the exception of China, reports a suicide rate higher than the global average of 9.15. Concerns have been expressed worldwide around underreporting of these statistics, particularly with regards to reporting in China.

In 2021 the world's population experienced over 155 million YLD as a result of mental health conditions,⁴⁴ including the three diagnoses in this study.

Table 5: 2021 YLDs for the top five countries in the ILC Index

| Overall Index ranking for 2022 (out of 153) | | YLD per 100,000 people due to mental health conditions in 2021 |
|---|-------------|--|
| 1 | Iceland | 1613 |
| 2 | Switzerland | 2338 |
| 3 | Sweden | 2088 |
| 4 | Singapore | 1231 |
| 5 | Norway | 2081 |
| Average YLDs | | 1870.2 |

Table 6: 2021 YLDs for the countries studied in this report

| Overall Index ranking for 2022 (out of 153) | | YLD per 100,000 people due to mental health conditions in 2021 |
|---|---------------|--|
| 14 | UK | 2029 |
| 20 | Japan | 1237.5 |
| 22 | Germany | 2149 |
| 31 | United States | 2211.5 |
| 49 | China | 1275.5 |
| Average YLDs | | 1780.5 |

On the surface, it would appear that our five countries of study have mentally healthier populations than the top five countries in ILC's Index. For the top five countries in our Index, every 100,000 people experienced an average of 1870.2 years lived in disability due to mental health conditions in 2021. This is the equivalent of every person in each country spending **6.85 days in disability**. But for our five countries of study, every 100,000 people experienced an average of 1780.5 YLD in the same year; the equivalent of **6.5 days of disability per person**.

One reason for this disparity between the five countries of study and the Index top five is the relatively small population size of the top ten

Index countries – together they only represent around 0.39% of the world's population. Many of them perform well on the Index due to their small population sizes, strong welfare states, and robust health infrastructure. This likely supports better diagnosing of mental health conditions, as well as data collection and sharing to capture incidence and impact of mental health conditions.

That our five countries of study ostensibly have fewer YLDs per 100,000 people could reflect unmet need and lack of comprehensive data with these countries, rather than indicate better performance.

There's a greater risk that the incidence and burden of mental illness isn't adequately captured for the low-income countries that tend to rank lower on our Index. The WHO reports that approximately three-quarters of people with mental health conditions living in low-income countries receive no treatment at all.⁴⁵ Countries without the infrastructure to diagnose, treat and manage mental illness are unlikely to gather comprehensive data on YLDs relating to these conditions.

It is crucial that health systems around the world are able to capture the burden of serious mental health conditions with robust and comprehensive data. Limited data means our response is restricted and we cannot properly address the scale of the problem.

Serious mental health conditions in our countries of study

ILC's [Healthy Ageing and Prevention Index](#) finds that the average person living today will spend at least a decade of their life in poor health. That's ten years where poor health interrupts our work and social lives, volunteering, earning potential, and capacity to do the things that matter to us.

We have already seen that mental health conditions were associated with over 155 million years lived with disability around the world in 2021 alone. That's the equivalent of every person in the world spending over a week (7.2 days) with a mental health-related disability.

The current global figure of one in eight people living with mental illness⁴⁶ further indicates that mental health conditions might already account for a significant proportion of these unhealthy years. These statistics are staggering but can seem abstract – the full extent of the mental health burden is often understood primarily in economic terms.

We also know these unhealthy years are unevenly distributed by country, region, socioeconomic background and other characteristics, reflecting inequalities in access and outcomes that are well documented in healthcare. Using the framework of our Index, we've explored the mental health policy landscape across the five countries in our study through the lens of three acute mental illnesses: major depressive disorder, PTSD and schizophrenia.

Major depressive disorder

Major depressive disorder (MDD) is the most common of our three diagnoses across the five countries of study. Globally, this illness is associated with over 46 million YLDs in 2021 alone.⁴⁷ Evidence around incidence and treatment is more frequently gathered on MDD than most other mental health conditions.

The impacts of the COVID-19 pandemic on MDD incidence and demand for treatment are well documented. The list below captures the impact of the pandemic on symptoms and incidence in the five countries of study. This helps to build a picture of how mental healthcare infrastructure in each country was able to respond to the increased demand for care caused by the pandemic and associated lockdown measures.

- **China:** the estimated overall prevalence of depressive symptoms during 2020 was 26.9%⁴⁸
- **Germany:** experienced the EU's third-highest reported incidence of chronic depression in 2021, at 11.6% of the population⁴⁹
- **Japan:** a national survey on the prevalence of depressive symptoms found that 17.3% of the population reported symptoms in 2020⁵⁰
- **UK:** 16% of the adult population were found to have experienced moderate to severe depressive symptoms in 2022⁵¹
- **US:** an estimated 8.3% of all adults had at least one major depressive episode in 2021⁵²

Data collection methods for symptoms and diagnoses are not symmetrical across countries. That said, the impact of the COVID-19 pandemic on population mental health is also reflected in these statistics and is difficult to overstate. This period has been described by academics as “a syndemic [*synergistic epidemic*] of viral infection and mental health adversity”⁵³ of which depression and MDD must be a particular focus.

The pandemic pushed mental health up the global agenda – we must preserve this momentum as we move towards the HLM4 in 2025. MDD is the most commonly diagnosed of the three conditions studied in this report; people living with schizophrenia and PTSD face similar and distinct challenges when accessing healthcare.

Schizophrenia: prevalence and treatment

We take our definition of this illness from the US National Institute of Mental Health. “Schizophrenia is a serious mental illness that affects how a person thinks, feels, and behaves. The symptoms of schizophrenia can make it difficult to participate in usual, everyday activities, but effective treatments are available. Many people who receive treatment can engage in school or work, achieve independence, and enjoy personal relationships.”⁵⁴






The exact causes of schizophrenia are unknown. Research suggests a combination of physical, genetic, psychological and environmental factors can make a person more likely to develop the condition.⁵⁵

The evidence on whether schizophrenia is purely genetic varies. One study⁵⁶ placed the heritability risk at 79%, whereas another⁵⁷ found a

more even split, placing the variance at 47.3% for genetic as opposed to environmental factors.

There is an extensive range of risk factors for schizophrenia. Some are possible to control (modifiable), such as substance abuse and environmental factors, and some aren't (non-modifiable), such as genetic predisposition through a family history of the disease. These risk factors may affect onset of the disease or how an individual experiences their symptoms.

Treatment usually involves both antipsychotic medication and psychological intervention. The latter can include individual and family psychological therapies and interventions, such as talking therapy, arts therapies, and decreasingly in-patient care in hospital.

| Country |  |  |  |  |  |
|-------------------------------------|---|---|---|---|---|
| | China | Germany | Japan | UK | USA |
| Lifetime incidence of schizophrenia | 1.25% ⁵⁸ | 1% ⁵⁹ | 0.59% ⁶⁰ | 1% ⁶¹ | 0.72% ⁶² |

In 2022, WHO estimated that schizophrenia affected 0.32% of the global population.⁶³






Estimates of prevalence of schizophrenia can vary quite widely, and efforts have been made to understand why these are so inconsistent.⁶⁴ Alongside improved capacity within health systems, it is crucial that data gathering and sharing is strengthened to give a clearer understanding of the overall burden of disease.

Post-traumatic stress disorder

Symptoms of post-traumatic stress disorder or PTSD are intrusive and long term, and can include distressing recollections, dissociative flashbacks, and psychological distress. This condition can cause changes in behaviour and emotional state, and create feelings of detachment and disinterest in ordinary activities. It's caused by exposure to one or more traumatic events, such as actual or threatened death, serious injury or sexual violence.⁶⁵

Some healthcare systems offer psychological treatment in the first instance, followed or combined with medication if needed. In others, medication and psychological interventions are offered together.

Exposure to adverse childhood experiences (ACEs), potentially traumatic events that occur in childhood, are linked to a range of mental health conditions in adulthood, including PTSD.

| Country |  China |  Germany |  Japan |  UK |  USA |
|---|---|---|---|--|---|
| Lifetime prevalence of PTSD⁶⁶ | 0.3% | 1.7% | 1.3% | 5.3% ⁶⁷ | 6.9% |

We have noted the differences in resourcing and capacity between these five health systems in this report. As a result, these numbers on lifetime incidence are likely to be reflective of the burden of disease is captured in surveys, not necessarily the number of people who seek or receive treatment for a diagnosed condition.

Recommendations

At a global level, policymakers should:

- Use the **2025 UN High-Level Meeting** on NCDs to bring mental health conditions in line with other NCDs with regards to infrastructure and investment, and recognise mental illness as a fifth major category of NCD
 - A global commitment to a **life course approach** to mental illness will be crucial to manage demand for healthcare and ensure continuity of treatment throughout our longer lives
 - There's an urgent need to tackle disparities in access and outcomes between different groups; **ageism in mental health** policy and practice is pervasive and damaging and must be tackled
 - An emphasis on **person-centred care** is needed to ensure that individual needs and preferences are met to support better outcomes
 - Mental healthcare workforces face issues with retention and staff development; **pay, continual training, and incentives** are key to maintaining a strong and effective workforce in each country
- Establish a **European Year of Mental Health** to promote this issue as a regional priority
 - The EU should use the 'European Year' initiative⁶⁸ to focus on the promotion of better mental health for all European citizens
 - Other political and economic blocs must foster closer collaboration to improve population mental health in their region

At a societal and healthcare level, clinicians should:

- Implement a **life course approach** to mental healthcare provision; different age cohorts may benefit from specific interventions and pathways to care:
 - **All actors** should make age parity and eradicating ageism central to their work on mental health
 - **Health systems** should commit to gathering symmetrical data, and providing equitable services, across age groups, especially addressing the gulf between adolescent and adult services

- **Healthcare workers** should undergo training on ageism in mental healthcare and its impacts on older people

At a financial level, governments should:

- Re-evaluate the **level and value of investment** in mental healthcare:
 - **Health departments** should rebalance investment between physical and mental healthcare: 90-98% of health budgets globally are currently channelled towards physical healthcare
 - *Policymakers should ensure mental health care spending is in line with other disease area spending; investment in mental healthcare is crucial for economic sustainability given its impact on workforce participation and population wellbeing*
 - **Finance departments** should work across government with their counterparts in health, housing and welfare, ensuring each department has resources to address the socioeconomic and systemic barriers driving poor mental health
 - **All government departments** should assess the impact of their policies and initiatives on population mental health

At an industry level:

- **Embed new interventions**, technologies, and concepts into care pathways to improve outcomes and accessibility throughout our lives:
 - **Health systems** should prioritise person-centred care, and structure services to be as agile and flexible as possible to meet individual needs
 - **Public and private actors** should collaborate more closely to generate the investment and capacity needed to improve medications; addressing symptoms more effectively, with fewer side effects
 - **Industry** should conduct trials for new medications that involve all age and sociodemographic groups to strengthen their efficacy and to ensure they meet our collective needs throughout our longer lives

Conclusion

The shift in recent years towards addressing mental health conditions and supporting people with their growing needs is commendable. For too long, mental health has been stigmatised and disregarded due to misconceptions and societal taboos. Changes in attitudes and understanding towards mild and moderate mental health conditions shows that there's a political, medical and societal will to address psychological health as we would physiological health.

Yet our understanding of serious mental health conditions, and the perceptions people hold of conditions such as MDD, PTSD and schizophrenia remains mixed. While these conditions are fully recognised, there's still a long way to go in terms of giving mental and physical health the same levels of treatment, management and care.

In an ageing society where many people can expect to live to 100, and as mental health literacy grows, serious mental health conditions will only become more prevalent. As increased longevity continues to reshape our societies, mental ill health poses a risk to the social and economic opportunities of longer lives.

Taking a life course approach towards serious mental health conditions is necessary to ensure the correct support for people of all ages. Everyone deserves the right to mental healthcare services and treatment as needed. We need to build understanding of mental illness as something that affects everyone, not just younger people or those of working age. We must work towards reducing internalised ageist perceptions of mental health, as well as ensuring that our healthcare services recognise the mental health needs of older patients as separate from their age.

We need to adequately fund mental health services and treatments so that serious mental health conditions don't continue to hinder work, education, socialising and volunteering. Improving physical health outcomes and preventing NCDs are increasingly prioritised by governments around the world. Yet treating and managing serious mental health conditions, as well as addressing the social, economic and environmental factors that contribute to them, remains suboptimal. Policymakers must recognise that physical and mental health are intrinsically linked, and a holistic approach is urgently needed to tackle poor health outcomes across our longer lives.

Finally, there's a need to advance new treatments and innovations to support people living with serious mental health conditions. Interventions must be fit for purpose and trialled on cohorts that reflect the diversity of people who will be prescribed them. Taking a person-centred approach to treatment is essential. Tailored support and patient pathways will enable people to engage more proactively with their condition and make informed decisions about their care.

The prospect of a 100-year life is a challenge and opportunity for all systems and societies. Throughout these longer lives, we must ensure that we address the causes of poor health outcomes. There is an urgent need to strengthen policies, funding and attitudes to achieve better mental health outcomes for people throughout their lives, so that we all live longer lives that are healthier, happier and more fulfilling.

References

¹World Health Organisation, 'On the road to 2025: Preparatory process for the Fourth High-level Meeting of the UN General Assembly on the prevention and control of NCDs' webpage <https://www.who.int/teams/noncommunicable-diseases/on-the-road-to-2025>

²World Health Organisation Factsheet on Non Communicable Diseases, published 16 September 2023 <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

³Roth, Gregory A et al. "Global Burden of Cardiovascular Diseases and Risk Factors, 1990-2019: Update From the GBD 2019 Study." *Journal of the American College of Cardiology* vol. 76,25 (2020): 2982-3021. doi:10.1016/j.jacc.2020.11.010 <https://pmc.ncbi.nlm.nih.gov/articles/PMC7755038/>

⁴Cancer Research UK, Worldwide cancer statistics data sheet <https://www.cancerresearchuk.org/health-professional/cancer-statistics/worldwide-cancer>

⁵Farzadfar, F. et al. "Global burden of chronic respiratory diseases and risk factors, 1990–2019: an update from the Global Burden of Disease Study 2019" <https://www.sciencedirect.com/science/article/pii/S258953702300113X>

⁶World Health Organisation Factsheet on Diabetes, published 14 November 2024 <https://www.who.int/news-room/fact-sheets/detail/diabetes>

⁷Estimated figure based on: Depression: <https://iris.who.int/bitstream/handle/10665/254610/WHO-MSD-MER-2017.2-eng.pdf> (~300 million) Schizophrenia: <https://www.who.int/news-room/fact-sheets/detail/schizophrenia> (~24 million) Post-traumatic stress disorder: <https://www.who.int/news-room/fact-sheets/detail/post-traumatic-stress-disorder> (~300 million)

⁸Scott, Kate M., et al. (2007) Depression–anxiety relationships with chronic physical conditions: results from the World Mental Health Surveys. *Journal of affective disorders* 103,1-3: 113-120. <https://www.sciencedirect.com/science/article/abs/pii/S0165032707000171?via%3Dihub>

⁹Chang, ES. Et al "Global reach of ageism on older persons' health: A systematic review" (2020) PLOS ONE 15(1) <https://doi.org/10.1371/journal.pone.0220857>

¹⁰World Health Organisation Factsheet 'Improving the mental and brain health of children and adolescents' (no date) <https://www.who.int/activities/improving-the-mental-and-brain-health-of-children-and-adolescents>

¹¹World Health Organisation Factsheet 'Mental Health. Brain Health and Substance Use' (no date) <https://www.who.int/teams/mental-health-and-substance-use/promotion-prevention/mental-health-in-the-workplace>

¹²World Health Organisation Factsheet 'Mental health of older adults' published 20 October 2023 <https://www.who.int/news-room/fact-sheets/detail/mental-health-of-older-adults>

¹³Solmi et al 'Age at onset of mental disorders worldwide: large-scale meta-analysis of 192 epidemiological studies' (2022) *Molecular Psychiatry* 27 (281-295) <https://doi.org/10.1038/s41380-021-01161-7>

¹⁴Manchester University NHS Foundation Trust (no date) *Adverse Childhood Experiences (ACEs) and Attachment*: <https://mft.nhs.uk/rmch/services/camhs/young-people/adverse-childhood-experiences-aces-and-attachment/>

¹⁵Stahlmann, K.; Mena, E.; Kuhnert, R.; Conrad, A.; Bolte, G. (2022) Social Inequalities in the Association between Social Infrastructure and Mental Health: An Observational Cross-Sectional Analysis of Children and Adolescents in Germany. *Int. J. Environ. Res. Public Health*, 19, 6760. <https://doi.org/10.3390/ijerph19116760>

¹⁶Manchester University NHS Foundation Trust (no date) *Adverse Childhood Experiences (ACEs) and Attachment*. Accessed on 14/08/2024: <https://mft.nhs.uk/rmch/services/camhs/young-people/adverse-childhood-experiences-aces-and-attachment/>

¹⁷Jones, P.B. Adult mental health disorders and their age at onset (2013) *British Journal of Psychiatry*, 202(s54): s5-s10. doi:10.1192/bjp.bp.112.119164

¹⁸Gu W, Zhao Q, Yuan C, et al. (2022) Impact of adverse childhood experiences on the symptom severity of different mental disorders: a cross-diagnostic study. *General Psychiatry*, 35 e100741. doi:10.1136/gpsych-2021-100741

¹⁹Butler, A. M., Kowalkowski, M., Jones, H. A., & Raphael, J. L. (2012) The relationship of reported neighborhood conditions with child mental health. *Academic pediatrics*, 12(6), 523–531. <https://doi.org/10.1016/j.acap.2012.06.005>

²⁰Stahlmann, K.; Mena, E.; Kuhnert, R.; Conrad, A.; Bolte, G. (2022) Social Inequalities in the Association between Social Infrastructure and Mental Health: An Observational Cross-Sectional Analysis of Children and Adolescents in Germany. *Int. J. Environ. Res. Public Health*, 19, 6760. <https://doi.org/10.3390/ijerph19116760>

²¹Ibid.

²²Centre for Mental Health (2024) *Older people's mental health being overlooked, say Centre for Mental Health and Age UK*. Accessed on 28/08/2024: <https://www.centreformentalhealth.org.uk/news/item/older-peoples-mental-health-being-overlooked-say-centre-for-mental-health-and-age-uk/>

²³Flores-Flores, O., Carrión, I.V., et al (2023) FC12: Ageism and mental health stigma: key barriers to accessing mental health services among Peruvian older adults. *International Psychogeriatrics*, 35(S1), pp.75-75.

²⁴Flores-Flores, O., Carrión, I.V., et al (2023) FC12: Ageism and mental health stigma: key barriers to accessing mental health services among Peruvian older adults. *International Psychogeriatrics*, 35(S1), pp.75-75.

²⁵Collins, N., & Corna, L. (2018) General practitioner referral of older patients to Improving Access to Psychological Therapies (IAPT): an exploratory qualitative study. *BJPsych bulletin*, 42(3), 115–118. <https://doi.org/10.1192/bjb.2018.10>

²⁶Independent Age (2018) *Ageism and mental health services*. Accessed on 19/08/2024: <https://www.independentage.org/ageism-plus/ageism-plus-blog/ageism-and-mental-health-services>

- ²⁷Royal College of General Practitioners (2017) *Management of Depression in Older People: Why this is Important in Primary Care*. Accessed on 22/08/2024: https://elearning.rcgp.org.uk/pluginfile.php/175878/mod_book/chapter/605/3%20%20Managing%20Depression%20In%20Older%20People.pdf
- ²⁸Kang, H. and Kim, H. (2022) Ageism and psychological well-being among older adults: a systematic review. *Gerontology and Geriatric Medicine*, 8, p.23337214221087023.
- ²⁹Elshaikh, U., Sheik, R., Saeed, R.K.M. *et al.* Barriers and facilitators of older adults for professional mental health help-seeking: a systematic review (2023) *BMC Geriatr* 23, 516. <https://doi.org/10.1186/s12877-023-04229-x>
- ³⁰Age UK and Centre for Mental Health, 'Mental health in later life: understanding needs, policies, and services in England' (2024) https://www.centreformentalhealth.org.uk/wp-content/uploads/2024/03/CentreforMH_MentalHealthInLaterLife-1.pdf
- ³¹NHS Digital (2020) *Psychological Therapies, Annual report on the use of IAPT services 2019-20*. Accessed on 28/08/2024: <https://digital.nhs.uk/data-and-information/publications/statistical/psychological-therapies-annual-reports-on-the-use-of-iapt-services/annual-report-2019-20>
- ³²Office for National Statistics (2022) *Socio-demographic differences in use of Improving Access to Psychological Therapies services, England*. Accessed on 28/08/2024: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/mentalhealth/articles/sociodemographicdifferencesinuseoftheimprovingaccesstopychologicaltherapiesserviceengland/april2017to-march2018>
- ³³Institute for Health Metrics and Evaluation (2024) *GBD 2021 Data and Tools Overview* https://www.healthdata.org/sites/default/files/2024-06/IHME_GBD_2021_DATA_TOOLS_GUIDE_06262024.pdf
- ³⁴OECD (2021), *A New Benchmark for Mental Health Systems: Tackling the Social and Economic Costs of Mental Ill-Health*. Accessed on 28/08/2024: <https://doi.org/10.1787/4ed890f6-en>
- ³⁵House of Commons Library (2024) *The budget deficit: a short guide*. Accessed on 04/09/2024: <https://researchbriefings.files.parliament.uk/documents/SN06167/SN06167.pdf>
- ³⁶UK Parliament (2024) *Approved work: Psychedelic drugs and mental health*. Accessed on 01/10/2024: <https://post.parliament.uk/approved-work-psychedelic-drugs-and-mental-health/>
- ³⁷Clark, L. A., Cuthbert, B., Lewis-Fernández, R., Narrow, W. E., & Reed, G. M. (2017). Three Approaches to Understanding and Classifying Mental Disorder: ICD-11, DSM-5, and the National Institute of Mental Health's Research Domain Criteria (RDoC). *Psychological science in the public interest: a journal of the American Psychological Society*, 18(2), 72–145. <https://doi.org/10.1177/1529100617727266>
- ³⁸Reed et al (2019) Innovations and changes in the ICD11 classification of mental, behavioural and neurodevelopmental disorders. *World Psychiatry* 18(1) 3-19 <https://pmc.ncbi.nlm.nih.gov/articles/PMC6313247/>

- ³⁹World Health Organisation Global Health Observatory data repository, Current health expenditure (CHE) per capita in US\$, Data by country <https://apps.who.int/gho/data/view.main.GHEDCHEpcUSSHA2011v?lang=en>
- ⁴⁰German Federal Statistical Office (no date) *GENESIS-Online*. Accessed on 28/08/2024: <https://www-genesis.destatis.de/genesis/online>
- ⁴¹Japanese Cabinet Office (no date) *Reference material: Overview of the budget for policies for persons with disabilities (FY2021-2022 (including FY2021 settlement amount))*. Accessed on 28/08/2024: https://www8.cao.go.jp/shougai/whitepaper/r05hakusho/zenbun/siryu_02.html
- ⁴²British Medical Association (2024) *Mental health pressures in England*. Accessed on 28/11/2024: <https://www.bma.org.uk/advice-and-support/nhs-delivery-and-workforce/pressures/mental-health-pressures-data-analysis>
- ⁴³Fronstin et al (2020) Use of Health Care Services for Mental Health Disorders and Spending Trends. EBRI https://www.ebri.org/docs/default-source/pbriefs/ebri_ib_569_mentalhealth-8sept22.pdf?sfvrsn=12bb382f_7
- ⁴⁴Institute for Health Metrics and Evaluation (no date) *Global Burden of Disease*. Accessed on 28/08/2024: <https://vizhub.healthdata.org/gbd-results/>
- ⁴⁵World Health Organization (2011) *Global burden of mental disorders and the need for a comprehensive, coordinated response from health and social sectors at the country level*. Accessed on 28/08/2024: https://apps.who.int/gb/ebwha/pdf_files/eb130/b130_9-en.pdf
- ⁴⁶World Health Organization (no date) *WHO Special Initiative for Mental Health*. Accessed on 28/08/2024: <https://www.who.int/initiatives/who-special-initiative-for-mental-health>
- ⁴⁷Global Burden of Disease Collaborative Network, Global Burden of Disease Study 2021 (GBD 2021) Results. United States Institute for Health Metrics and Evaluation (IHME), 2022. Available from: <https://vizhub.healthdata.org/gbd-results/>
- ⁴⁸Bareeqa, S. B., Ahmed, S. I., Samar, S. S., Yasin, W., Zehra, S., Monese, G. M., & Gouthro, R. V. (2021). Prevalence of depression, anxiety and stress in china during COVID-19 pandemic: A systematic review with meta-analysis. *International journal of psychiatry in medicine*, 56(4), 210–227. <https://doi.org/10.1177/0091217420978005>
- ⁴⁹Eurostat (2021) *7.2% of people in the EU suffer from chronic depression*. Accessed on 28/08/2024: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/edn-20210910-1>
- ⁵⁰Ueda, M., Stickley, A., Sueki, H., & Matsubayashi, T. (2020). Mental health status of the general population in Japan during the COVID-19 pandemic. *Psychiatry and clinical neurosciences*, 74(9), 505–506. <https://doi.org/10.1111/pcn.13105>

- ⁵⁴Office of National Statistics (2022) *Cost of living and depression in adults, Great Britain: 29 September to 23 October 2022*. Accessed on 28/08/2024: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/mental-health/articles/costoflivinganddepressioninadultsgreatbritain/29september-to23october2022>
- ⁵⁵National Institute of Mental Health (no date) *Major Depression*. Available at: <https://www.nimh.nih.gov/health/statistics/major-depression>
- ⁵⁶Lui, L. M. W., & McIntyre, R. S. (2022). Canadian Healthcare System and Individuals with Severe Mental Disorders During Coronavirus Disease 2019: Challenges and Unmet Needs. *Schizophrenia bulletin open*, 3(1), sgac036. <https://doi.org/10.1093/schizbullopen/sgac036>
- ⁵⁷National Institute of Mental Health (no date) *Schizophrenia*. Available at: <https://www.nimh.nih.gov/health/topics/schizophrenia>
- ⁵⁸NHS (no date) *Causes – Schizophrenia*. Available at: <https://www.nhs.uk/mental-health/conditions/schizophrenia/causes/>
- ⁵⁹Rikke, H. et al. (2018) *Heritability of Schizophrenia and Schizophrenia Spectrum Based on the Nationwide Danish Twin Register*. Accessed on 28/08/2024: <https://doi.org/10.1016/j.biopsych.2017.08.017>
- ⁶⁰Chou, I-J. et al. (2017) Familial Aggregation and Heritability of Schizophrenia and Co-aggregation of Psychiatric Illnesses in Affected Families. *Schizophrenia Bulletin*, Volume 43, Issue 5, September 2017, Pages 1070–1078, <https://doi.org/10.1093/schbul/sbw159>
- ⁶¹Chang, W. C. et al. (2017) *Lifetime Prevalence and Correlates of Schizophrenia-Spectrum, Affective, and Other Non-affective Psychotic Disorders in the Chinese Adult Population*. Available at: <https://academic.oup.com/schizophreniabulletin/article/43/6/1280/3861665>
- ⁶²Hasan, A. et al. (2020) Schizophrenia. *Deutsches Arzteblatt international*. Available at: <https://www.aerzteblatt.de/int/archive/article/214278/>
- ⁶³Baba, K. et al. (2022) Burden of schizophrenia among Japanese patients: a cross-sectional National Health and Wellness Survey. *BMC Psychiatry* 22, 410. Available at: <https://doi.org/10.1186/s12888-022-04044-5>
- ⁶⁴Royal College of Psychiatrists (no date) *Schizophrenia*. Accessed on 29/10/2025: <https://www.rcpsych.ac.uk/mental-health/mental-illnesses-and-mental-health-problems/schizophrenia>
- ⁶⁵Kadakia, A. et al. (2022) The Economic Burden of Schizophrenia in the United States. *The Journal of Clinical Psychiatry*. Accessed on 29/01/2025: <https://www.psychiatrist.com/jcp/economic-burden-schizophrenia-united-states/>
- ⁶⁶World Health Organization (2022) *Schizophrenia*. Available at: <https://www.who.int/news-room/fact-sheets/detail/schizophrenia>

⁶⁴Simeone, J. C., Ward, A. J., Rotella, P., Collins, J., & Windisch, R. (2015) An evaluation of variation in published estimates of schizophrenia prevalence from 1990-2013: a systematic literature review. *BMC psychiatry*, 15, 193. <https://doi.org/10.1186/s12888-015-0578-7>

⁶⁵Center for Substance Abuse Treatment (US). Trauma-Informed Care in Behavioral Health Services. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2014. (Treatment Improvement Protocol (TIP) Series, No. 57.) Exhibit 1.3-4, DSM-5 Diagnostic Criteria for PTSD. Available from: https://www.ncbi.nlm.nih.gov/books/NBK207191/box/part1_ch3_box16/

⁶⁶Koenen, K. C. et al (2017) Posttraumatic stress disorder in the World Mental Health Surveys. *Psychological medicine*, 47(13), 2260–2274. <https://doi.org/10.1017/S0033291717000708>

⁶⁷Karatzias, T. et al (2019) Risk factors and comorbidity of ICD-11 PTSD and complex PTSD: Findings from a trauma-exposed population based sample of adults in the United Kingdom. *Depression and anxiety*, 36(9), 887–894. <https://doi.org/10.1002/da.22934>

⁶⁸European Union (no date) *European years*. Accessed on 07/01/2025: https://european-union.europa.eu/priorities-and-actions/european-years_en

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ILC is the UK's leading authority on the impact of longevity on society. We combine evidence, solutions and networks to make change happen.

We help governments, policy makers, businesses and employers develop and implement solutions to ensure we all live happier, healthier and more fulfilling lives. We want a society where tomorrow is better than today and where future generations are better off.

ILC wants to help forge a new vision for the 100-year life, where everyone has the opportunity to learn throughout life, and where new technology helps us contribute more to society.



**International
Longevity Centre UK**

The Foundry
17 Oval Way
London SE11 5RR
Tel : +44 (0) 203 752 5794

www.ilcuk.org.uk

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